



2022 PRODUCT CATALOG



PRODUCTS AT WORK

Balances & Scales
Moisture Analyzers
Laboratory Equipment
Water Analysis Instruments
Calibration Weights



Ingeniously Practical

www.ohaus.com

The OHAUS Advantage.....	1	Defender™ 5000 - Plastic Indicator.....	66	High Speed Microplate Shakers.....	180
Products at Work.....	2	Defender™ 5000 Low Profile - Metal Indicator.....	68	Incubating & Incubating Cooling Shakers...	181
Laboratory Weighing		Defender™ 5000 Low Profile - Plastic Indicator.....	70	<i>Incubating & Incubating Cooling Shakers</i>	
<i>Laboratory Balance Selector Guide.....</i>	<i>4</i>	Defender™ 3000 Stainless Steel.....	72	<i>Selector Guide.....</i>	<i>181</i>
Analytical & Precision Balances.....	5	Defender™ 3000.....	73	Incubating Cooling Thermal Shakers.....	183
Explorer™ Semi-Micro.....	5	Defender™ 3000 Low Profile.....	74	Incubating Light Duty Orbital Shakers.....	184
Explorer™ Analytical.....	6	Defender™ 3000 Field Test.....	75	Incubating Cooling Orbital Shakers.....	185
Explorer™ Analytical NTEP.....	7	Shipping Scales.....	76	Incubating Heavy Duty Orbital Shakers.....	186
Explorer™ Precision.....	8	ES Series.....	76	Incubating Rocking & Waving Shakers.....	187
Explorer™ Precision NTEP.....	10	SD Series.....	77	Open Air, Incubating, Incubating Cooling Shakers	
Explorer™ Precision High Capacity.....	12	Catapult™ 1000.....	78	Accessories.....	188
Explorer™ Precision High Capacity NTEP.....	13	Counting Scales.....	79	Vortex Mixers.....	192
Adventurer™ Analytical.....	14	Ranger™ Count 4000.....	79	Mini Vortex Mixers.....	192
Adventurer™ Analytical NTEP.....	15	Ranger™ Count 3000.....	80	Heavy-Duty Vortex Mixers.....	193
Adventurer™ Precision.....	16	Compact Bench Scales.....	81	Microplate Vortex Mixers.....	194
Adventurer™ Precision NTEP.....	18	Ranger™ 7000.....	81	Multi-Tube Vortex Mixers.....	195
Pioneer™ Semi-Micro.....	20	Ranger™ 4000.....	82	Dry Block Heaters.....	196
Pioneer™ Analytical.....	21	Ranger™ 3000.....	83	1 Block Dry Block Heaters.....	196
Pioneer™ Precision.....	22	Valor™ 7000.....	84	2 Block Dry Block Heaters.....	197
PR Series Analytical.....	24	Valor™ 4000.....	85	4 Block Dry Block Heaters.....	198
PR Series Precision.....	25	Valor™ 3000.....	86	6 Block Dry Block Heaters.....	199
PR Series Precision NTEP.....	26	Valor™ 2000.....	87	Hotplates & Stirrers.....	200
Portable Balances.....	27	Valor™ 1000 - V12P.....	88	Guardian 7000 Hotplate Stirrers.....	200
Scout™ STX.....	27	Indicators.....	89	Guardian 5000 Hotplates & Stirrers.....	201
Scout™ SPX.....	28	i-DT61XW.....	89	Mini Hotplates & Stirrers.....	202
Scout™ SJX.....	29	i-DT61PW.....	90	Specialty Stirrers.....	203
Navigator™.....	30	TD52XW.....	91	Multi-Position Stirrers.....	203
Compass™ CX.....	31	TD52P.....	92	Large Volume Stirrers.....	204
Compass™ CR.....	32	T72XW.....	93	Overhead Stirrers.....	205
PS Series.....	33	T51XW.....	94	Achiever™ 5000.....	205
YA Gold Series.....	34	T32XW.....	95	Bead Mill Homogenizers.....	206
Moisture Analyzers		T32M.....	96	HT Lysing Homogenizer.....	206
<i>Moisture Analyzer Selector Guide.....</i>	<i>35</i>	T31P.....	97	LabJaws Clamps & Supports.....	207
MB120.....	36	Bench Scale Bases.....	98	Multi Purpose Clamps.....	207
MB90.....	37	CKW Base.....	98	Rods, Frames & Supports.....	212
MB27.....	38	Defender™ 6000 Washdown Base.....	99	Laboratory Instruments	
MB23.....	39	Defender™ 5000 Stainless Steel Base.....	100	<i>Instrument Selector Guide.....</i>	<i>220</i>
Mechanical Scales & Balances.....	40	Defender™ 5000 Base.....	101	pH/ORP/Conductivity/DO Measurement.....	221
Triple Beam Pro™.....	40	Defender™ V Series Stainless Steel.....	102	Starter 5000 pH Bench.....	221
Triple Beam™ 700 Series.....	41	Defender™ B Series.....	103	Starter 2200 pH Bench Meter.....	222
Triple Beam™ Junior.....	42	Weights & Weight Sets		Starter 300 pH Portable.....	223
Triple Beam Dial-O-Gram™ 1600 Series.....	43	<i>Weights & Weight Sets Overview.....</i>	<i>106</i>	Starter 300C Conductivity Portable.....	224
Dial-O-Gram™ and Cent-O-Gram™ 300 Series.....	44	Reference Weights and Mass Standards.....	107	Starter 300D DO Portable.....	225
Harvard Junior.....	45	Calibration Weights.....	117	Starter 400 pH Portable.....	226
Harvard Trip™.....	46	Scale Weights & Test Weights.....	147	Starter 400M pH & Conductivity Portable.....	227
School Balance.....	47	Accessories for Weighing		Starter 400D DO Portable.....	229
Primer™ Balance.....	48	Printers.....	149	Starter Pen Meters.....	230
Spring Scales.....	49	SF40A.....	149	Starter Electrodes.....	232
Reloading Scales.....	50	STP103.....	150	AquaSearcher™ AB23PH Bench Meter.....	234
Industrial Weighing		Zebra GK-420T.....	151	AquaSearcher™ AB23EC Bench Meter.....	235
<i>Industrial Product Selector Guide.....</i>	<i>52</i>	Laboratory Equipment		AquaSearcher™ AB33M1 Bench Meter.....	236
Floor Scales.....	53	Centrifuges.....	154	AquaSearcher™ AB33PH Bench Meter.....	238
Defender™ Drum Scales - DFD32M.....	53	Frontier™ 5000 Series Micro.....	154	AquaSearcher™ AB33EC Bench Meter.....	239
VX Series.....	54	Frontier™ 5000 Series Multi Pro.....	155	AquaSearcher™ AB41PH Bench Meter.....	240
VN Series.....	55	Frontier™ 5000 Series Multi.....	156	OHAUS Resources	
Floor Scale Platforms.....	56	Frontier™ 5000 Series Mini.....	157	Terms and Conditions of Sale.....	241
VN Series Floor Scale Platforms.....	56	Frontier™ Rotors.....	158	OHAUS Minimum Advertised Price (MAP) Policy.....	242
Bench Scales.....	57	Open Air Shakers.....	170	Dealer Resources.....	243
Defender™ 6000 Washdown - Metal Indicator.....	57	<i>Open Air Shakers Selector Guide.....</i>	<i>170</i>	Dealer Support.....	244
Defender™ 6000 Washdown - Plastic Indicator.....	58	Light Duty Orbital Shakers.....	172	Icon Legend.....	245
Defender™ 6000 Hybrid - Metal Indicator.....	59	Extreme Environment Shakers.....	173		
Defender™ 6000 Hybrid - Plastic Indicator.....	60	Heavy Duty Orbital Shakers.....	175		
Defender™ 5000 Washdown.....	61	Rocking & Waving Shakers.....	177		
Defender™ 5000 Washdown Low Profile.....	63	Reciprocating Shakers.....	178		
Defender™ 5000 - Metal Indicator.....	65				

The OHAUS Advantage

For more than a century, the OHAUS name has been synonymous with precision and reliability. Our high-quality balances and scales, laboratory equipment and analytical instruments are designed to meet the evolving needs of a growing range of industries. In addition to supporting the need for precision in every setting, our Ingeniously Practical methodology—demonstrated in all of our products and services—provides tangible benefits that improve accuracy and quality for our customers.

At OHAUS, we have an unwavering dedication to four principles that guide the way we conduct business and support our customers: trust, agility, ingenuity and commitment. That's the OHAUS Advantage, and it's the promise we make to our customers every day.

TRUST

More Than A Century Of Precision & Reliability

Trust is a cornerstone of our relationship with our customers. With more than a century of expertise, we have become a trusted resource for those who rely on precision weighing products and life science equipment. As customer needs have evolved over the decades, our ability to adapt to change and offer the latest practical innovations has contributed to this enduring trust.

Today, we continue to deliver the same level of trusted quality and reliability that our customers have come to expect. While remaining grounded in our deep American roots established by Gustav and Karl Ohaus in 1907, we have expanded into 20 countries across six continents, creating a strong global network positioned to meet customer needs around the world.

AGILITY

Always Evolving

Over the years, OHAUS has brought the quality and value that define our weighing products to a wider range of specialized products, including analytical instruments and laboratory equipment for various industries. Our ability to be agile supports our commitment to embrace and adapt new technologies that benefit our customers.

Through our global network of office locations, representatives, and dealers, we stay on top of industry trends around the world and are positioned to quickly adapt to market changes and customer needs. Together with research/development and advanced manufacturing processes, this knowledge enables us to design and craft every OHAUS product to meet and exceed the demands, trends and expectations of our markets.

INGENUITY

Ingeniously Practical In Meeting Customer Needs

Whether you're looking for traditional weighing products or specialized laboratory or analytical equipment, all OHAUS products are built with ingenuity while also remaining practical in meeting customer needs. In fact, we call our expanded portfolio of products "Ingeniously Practical." To us, this means they offer both pinpoint accuracy and ease of use, and they feature the highest quality while being affordable and durable.

All OHAUS products are rigorously tested to meet national and international safety, quality, and accuracy standards. As an ISO 9001-2015 manufacturer, we maintain our commitment to quality through certifications, listings and ratings such as NTEP, OIML, IP, NEMA and NSF, ensuring legal and operational compliance. Our products are further backed by our extended warranties and ongoing technical support.

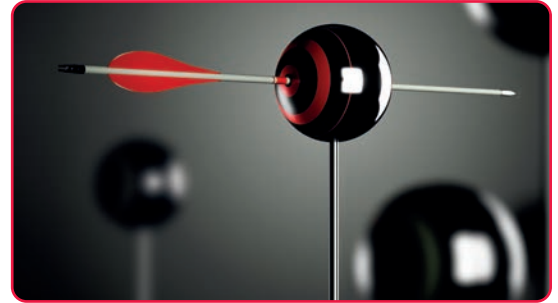
OHAUS products also feature superior mechanical overload protection to protect the weighing cells, while IP and NEMA ratings demonstrate further protection from harsh environments. These protective attributes prolong the life of our equipment.

COMMITMENT

Supporting Our Customers Around The Globe

At OHAUS, we are committed to providing comprehensive customer support, from technical advice and marketing insight to the logistical capacity to meet specific requests and turnaround times. We complement these offerings with onsite training, webinars, video demonstrations and a monthly newsletter.

We believe this commitment means developing a relationship that benefits our customers for the long-term. Our responsive customer service and technical support representatives go the extra mile to provide value-added solutions in a timely manner. With offices in 20 countries, you can receive personalized service and support from anywhere in the world.

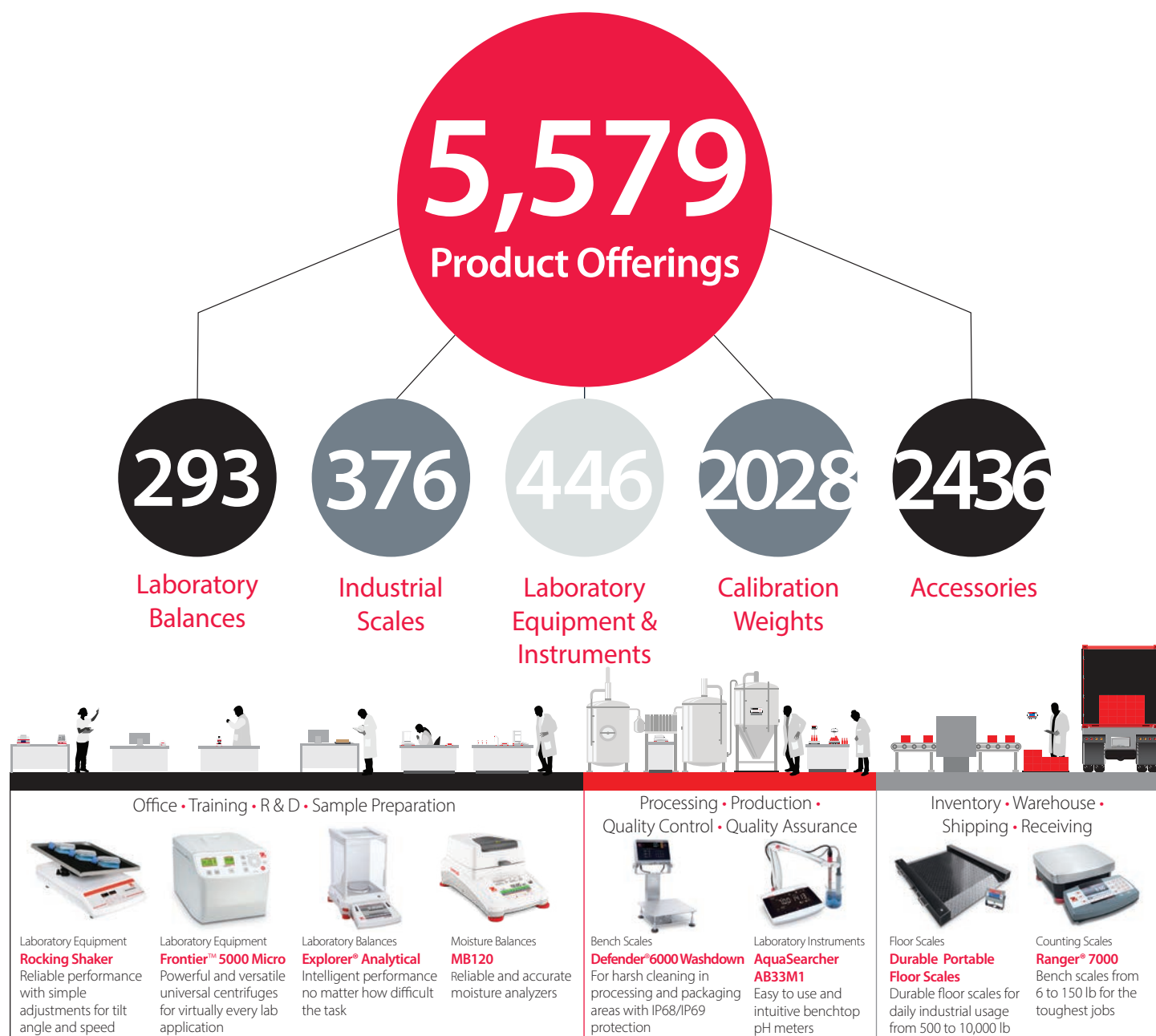


Products at Work

The OHAUS product range is specifically designed to help maximize productivity, across every surface of the workspace. From the office to the warehouse, our Ingeniously Practical portfolio is packed with products made with your customers' needs in mind. Our industry-leading line of scales and balances offer the accuracy, speed, and peace of mind your customers need to Weigh It with ease, while our ever-growing line of laboratory instruments products allows them to Test It with the confidence they need. Introduced in 2017, the OHAUS line of laboratory equipment rounds out the ability to Do More in the lab, offering products ranging from mixers and shakers to clamps and supports—and everything in between.

No matter what your customers' needs are, from research and development to fulfilment and receiving, you can depend on OHAUS for everything you need to let your customers' operations thrive.

Don't stop at just measurement—Do More.



Laboratory Weighing



From our powerhouse flagship Explorer balance to our rugged and practical PR Series, OHAUS has a wide variety of semi-micro, analytical, precision, high-capacity, and moisture balances that are ideal for use in almost every area of your laboratory—and beyond.



	Analytical Balances						Precision Balances				Portables		
	Explorer Semi-Micro	Pioneer Semi-Micro	Explorer	Adventurer	Pioneer	PR Series	Explorer	Adventurer	Pioneer	PR Series	Navigator	Scout	Compass CX/CR
Weighing Capacity Range	51 g - 220 g	82 g - 220 g	120 g - 320 g	120 g - 320 g	80 g - 220 g	64 g - 220 g	220 g - 35000 g	220 g - 8200 g	160 g - 4200 g	320 g - 6200 g	120 g - 20 kg	120 g - 8200 g	220 g - 5,200 g
Readability Range	0.01 mg	0.01 mg	0.1 mg	0.1 mg	0.1 mg	0.1 mg	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 1 g	0.001 g - 1 g	0.1 g - 1 g
Parts Counting	●	●	●	●	●	●	●	●	●	●	●	●	
Percent Weighing	●	●	●	●	●	●	●	●	●	●	●	●	
Custom Unit - Factor Entry	●		●	●	●		●	●	●			●*	
Checkweighing	●		●	●			●	●			●	●	
Dynamic Weighing	●	●	●	●	●		●	●	●			●*	
Gross/Net/Tare	●	●	●	●		●	●	●		●			
Totalization	●		●	●			●	●				●	
Statistics	●		●	●			●	●					
Differential Weighing	●		●				●						
Filling	●		●				●						
Mole Weighing												●*	
Density Determination	●	●	●	●	●		●	●	●			●*	
Pipette Calibration	●		●				●*						
High Point	●		●				●						
Display Hold				●				●				●*	
Formulation	●		●	●			●	●					
Ingredient Costing			●				●						
Battery Power							●*				●	●	●
Backlight LCD		●			●	●			●	●	●	●	●*
LCD		●			●	●			●	●	●	●	●
Color Graphics Display	●		●	●			●	●				●*	
Touchscreen	●		●	●			●	●				●*	
Keys		●		●	●	●		●	●	●		●	
Multi Languages	●	●	●	●			●	●				●*	
RS232	●	●	●	●	●	●	●	●	●	●	○	○	
USB - Host	●		●	●			●	●				○	
USB - Device	●	●	●	●	●	○	●	●	●	○	○	○	
Ethernet	○	○	○	○	○	○	○	○	○	○	○	○	
GLP / Time / Date	●	●	●	●	●		●	●	●			●*	
Bluetooth												○	
Internal Calibration	●*	●	●*	●*	●*	●*	●*	●*	●*	●*			
External Calibration	●	●	●	●	●	●	●	●	●	●	●	●	●
AutoCal	●*		●*	●*			●*	●*					
Below Balance Weighing	●	●	●	●	●	●	●	●	●	●	○	●	
NTEP Certified or Measurement Canada Approved			●*	●*			●*	●*		●		●	
Page No.	5	20	6	14	21	24	8	16	22	25	30	27, 28, 29	31, 32

○ Optional * on specific models

EXPLORER™ SEMI-MICRO

Flagship Balances from OHAUS

Display

Full-color VGA graphic display (5.7 in. diagonal), 4-wire resistive touch screen. QWERTY keyboard and numeric keypad to quickly input GLP and GMP data and other application data

Communication

Easy access communication ports including 2 units of USB port and RS232 and an optional fourth port of either RS232 or Ethernet. GLP/GMP Data Output with Real Time Clock. Data Transfer Function.

Construction

Metal base, ABS top housing, stainless steel pan, anti-static glass draftshield with flip-top door, replaceable in-use cover, automatic door as option models

Design Features

AutoCal™ fully-automatic internal calibration system, fast stabilization time, four touchless sensors, built-in ionizer with automatic door models, up to 14 operating languages, OIML models available, SAVE to USB function, menu lock switch, security bracket, integral weigh below hook for below balance weighing applications, removable stainless steel weighing platform, stability indicator, overload and underload indicators, auto standby.

Operation

AC Adapter (Included)



**INTELLIGENT
PERFORMANCE**

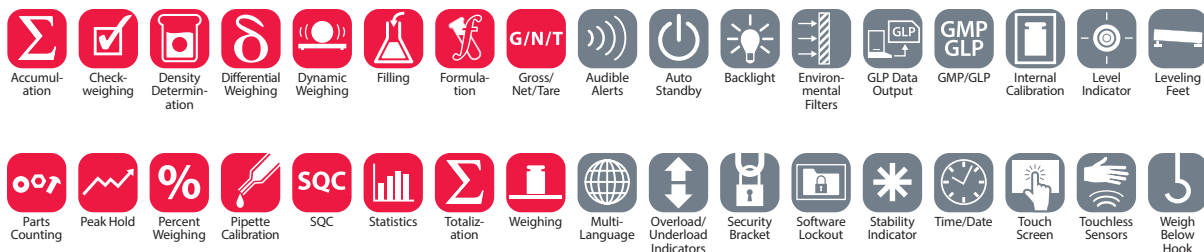
Explorer's weighing cells precision-machined from a solid metal block, together with AutoCal™ provides exceptional accuracy and durability suitable for laboratory and industrial environments.

Features such as four-level user management with password protection, and un-editable system log plus a high level of configurability make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, optional built-in ionizer & automatic doors, and a frameless draftshield make Explorer balances easy & convenient to use.

Model	Auto Door	Built-in Ionizer	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX125	-	-	•	120 g	0.01 mg	3.14 in (80 mm)	30139511	7545
EX125D	-	-	•	52 g/120 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139510	6050
EX225D	-	-	•	120 g/220 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139512	7720
EX225D/AD	•	•	•	120 g/220 g	0.01 mg; 0.1 mg	3.14 in (80 mm)	30139513	7980
EX225/AD	•	•	•	220 g	0.01 mg	3.14 in (80 mm)	30139514	9635

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable ST103-EX MB PA TxxP	80252581	209
Printer, Impact, SF40A, AM	30064203	1070	Density Kit, Solids	80253384	845
Cable, RS422, 9m, EX EX-HiCap	30078078	166	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Dust Cover, Balance with Draft Shield	30093334	55	Cable RS232 IBM 9P Male-to-Female	80500525	209
Static Ionizer, ION-100A, AM	30130302	1885	Anti-Theft Device Lab Balance	80850043	251
Pipette Adjustment Kit, EX Semi-Micro	30252145	1570	Software, Winwedge	80850080	575
Gridding Pan, EX5	30369673	171	Ethernet Kit, EX EX-HiCap	83021082	209
Auxiliary display AD7-RS	30472064	78	Cable Extension RS422 2m EX EX-HiCap	83021083	117
Paper Roll, Thermal, STP103	80251931	24	Cable, USB, Type A-B	83021085	209
Paper Roll, CBM910	80251932	22	In-Use-Cover, Terminal, EX	83033633	92
Ink Ribbon, CBM910	80251933	61	Sinker, Glass, Liquid, Density Kit	83034024	705
Printer, Thermal, STP-103, US	80251992	825			



EXPLORER™ ANALYTICAL

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door, illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC adapter (included)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, automatic doors, and a frameless draftshield make Explorer analytical balances easy and convenient to use.

Model	Auto Door	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX124/AD	•	•	120 g	0.1 mg	3.5 in (90 mm)	30061976	4670
EX124	-	•	120 g	0.1 mg	3.5 in (90 mm)	83021331	4515
EX224/AD	•	•	220 g	0.1 mg	3.5 in (90 mm)	30061977	5185
EX224	-	•	220 g	0.1 mg	3.5 in (90 mm)	83021332	5015
EX324/AD	•	•	320 g	0.1 mg	3.5 in (90 mm)	30061978	6095
EX324	-	•	320 g	0.1 mg	3.5 in (90 mm)	83021335	5895

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable RS232 IBM 9P Male-to-Female	80500525	209
Printer, Impact, SF40A, AM	30064203	1070	Anti-Theft Device, SP PA AV NV	80850000	96
Cable, RS422, 9m, EX EX-HiCap	30078078	166	Anti-Theft Device Lab Balance	80850043	251
Dust Cover, Balance with Draft Shield	30093334	55	Software, Winwedge	80850080	575
Static Ionizer, ION-100A, AM	30130302	1885	Ethernet Kit, EX EX-HiCap	83021082	209
Auxiliary display AD7-RS	30472064	78	Cable Extension RS422 2m EX EX-HiCap	83021083	117
Paper Roll, Thermal, STP103	80251931	24	Cable, USB, Type A-B	83021085	209
Printer, Thermal, STP-103, US	80251992	825	Column Kit, EX	83021102	181
Cable ST103-EX MB PA TxxP	80252581	209	In-Use-Cover, Terminal, EX	83033633	92
Density Kit, Solids	80253384	845	Sinker, Glass, Liquid, Density Kit	83034024	705
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209			



EXPLORER™ ANALYTICAL NTEP

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door, illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC adapter (included)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

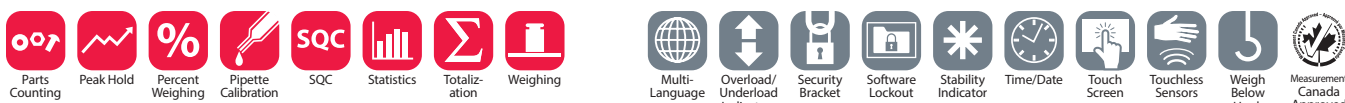
Features such as four-level user management with password protection, and un-editable system log plus a high level of configurability make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, automatic doors, and a frameless draftshield make Explorer analytical balances easy and convenient to use.

Model	Auto Door	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX224N/AD	•	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30061998	6180
EX224N	-	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	83021334	5520
EX324N/AD	•	•	320 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30061999	6745
EX324N	-	•	320 g	0.1 mg	1 mg	I	3.5 in (90 mm)	83021337	6460

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Cable, RS422, 9m, EX EX-HiCap	30078078	166
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209

Accessories	Item Number	List Price (USD)
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device, SP PA AV NV	80850000	96
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Ethernet Kit, EX EX-HiCap	83021082	209
Cable Extension RS422 2m EX EX-HiCap	83021083	117
Cable, USB, Type A-B	83021085	209
Column Kit, EX	83021102	181
In-Use-Cover, Terminal, EX	83033633	92
Sinker, Glass, Liquid, Density Kit	83034024	705



EXPLORER™ PRECISION

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door (1 mg models), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC adapter (included)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, and a frameless draftshield make Explorer precision balances easy and convenient to use.

Model	AutoCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX223/E	-	•	220 g	1 mg	5.1 in (130 mm)	30061979	2540
EX223	•	•	220 g	1 mg	5.1 in (130 mm)	83021341	2960
EX423/E	-	•	420 g	1 mg	5.1 in (130 mm)	30061980	3075
EX423	•	•	420 g	1 mg	5.1 in (130 mm)	83021342	3460
EX623	•	•	620 g	1 mg	5.1 in (130 mm)	83021348	4230
EX1103	•	•	1,100 g	1 mg	5.1 in (130 mm)	83021350	4965
EX2202/E	-	-	2,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	30061981	2770
EX2202	•	-	2,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	83021356	3205
EX4202/E	-	-	4,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	30061982	3230
EX4202	•	-	4,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	83021357	3680
EX6202/E	-	-	6,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	30061983	3705
EX6202	•	-	6,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	83021360	4180
EX10202	•	-	10,200 g	0.01 g	7.5 in x 8 in (190 mm x 200 mm)	83021362	4960
EX6201/E	-	-	6,200 g	0.1 g	7.5 in x 8 in (190 mm x 200 mm)	30061984	2970
EX6201	•	-	6,200 g	0.1 g	7.5 in x 8 in (190 mm x 200 mm)	83021361	3470
EX10201	•	-	10,200 g	0.1 g	7.5 in x 8 in (190 mm x 200 mm)	83021365	3810

Accessories on next page



EXPLORER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Cable, RS422, 9m, EX EX-HiCap	30078078	166
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209

Accessories	Item Number	List Price (USD)
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device, SP PA AV NV	80850000	96
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Ethernet Kit, EX EX-HiCap	83021082	209
Cable Extension RS422 2m EX EX-HiCap	83021083	117
Draft Shield Kit, EX	83021084	1020
Cable, USB, Type A-B	83021085	209
Column Kit, EX	83021102	181
In-Use-Cover, Terminal, EX	83033633	92
Sinker, Glass, Liquid, Density Kit	83034024	705

EXPLORER™ PRECISION NTEP

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors & flip/sliding top door (1 mg models), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, 4 touchless sensors, in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC adapter (included)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

Features such as four-level user management with password protection and a non-editable system log plus a high level of configuration make Explorer balances well suited for regulated applications.

A detachable terminal with a large color touchscreen, programmable IR sensors, and a frameless draftshield make Explorer precision balances easy and convenient to use.

Model	AutoCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX223N/E	-	•	220 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30553844	2755
EX223N	•	•	220 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30553843	3170
EX423N/E	-	•	420 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30553845	3290
EX423N	•	•	420 g	1 mg	0.01 g	II	5.1 in (130 mm)	83021344	3865
EX1103N	•	•	1,100 g	1 mg	0.01 g	I	5.1 in (130 mm)	83021352	5415
EX2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553846	2980
EX4202N/E	-	-	4,200 g	0.01 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553847	3440
EX4202N	•	-	4,200 g	0.01 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	83021359	4045
EX6202N/E	-	-	6,200 g	0.01 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553889	4390
EX6202N	•	-	6,200 g	0.01 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553888	3920
EX10202N	•	-	10,200 g	0.01 g	0.1 g	I	7.5 in x 8 in (190 mm x 200 mm)	83021364	5415
EX6201N/E	-	-	6,200 g	0.1 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553891	3180
EX6201N	•	-	6,200 g	0.1 g	0.1 g	II	7.5 in x 8 in (190 mm x 200 mm)	30553890	3680
EX10201N	•	-	10,200 g	0.1 g	0.1 g	I	7.5 in x 8 in (190 mm x 200 mm)	83021367	4185

Accessories on next page



EXPLORER™ PRECISION NTEP ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Cable, RS422, 9m, EX EX-HiCap	30078078	166
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209

Accessories	Item Number	List Price (USD)
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device, SP PA AV NV	80850000	96
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Ethernet Kit, EX EX-HiCap	83021082	209
Cable Extension RS422 2m EX EX-HiCap	83021083	117
Draft Shield Kit, EX	83021084	1020
Cable, USB, Type A-B	83021085	209
Column Kit, EX	83021102	181
In-Use-Cover, Terminal, EX	83033633	92
Sinker, Glass, Liquid, Density Kit	83034024	705

EXPLORER™ PRECISION HIGH CAPACITY

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately) . GLP/GMP data output with real-time clock.

Construction

Modular design, IP54 metal base, Die-cast top housing, stainless steel pan, up-front level indicator, integral weigh below hook, calibration lock, two touchless sensors, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC Adapter (included) or rechargeable battery (accessory sold separately)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

2-D shock protection and IP54 base enclosure protect the balance from damage, while the AutoCal™ automatic internal calibration system ensures performance.

A detachable terminal with a large color touchscreen and programmable IR sensors make Explorer High-Capacity balances easy and convenient to use.

Model	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
EX12001	•	12,000 g	0.1 g	14.8 in x 12.2 in (377 mm x 311 mm)	30057099	4210
EX24001	•	24,000 g	0.1 g	14.8 in x 12.2 in (377 mm x 311 mm)	30057100	5130
EX35001	•	35,000 g	0.1 g	14.8 in x 12.2 in (377 mm x 311 mm)	30057101	6025

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
BATTERY,pack,Li-ion,R,14.8V,2600mAh	30041295	420
Wheel Kit, Set(4), EX-HiCap	30041470	181
Printer, Impact, SF40A, AM	30064203	1070
Cable, RS422, 9m, EX EX-HiCap	30078078	166
Column Kit, EX-HiCap	30078082	166
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Ethernet Kit, EX EX-HiCap	83021082	209
Cable Extension RS422 2m EX EX-HiCap	83021083	117
Cable, USB, Type A-B	83021085	209
In-Use-Cover, Terminal, EX	83033633	92



EXPLORER™ PRECISION HIGH CAPACITY NTEP

Flagship Balances from OHAUS

Display

5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232 and USB (included) or second RS232/Ethernet (accessories sold separately). GLP/GMP data output with real-time clock.

Construction

Modular design, IP54 metal base, Die-cast top housing, stainless steel pan, up-front level indicator, integral weigh below hook, calibration lock, two touchless sensors, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, auto standby, up to 14 operating languages

Operation

AC Adapter (included) or rechargeable battery (accessory sold separately)



Equipped with a weighing cell that's precision-machined from a solid metal block, Explorer balances are extremely accurate and durable, and are ideal for laboratory and industrial environments.

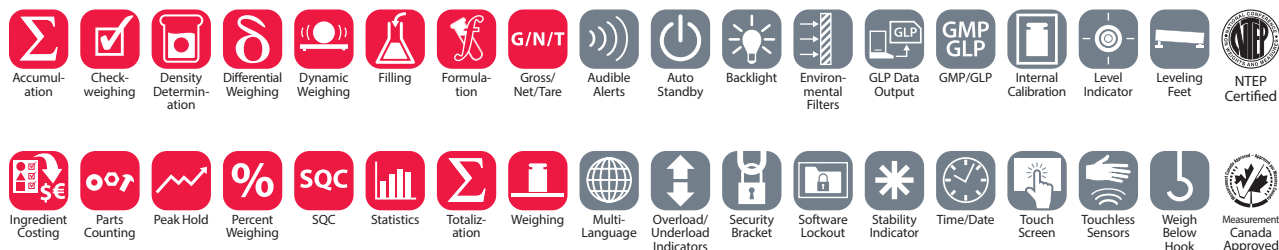
2-D shock protection and IP54 base enclosure protect the balance from damage, while the AutoCal™ automatic internal calibration system ensures performance.

A detachable terminal with a large color touchscreen and programmable IR sensors make Explorer High-Capacity balances easy and convenient to use.

Model	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
EX12001N	•	12,000 g	0.1 g	1 g	II	14.8 in x 12.2 in (377 mm x 311 mm)	30553892	4425
EX24001N	•	24,000 g	0.1 g	1 g	II	14.8 in x 12.2 in (377 mm x 311 mm)	30553893	5340
EX35001N	•	35,000 g	0.1 g	1 g	II	14.8 in x 12.2 in (377 mm x 311 mm)	30553894	6235

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
BATTERY, pack, Li-ion, R, 14.8V, 2600mAh	30041295	420
Wheel Kit, Set(4), EX-HiCap	30041470	181
Printer, Impact, SF40A, AM	30064203	1070
Cable, RS422, 9m, EX EX-HiCap	30078078	166
Column Kit, EX-HiCap	30078082	166
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Ethernet Kit, EX EX-HiCap	83021082	209
Cable Extension RS422 2m EX EX-HiCap	83021083	117
Cable, USB, Type A-B	83021085	209
In-Use-Cover, Terminal, EX	83033633	92



ADVENTURER™ ANALYTICAL

Intuitive Balances Designed for a Variety of Needs

Display

4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication

RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with two piece top mounted side doors and sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation

AC adapter (included)



**EASY OPERATION
& TIME SAVING**

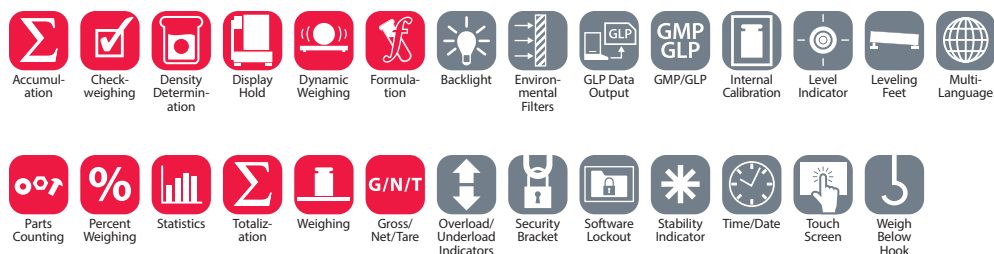
Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX124/E	-	120 g	0.1 mg	3.5 in (90 mm)	30100601	2715
AX124	•	120 g	0.1 mg	3.5 in (90 mm)	30100600	3300
AX224/E	-	220 g	0.1 mg	3.5 in (90 mm)	30100603	2990
AX224	•	220 g	0.1 mg	3.5 in (90 mm)	30100602	3640
AX324	•	320 g	0.1 mg	3.5 in (90 mm)	30100604	3980

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable ST103-EX MB PA TxxP	80252581	209
Printer, Impact, SF40A, AM	30064203	1070	Density Kit, Solids	80253384	845
Dust Cover, Balance with Draft Shield	30093334	55	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
In-Use-Cover DS AX	30111792	32	Cable RS232 IBM 9P Male-to-Female	80500525	209
Static Ionizer, ION-100A, AM	30130302	1885	Anti-Theft Device Lab Balance	80850043	251
Auxiliary display AD7-RS	30472064	78	Software, Winwedge	80850080	575
Paper Roll, Thermal, STP103	80251931	24	Cable, USB, Type A-B	83021085	209
Printer, Thermal, STP-103, US	80251992	825	Sinker, Glass, Liquid, Density Kit	83034024	705



ADVENTURER™ ANALYTICAL NTEP

Intuitive Balances Designed for a Variety of Needs

Display

4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication

RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with two piece top mounted side doors and sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation

AC adapter (included)



Adventurer balances feature a color touchscreen, icon-based user interface, and an ergonomic design making them easy to configure and use.

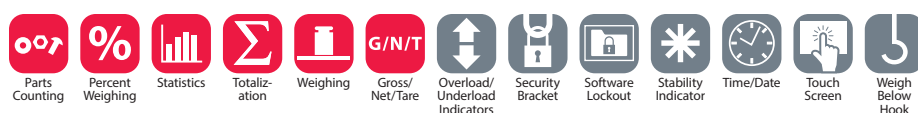
Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
AX224N	•	220 g	0.1 mg	1 mg	I	3.5 in (90 mm)	30100630	3865

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
In-Use-Cover DS AX	30111792	32
Static Ionizer, ION-100A, AM	30130302	1885
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209
Sinker, Glass, Liquid, Density Kit	83034024	705



ADVENTURER™ PRECISION

Intuitive Balance Designed for a Variety of Needs

Display

4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication

RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1 mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation

AC adapter (included)



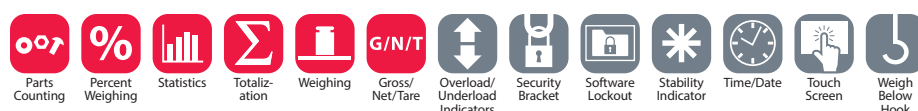
Adventurer balances come with a color touchscreen, an icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
AX223/E	-	•	220 g	1 mg	5.1 in (130 mm)	30100606	1585
AX223	•	•	220 g	1 mg	5.1 in (130 mm)	30100605	1990
AX423/E	-	•	420 g	1 mg	5.1 in (130 mm)	30100608	1955
AX423	•	•	420 g	1 mg	5.1 in (130 mm)	30100607	2405
AX523/E	-	•	520 g	1 mg	5.1 in (130 mm)	30100610	2150
AX523	•	•	520 g	1 mg	5.1 in (130 mm)	30100609	2630
AX422/E	-	-	420 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30127981	1105
AX622	•	-	620 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30122632	1510
AX822/E	-	-	820 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30127983	1305
AX1502/E	-	-	1,520 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100612	1415
AX1502	•	-	1,520 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100611	1845
AX2202/E	-	-	2,200 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100614	1525
AX2202	•	-	2,200 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100613	1965
AX4202/E	-	-	4,200 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100616	1980
AX4202	•	-	4,200 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100615	2465
AX5202	•	-	5,200 g	0.01 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100617	2795
AX2201/E	-	-	2,200 g	0.1 g	7.7 in x 6.9 in (195 mm x 175 mm)	30248912	1250
AX4201/E	-	-	4,200 g	0.1 g	7.7 in x 6.9 in (195 mm x 175 mm)	30122635	1415
AX4201	•	-	4,200 g	0.1 g	7.7 in x 6.9 in (195 mm x 175 mm)	30122634	1630
AX8201/E	-	-	8,200 g	0.1 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100619	1585
AX8201	•	-	8,200 g	0.1 g	7.7 in x 6.9 in (195 mm x 175 mm)	30100618	1905

Accessories on next page



ADVENTURER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
In-Use-Cover w/o DS AX	30111777	32
In-Use-Cover DS AX	30111792	32
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209

ADVENTURER™ PRECISION NTEP

Intuitive Balance Designed for a Variety of Needs

Display

4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness

Communication

RS232, USB Host, USB Device (included). GLP/GMP data output with real-time clock.

Construction

Metal base, ABS top housing, stainless steel pan, glass draftshield with 2-piece top mounted side doors & sliding top door (1 mg models only), illuminated up-front level indicator, weigh below hook, security bracket, calibration lock, full housing in-use cover

Design Features

Selectable environmental filters, auto tare, user selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user definable project and user IDs, up to 9 operating languages

Operation

AC adapter (included)



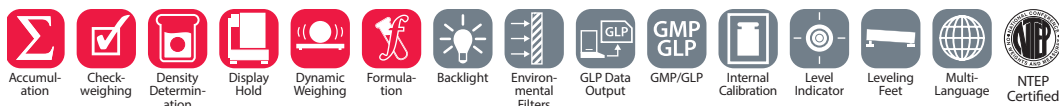
Adventurer balances come with a color touchscreen, an icon-based user interface, and an ergonomic design, making them easy to configure and use.

Features such as specialized weighing modes, multiple connectivity options, and AutoCal™ provide versatility and flexibility for a variety of applications.

Durable construction, large weighing surfaces, a space-saving draftshield design, and full housing in-use cover allow for use in lab, education and industrial environments.

Model	AutoCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
AX223N/E	-	•	220 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100631	1750
AX423N/E	-	•	420 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100633	2090
AX423N	•	•	420 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100632	2570
AX523N/E	-	•	520 g	0.001 g	0.01 g	II	5.1 in (130 mm)	30100634	2320
AX622N/E	-	-	620 g	0.01 g	0.1 g	II	7.7 in x 6.9 in (195 mm x 175 mm)	30100635	1355
AX1502N/E	-	-	1,520 g	0.01 g	0.1 g	II	7.7 in x 6.9 in (195 mm x 175 mm)	30100636	1525
AX2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.7 in x 6.9 in (195 mm x 175 mm)	30100637	1695
AX4202N/E	-	-	4,200 g	0.01 g	0.1 g	II	7.7 in x 6.9 in (195 mm x 175 mm)	30122655	2150
AX8201N/E	-	-	8,200 g	0.1 g	1 g	II	7.7 in x 6.9 in (195 mm x 175 mm)	30100639	1695

Accessories on next page



ADVENTURER™ PRECISION NTEP ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
In-Use-Cover w/o DS AX	30111777	32
In-Use-Cover DS AX	30111792	32
Auxiliary display AD7-RS	30472064	78
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209

PIONEER™ SEMI-MICRO

Combining Economy and High Performance for Essential Weighing

Display

Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)

Communication

RS232 and USB device (included)

Construction

Metal base, plastic top housing, removable stainless steel pan, glass draftshield, integrated weigh-below-hook, security bracket, calibration lock and in-use cover

Design Features

User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, userselectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation

AC adapter (included)



The PX5 offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and education settings at an economical price point.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX5 is durably constructed for versatile, long-term use.

The PX5 features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB and RS232 connectivity for easy communication.

Model	InCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX85	•	82 g	0.01 mg	80 mm	30475733	4490
PX225D	•	82 g/220 g	0.01 mg; 0.1 mg	80 mm	30475734	5195

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable ST103-EX MB PA TxxP	80252581	209
Printer, Impact, SF40A, AM	30064203	1070	Density Kit, Solids	80253384	845
Dust Cover, Balance with Draft Shield	30093334	55	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Static Ionizer, ION-100A, AM	30130302	1885	Cable RS232 IBM 9P Male-to-Female	80500525	209
In-Use-Cover, PX	30372546	50	Anti-Theft Device Lab Balance	80850043	251
Auxiliary display AD7-RS	30472064	78	Software, Winwedge	80850080	575
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53	Cable, USB, Type A-B	83021085	209
Paper Roll, Thermal, STP103	80251931	24	Sinker, Glass, Liquid, Density Kit	83034024	705
Printer, Thermal, STP-103, US	80251992	825			



Density Determination



Dynamic Weighing



Gross/Net/Tare



Parts Counting



Percent Weighing



Weighing



Backlight



Environmental Filters



Internal Calibration



Level Indicator



Leveling Feet



Overload Protection



Security Bracket



Software Lockout



Stability Indicator



Weigh Below Hook

PIONEER™ ANALYTICAL

Affordable Balance to Achieve Reliable Results

Display

Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)

Communication

RS232 and USB device (included); GLP/GMP data output with real-time clock

Construction

Metal base, plastic top housing, removable stainless steel pan, glass draftshield, integrated weigh-below-hook, security bracket, calibration lock and in-use cover

Design Features

User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, userselectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation

AC adapter (included)



**\$ECONOMY
& ACCURACY**

The PX offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and education settings at an economical price point.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX is durably constructed for versatile, long-term use.

PX features a second line display for additional information/guidance, & USB/RS232 connectivity for easy communication. Draftshield models feature a static removal (ESR) bar for convenient grounding.

Model	InCal™	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX84/E	-	82 g	0.0001 g	90 mm	30429845	1825
PX84	•	82 g	0.0001 g	90 mm	30429837	2130
PX124/E	-	120 g	0.0001 g	90 mm	30429846	2105
PX124	•	120 g	0.0001 g	90 mm	30429838	2440
PX224/E	-	220 g	0.0001 g	90 mm	30429847	2335
PX224	•	220 g	0.0001 g	90 mm	30430053	2685

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
In-Use-Cover, PX	30372546	50
Auxiliary display AD7-RS	30472064	78
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209
Sinker, Glass, Liquid, Density Kit	83034024	705



Density Determination



Dynamic Weighing



Gross/Net/Tare



Parts Counting



Percent Weighing



Weighing



Backlight



Environmental Filters



Internal Calibration



Level Indicator



Leveling Feet



Overload Protection



Security Bracket



Software Lockout



Stability Indicator



Weigh Below Hook

PIONEER™ PRECISION

Combining Economy and High Performance for Essential Weighing

Display

2-Line LCD with Backlight

Communication

RS232, USB

Construction

Metal base, plastic top housing, removable stainless steel pan, weigh-below-hook

Design Features

Metal base, plastic top housing, removable stainless steel pan, glass draftshield, Real Time Clock with GLP/ GMP Data integrated, weigh-below-hook, security bracket, calibration lock and in-use cover, userselectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, overload indicator, software lockout and reset menu, user-selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, four operating languages

Operation

Power Adaptor



The PX offers high accuracy and repeatability for essential weighing applications in laboratory, industrial and educational settings at an economical pricepoint.

Featuring a cast metal lower housing, sub-pan and stainless steel weighing pan, the PX is durably constructed for versatile, long-term use.

The PX features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB and RS232 connectivity for easy communication.

Model	InCal™	Draftshield	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PX163/E	-	•	160 g	0.001 g	120 mm	30429848	1060
PX163	•	•	160 g	0.001 g	120 mm	30429839	1335
PX323/E	-	•	320 g	0.001 g	120 mm	30429849	1235
PX323	•	•	320 g	0.001 g	120 mm	30429840	1500
PX523/E	-	-	520 g	0.001 g	120 mm	30430057	1560
PX523	•	•	520 g	0.001 g	120 mm	30430054	1845
PX623/E*	-	•	620 g	0.001 g	120 mm	30699093	1564
PX623*	•	•	620 g	0.001 g	120 mm	30699092	1791
PX1602/E	-	-	1,600 g	0.01 g	180 mm	30430058	1025
PX1602	•	-	1,600 g	0.01 g	180 mm	30430055	1265
PX2202/E	-	-	2,200 g	0.01 g	180 mm	30429850	1120
PX2202	•	-	2,200 g	0.01 g	180 mm	30429841	1370
PX3202/E	-	-	3,200 g	0.01 g	180 mm	30429851	1350
PX3202	•	-	3,200 g	0.01 g	180 mm	30429842	1615
PX4202/E	-	-	4,200 g	0.01 g	180 mm	30429852	1525
PX4202	•	-	4,200 g	0.01 g	180 mm	30429843	1815
PX6202/E*	-	-	6,200 g	0.01 g	180 mm	30699095	1935
PX6202*	•	-	6,200 g	0.01 g	180 mm	30699094	2237
PX2201/E	-	-	2,200 g	0.1 g	180 mm	30430059	950
PX2201	•	-	2,200 g	0.1 g	180 mm	30430056	1175
PX4201/E	-	-	4,200 g	0.1 g	180 mm	30429853	1095
PX4201	•	-	4,200 g	0.1 g	180 mm	30429844	1330

*Available starting March 2022

Accessories on next page



Density Determination



Dynamic Weighing



Gross/Net/Tare



Parts Counting



Percent Weighing



Weighing



Backlight



Environmental Filters



Internal Calibration



Level Indicator



Leveling Feet



Overload Protection



Security Bracket



Software Lockout



Stability Indicator



Weigh Below Hook

PIONEER™ PRECISION ACCESSORIES

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
In-Use-Cover, PX	30372546	50
Auxiliary display AD7-RS	30472064	78
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209
Sinker, Glass, Liquid, Density Kit	83034024	705

PR SERIES ANALYTICAL

Designed for Routine Weighing Applications in the Workplace

Display

Backlit Liquid Crystal Display (LCD)

Communication

RS232 (one port included)

Construction

ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features

User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation

AC adapter (included)



The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Capacity	Readability	Class	Pan Size	Item Number	List Price (USD)
PR64/E	-	62 g	0.0001 g	-	3.5 in (90 mm)	30430060	1475
PR124/E	-	120 g	0.0001 g	-	3.5 in (90 mm)	30529066	1700
PR124	•	120 g	0.0001 g	-	3.5 in (90 mm)	30529065	1920
PR224/E	-	220 g	0.0001 g	-	3.5 in (90 mm)	30430062	1890
PR224	•	220 g	0.0001 g	-	3.5 in (90 mm)	30430061	2125

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable ST103-EX MB PA TxxP	80252581	209
Printer, Impact, SF40A, AM	30064203	1070	Density Kit, Solids	80253384	845
Dust Cover, Balance with Draft Shield	30093334	55	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Static Ionizer, ION-100A, AM	30130302	1885	Cable RS232 IBM 9P Male-to-Female	80500525	209
In-Use-Cover, PR	30372547	50	Anti-Theft Device Lab Balance	80850043	251
Auxiliary display AD7-RS	30472064	78	Software, Winwedge	80850080	575
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53	Cable, USB, Type A-B	83021085	209
Paper Roll, Thermal, STP103	80251931	24	Sinker, Glass, Liquid, Density Kit	83034024	705
Printer, Thermal, STP-103, US	80251992	825			



PR SERIES PRECISION

Designed for Routine Weighing Applications in the Workplace

Display

Backlit Liquid Crystal Display (LCD)

Communication

RS232 (one port included)

Construction

ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features

User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation

AC adapter (included)



The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Draftshield	Capacity	Readability	Class	Pan Size	Item Number	List Price (USD)
PR223/E	-	•	220 g	0.001 g	-	4.7 in (120 mm)	30529239	935
PR523/E	-	•	520 g	0.001 g	-	4.7 in (120 mm)	30430063	1265
PR1602/E	-	-	1,600 g	0.01 g	-	7.1 in (180 mm)	30529067	860
PR2202/E	-	-	2,200 g	0.01 g	-	7.1 in (180 mm)	30430064	985
PR4202/E	-	-	4,200 g	0.01 g	-	7.1 in (180 mm)	30430065	1230
PR2201/E	-	-	2,200 g	0.1 g	-	7.1 in (180 mm)	30529238	765
PR4201/E	-	-	4,200 g	0.1 g	-	7.1 in (180 mm)	30430066	885

Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20
Printer, Impact, SF40A, AM	30064203	1070
Dust Cover, Balance with Draft Shield	30093334	55
Static Ionizer, ION-100A, AM	30130302	1885
In-Use-Cover, PR	30372547	50
Auxiliary display AD7-RS	30472064	78
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53
Paper Roll, Thermal, STP103	80251931	24
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable ST103-EX MB PA TxxP	80252581	209
Density Kit, Solids	80253384	845
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Software, Winwedge	80850080	575
Cable, USB, Type A-B	83021085	209
Sinker, Glass, Liquid, Density Kit	83034024	705



PR SERIES PRECISION NTEP

Designed for Routine Weighing Applications in the Workplace

Display

Backlit Liquid Crystal Display (LCD)

Communication

RS232 (one port included)

Construction

ABS top housing, removable stainless steel pan, removable glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock

Design Features

User-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

Operation

AC adapter (included)



The PR is equipped with 3 essential weighing modes, RS-232 connectivity for data transfer and storage, and internal calibration (in select models), making it ideal for routine weighing applications.

Equipped with an easy-to-read, bright backlit display and a simple user interface, the PR is incredibly easy to operate, with almost no training required.

The PR's small footprint saves desktop space while providing a large weighing surface. The PR is durably constructed, and features a stainless steel pan to withstand day-to-day use in the workplace.

Model	InCal™	Draftshield	Capacity	Readability	Certified Readability	Class	Pan Size	Item Number	List Price (USD)
PR323N/E	-	•	320 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30455605	1145
PR323NUS/E*	-	-	320 g	0.001 g	0.01 g	II	5.7 in (145 mm)	30575407	1145
PR523N	•	•	520 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30452494	1690
PR523N/E	-	•	520 g	0.001 g	0.01 g	II	4.7 in (120 mm)	30455606	1455
PR822N/E	-	-	820 g	0.1 g	0.1 g	III	7.1 in (180 mm)	30455607	940
PR2202N/E	-	-	2,200 g	0.01 g	0.1 g	II	7.1 in (180 mm)	30455668	1050
PR5202N/E	-	-	5,200 g	0.01 g	0.1 g	II	7.1 in (180 mm)	30455670	1465
PR6201N/E	-	-	6,200 g	1 g	1 g	III	7.1 in (180 mm)	30455673	1175

*Available starting April 2022

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Cable ST103-EX MB PA TxxP	80252581	209
Printer, Impact, SF40A, AM	30064203	1070	Density Kit, Solids	80253384	845
Dust Cover, Balance with Draft Shield	30093334	55	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Static Ionizer, ION-100A, AM	30130302	1885	Cable RS232 IBM 9P Male-to-Female	80500525	209
In-Use-Cover, PR	30372547	50	Anti-Theft Device Lab Balance	80850043	251
Auxiliary display AD7-RS	30472064	78	Software, Winwedge	80850080	575
PWR,W,IN,6W,12VDC,S21x55x9x100,S	46001724	53	Cable, USB, Type A-B	83021085	209
Paper Roll, Thermal, STP103	80251931	24	Sinker, Glass, Liquid, Density Kit	83034024	705
Printer, Thermal, STP-103, US	80251992	825			



SCOUT™ STX

High-Performance Portable Balances with Intuitive Touchscreens for High Accuracy and Productivity

Display

4.3" (109 mm) full-color VGA graphic touchscreen display with user-controlled brightness

Communication

RS232, USB Host, USB Device, Ethernet or Bluetooth® (available as an accessory)

Construction

ABS housing, stainless steel pan, ABS draftshield (1 mg models only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features

Stability indicator, stackable design with included storage cover (excluding 1 mg models), mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, span calibration mass included on models up to 620 g capacity

Operation

AC Adapter (Included) or 4 AA Batteries (Not included)



Large, intuitive, color touchscreen display allows for easy operation - guiding the user through every step of the weighing application.

Advanced weighing technology allows for one-second stabilization time for increased productivity.

Integrated overload protection system rated at ten times the capacity protects the balance in demanding environments.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
STX123	120 g	0.001 g	3.7 in (93 mm)	30253005	845
STX223	220 g	0.001 g	3.7 in (93 mm)	30253006	946
STX222	220 g	0.01 g	4.7 in (120 mm)	30253007	616
STX422	420 g	0.01 g	4.7 in (120 mm)	30253008	866
STX622	620 g	0.01 g	4.7 in (120 mm)	30253009	1015
STX1202	1,200 g	0.01 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253010	1158
STX2202	2,200 g	0.01 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253011	1296
STX421	420 g	0.1 g	4.7 in (120 mm)	30253012	351
STX621	620 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253013	519
STX2201	2,200 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253014	659
STX6201	6,200 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253015	1052
STX8200	8,200 g	1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253016	542

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Stacking Kit, x1, STX SPX SKX SJX/E	30268988	25
RS232 Interface, Scout	30268982	181	Density Kit, SKX STX SJX/E	30269020	24
USB Host Interface, Scout	30268983	181	Carrying Case, Scout	30269021	142
USB Device Interface, Scout	30268984	126	Power Adapter 5V 1A US Scout CX	30330714	27
Bluetooth Interface, Scout	30268985	162	Auxiliary display AD7-MD	30472063	143
Ethernet Interface, Scout	30268986	196	Anti-Theft Device Lab Balance	80850043	251
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	71			



SCOUT™ SPX

Portable Precision Balances Provide Consistently Accurate Measurements

Display

Liquid crystal display (LCD) with backlight

Communication

RS232, USB Host, USB Device, Ethernet or Bluetooth® (available as an accessory)

Construction

ABS housing, stainless steel pan, ABS draftshield (1 mg models only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features

Stability indicator, stackable design with optional storage cover (excluding 1 mg models), mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, span calibration mass included on models up to 620 g capacity

Operation

AC Adapter (Included) or 4 AA Batteries (Not included)



Large backlit display improves readability in low light conditions and is easier to view from a distance.

Integrated overload protection and impact-resistant pan allow the balance to operate efficiently in demanding environments.

Increase productivity with advanced weighing technology and stabilization time as fast as one-second.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
SPX123	120 g	0.001 g	3.7 in (93 mm)	30253017	737
SPX223	220 g	0.001 g	3.7 in (93 mm)	30253018	827
SPX222	220 g	0.01 g	4.7 in (120 mm)	30253019	541
SPX422	420 g	0.01 g	4.7 in (120 mm)	30253020	758
SPX622	620 g	0.01 g	4.7 in (120 mm)	30253021	885
SPX1202	1,200 g	0.01 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253022	1013
SPX2202	2,200 g	0.01 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253023	1134
SPX421	420 g	0.1 g	4.7 in (120 mm)	30253024	299
SPX621	620 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253025	442
SPX2201	2,200 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253026	557
SPX6201	6,200 g	0.1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253027	917
SPX8200	8,200 g	1 g	5.5 in x 6.7 in (140 mm x 170 mm)	30253028	462

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Stacking Kit, x1, STX SPX SKX SJX/E	30268988	25
RS232 Interface, Scout	30268982	181	Density Kit, SKX STX SJX/E	30269020	24
USB Host Interface, Scout	30268983	181	Carrying Case, Scout	30269021	142
USB Device Interface, Scout	30268984	126	Power Adapter 5V 1A US Scout CX	30330714	27
Bluetooth Interface, Scout	30268985	162	Auxiliary display AD7-MD	30472063	143
Ethernet Interface, Scout	30268986	196	Anti-Theft Device Lab Balance	80850043	251
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	71			



SCOUT™ SJX

Class II Legal-for-Trade Portable Balances Ideal for Jewelry Weighing

Display

Liquid crystal display (LCD) with backlight

Communication

RS232, USB Host, USB Device, Ethernet or Bluetooth® (available as an accessory)

Construction

ABS housing, stainless steel pan, ABS draftshield (1 mg model only), weigh below hook, transportation lock, manual calibration lock switch, security slot, adjustable leveling feet, illuminated up-front level indicator

Design Features

Stability indicator, mechanical and software overload/underload protection, low battery indicator, auto shut-off, auto tare, scoop and weight on 64 g model

Operation

AC Adapter (Included) or 4 AA Batteries (Not included)



Scout meets Class II and III accuracy requirements for countertop retail applications.

Multiple connectivity options are available for easy data logging and communication. An optional auxiliary display can also be installed for retail applications.

Advanced weighing technology ensures reliable, repeatable weighing results.

Model	Capacity	Readability	Certified Readability	Pan Size	Item Number	List Price (USD)
SJX323N/E	64 g	0.001 g	0.01 g	3.7 in (93 mm)	30253054	743
SJX622N/E	1.37 lb (620 g)	0.00005 lb (0.01 g)	0.0005 lb (0.1 g)	4.7 in (120 mm)	30253055	928
SJX1502N/E	3.3 lb (1,500 g)	0.00005 lb (0.01 g)	0.0005 lb (0.1 g)	5.5 in x 6.7 in (140 mm x 170 mm)	30253056	1077
SJX6201N/E	13.67 lb (6,200 g)	0.0005 lb (0.1 g)	0.005 lb (1 g)	5.5 in x 6.7 in (140 mm x 170 mm)	30253057	955

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Stacking Kit, x1, STX SPX SKX SJX/E	30268988	25
RS232 Interface, Scout	30268982	181	Density Kit, SKX STX SJX/E	30269020	24
USB Host Interface, Scout	30268983	181	Carrying Case, Scout	30269021	142
USB Device Interface, Scout	30268984	126	Power Adapter 5V 1A US Scout CX	30330714	27
Bluetooth Interface, Scout	30268985	162	Auxiliary display AD7-MD	30472063	143
Ethernet Interface, Scout	30268986	196	Anti-Theft Device Lab Balance	80850043	251
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	71			



NAVIGATOR™

Multi-Purpose Portable Balances Suitable for Everyday Weighing

Display

Liquid Crystal Display (LCD) with backlight

Communication

RS232, USB, or Ethernet (available as accessories)

Construction

ABS housing, stainless steel pan, transportation lock, slip-resistant and adjustable feet, leveling bubble

Design Features

Menu and calibration lock switch, mechanical and software overload/underload protection, stability indicator, low battery indicator, auto shut-off, user-selectable print options, user-selectable communication settings

Operation

AC adapter (included) or 4 C batteries (not included)



Navigator offers essential weighing applications at a competitive price point.

Advanced weighing technology offers one-second stabilization for fast and accurate weighing results, improving operator efficiency, productivity and throughput.

Overload protection system that can withstand loads up to four times the rated capacity safeguards the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
NV123	120 g	0.001 g	3.7 in (93 mm)	30642238	450
NV223	220 g	0.001 g	3.7 in (93 mm)	30642239	500
NV323	320 g	0.001 g	3.7 in (93 mm)	30642240	550
NV222	220 g	0.01 g	5.7 in (145 mm)	30456410	391
NV422	420 g	0.01 g	5.7 in (145 mm)	30456411	498
NV622	620 g	0.01 g	5.7 in (145 mm)	30467960	525
NV1202	1,200 g	0.01 g	5.7 in x 7.5 in (144 mm x 190 mm)	30642241	585
NV2202	2,200 g	0.01 g	5.7 in x 7.5 in (144 mm x 190 mm)	30642242	615
NV3202	3,200 g	0.01 g	5.7 in x 7.5 in (144 mm x 190 mm)	30642243	645
NV221	220 g	0.1 g	5.7 in x 7.5 in (144 mm x 190 mm)	30456412	228
NV621	620 g	0.1 g	5.7 in x 7.5 in (144 mm x 190 mm)	30456413	335
NV1201	1,200 g	0.1 g	5.7 in x 7.5 in (144 mm x 190 mm)	30456414	379
NV2201	2,200 g	0.1 g	5.7 in x 7.5 in (144 mm x 190 mm)	30456415	421
NVT2201	2,200 g	0.1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456416	421
NVT4201	4,200 g	0.1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456417	526
NVT6201	6,200 g	0.1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30467961	549
NVT10201	10,200 g	0.1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30642244	579
NVT2200	2,200 g	1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456418	396
NVT6200	6,200 g	1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456419	520
NVT12000	12,000 g	1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456420	563
NVT22000	22,000 g	1 g	6.9 in x 9.1 in (174 mm x 230 mm)	30456421	674

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Carrying Case NV NVT	30467963	118
Adaptor Kit 12V 0.5A EU-US-AU-UK-KR	30467987	42
Weigh below hook NV NVT	30628012	20

Accessories	Item Number	List Price (USD)
RS232 Kit TA NV NVT	83032107	181
USB Kit TA NV NVT	83032108	181
Ethernet Kit NV NVT	83032109	181



COMPASS™ CX

Energy-Efficient Portable Scale Suitable for Workplace and in-the-Field Weighing

Display

Liquid Crystal Display (LCD) with backlight

Construction

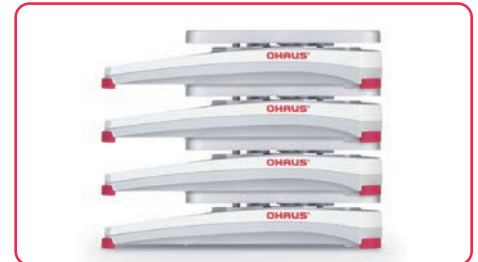
ABS housing, stainless steel pan, transportation lock, slip-resistant feet

Design Features

Stability indicator, mechanical and software overload/underload protection, low battery indicator, auto shut-off

Operation

3 AA batteries (included) or AC adapter (not included)



Save money over the lifetime of the balance. Alkaline batteries allow you to maximize operating time by up to 1,000 hours of continuous, energy-efficient weighing in the workplace or classroom.

Large backlit display increases readability in low-light conditions and makes it easier to view results from a distance.

Slim, space-saving design allows for stackable storage for up to four scales.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
CX221	220 g	0.1 g	5.6 in x 5 in (142 mm x 128 mm)	30428199	175
CX621	620 g	0.1 g	5.6 in x 5 in (142 mm x 128 mm)	30428200	181
CX1201	1,200 g	0.1 g	5.6 in x 5 in (142 mm x 128 mm)	30428201	192
CX2200	2,200 g	1 g	5.6 in x 5 in (142 mm x 128 mm)	30428202	175
CX5200	5,200 g	1 g	5.6 in x 5 in (142 mm x 128 mm)	30428203	206
CX221P	220 g	0.1 g	5.6 in x 5 in (142 mm x 128 mm)	30467746	188
CX2200P*	2,200 g	1 g	5.6 in x 5 in (142 mm x 128 mm)	30467747	189
CX5200P*	5,200 g	1 g	5.6 in x 5 in (142 mm x 128 mm)	30467761	206
CX5200F**	5,200 g	1 g	5.6 in x 5 in (142 mm x 128 mm)	30467762	237

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Power Adapter 5V 1A US Scout CX	30330714	27	Pan SST CX	30428138	22
Power Adapter 5V 1A AU Scout CX	30333865	28	Carrying case CX CR	30467763	71
Power Adapter 5V 1A EU Scout CX	30333866	28	Bowl, 1050ml, CX CR	80850075	59
Power Adapter 5V 1A UK Scout CX	30333867	28			

*Models followed by the letter "P" include a postal chart

**Models followed by the letter "F" include a carrying case



COMPASS™ CR

Quality Portable Electronic Scales Suitable for Everyday Weighing.

Display

Liquid Crystal Display (LCD)

Construction

ABS housing and pan, transportation lock, slip-resistant feet

Design Features

Stability indicator, mechanical and software overload/underload protection, auto shut-off

Operation

3 AA batteries (included) or AC adapter (not included)



Intuitive two-button design makes for easy operation.

Slim, space-saving design allows for stackable storage.

Enlarged weighing platform can adequately handle large samples and a variety of objects.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
CR221	220 g	0.1 g	5.2 in x 5 in (132 mm x 125 mm)	30428204	125
CR621	620 g	0.1 g	5.2 in x 5 in (132 mm x 125 mm)	30428205	130
CR2200	2,200 g	1 g	5.2 in x 5 in (132 mm x 125 mm)	30428206	125
CR5200	5,200 g	1 g	5.2 in x 5 in (132 mm x 125 mm)	30428207	172

Accessories	Item Number	List Price (USD)
Carrying case CX CR	30467763	71
Adaptor Kit 12V 0.5A EU-US-AU-UK-KR	30467987	42

Accessories	Item Number	List Price (USD)
Bowl, 1050ml, CX CR	80850075	59



PS SERIES

High Performance Portable Weighing in the Palm of Your Hand!

Display

Liquid crystal display (LCD)

Construction

ABS housing and protective sliding pan

Design Features

Mechanical and software overload/underload protection, auto shut-off

Operation

2 lithium batteries (included)



- The one-piece combination pan and cover slides back when being used to weigh and forward when not in use to protect the buttons and display during storage and transportation.
- One of the smallest portable balances on the market, PS can easily fit in to a standard shirt pocket.
- The "pop-out" design of the battery compartment provides simple and fast battery replacement.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
PS121	120 g	0.1 g	2.6 in x 2.5 in (66 mm x 63 mm)	80104060	80
PS251	250 g	0.1 g	2.6 in x 2.5 in (66 mm x 63 mm)	80104061	103


Weighing


Auto Shut-Off


Low Battery Indicator


Overload/Underload Indicators


Stability Indicator

YA GOLD SERIES

Portable Precision Weighing in a Compact Case

Display

Backlit liquid crystal display (LCD)

Construction

ABS housing, stainless steel pan, protective cover

Design Features

Mechanical and software overload/underload protection, auto shut-off

Operation

2 AAA batteries (included)



A hinged cover, sturdy plastic housing and stainless steel weighing pan protect the small balance from damage.

With an extremely fast stabilization time, your results will appear quickly on the blue backlit LCD display.

Powered by two 'AAA' batteries, a power-saving auto shut-off feature helps to conserve battery life.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
YA102	100 g	0.01 g	2.8 in x 2 in (70 mm x 50 mm)	80251910	121
YA302	300 g	0.05 g	2.8 in x 2 in (70 mm x 50 mm)	80251911	105
YA501	500 g	0.1 g	2.8 in x 2 in (70 mm x 50 mm)	80251912	75





Moisture Analyzer Selector Guide



Moisture Analyzers				
	MB120	MB90	MB27	MB23
Weighing Capacity	120 g	90 g	90 g	110 g
Readability Range	0.001 g	0.001 g	0.001 g	0.01 g
SmartGuide™	•			
Halogen	•	•	•	
Infrared				•
Color Graphics Display	•	•		
Backlit LCD			•	•
Touchscreen	•	•		
% Moisture	•	•	•	•
% Solids	•	•	•	•
External Calibration	•	•	•	•
GLP / Time / Date	•	•		
RS232	•	•	•	•
Temperature Range	40-230 °C	40-200 °C	50-160 °C	50-160 °C
Page No.	36	37	38	39

MB120

Faster, Smarter, More Efficient Moisture Analysis

Display

4.3" TFT color touchscreen display

Communication

RS232 with GLP/GMP data output, USB Host and USB Device (included)

Construction

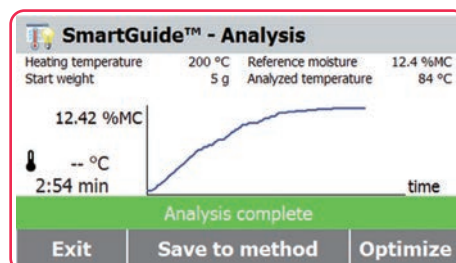
Metal base, ABS top housing, halogen heat source, stainless steel pan support, stainless steel pan handler, in-use cover

Design Features

Seven shut-off criteria (manual, timed, autofree %/s, autofree mg/s, A30, A60 and A90), four drying profiles (standard, fast, ramp and step), storage up to 100 methods and 1000 test results for all methods, user guide, 40°C to 230°C heating temperature range (1°C increments), 14 operational languages

Operation

Power cord (included)



Get started quickly with SmartGuide™. This revolutionary feature automatically analyzes a sample and creates a method, thereby removing the guesswork from the initial setup.

The MB120 has the capability to produce fast and accurate results due to features such as a halogen heating system, customizable shut-off criteria and four built in drying profiles.

The MB120 allows storage of up to 100 methods and 1,000 measurement results. Stored results can be exported, and methods can be shared across multiple devices.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB120	120 g	1 mg/0.01%	3.5 in (90 mm)	30241165	5415

Accessories	Item Number	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	635
Printer, Impact, SF40A, AM	30064203	1070
Handle Pan MB90 MB120	30246947	77
Scoop, Accessory, MB9x MB120	30284477	55
In-Use-Cover, Accessory, MB9x MB120	30284478	86
Interface Kit, RS232-USB	30304101	157

Accessories	Item Number	List Price (USD)
Interface Kit, RS232-Ethernet	30304102	157
Cage, Sample, MB Series	80252477	113
Pan, Reusable, Set(3), 7mm, MB Series	80252478	94
Pan, Reusable, Set(3), 14mm, MB Series	80252479	98
Anti-Theft Device Lab Balance	80850043	251
Filter Glass Fiber, Set(200) Series	80850087	112



MB90

Simple Operation. Precise Results.

Display

4.3" TFT color touchscreen display

Communication

RS232 with GLP/GMP data output, USB Host and USB Device (included)

Construction

Metal base, ABS top housing, halogen heat source, stainless steel pan support, stainless steel pan handler, in-use cover

Design Features

Three shut-off criteria (manual, timed or auto), two drying profiles (standard and fast), storage up to two methods, user guide, 40°C to 200°C heating temperature range (1°C increments), 14 operational languages

Operation

Power cord (included)



Halogen heating increases efficiency for faster results.

Intuitive touchscreen menu offers step-by-step guidance for any application.

Tool-free cleaning for easy maintenance.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB90	90 g	1 mg/0.01%	90 mm	30241164	4265

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	635	Interface Kit, RS232-Ethernet	30304102	157
Printer, Impact, SF40A, AM	30064203	1070	Cage, Sample, MB Series	80252477	113
Handle Pan MB90 MB120	30246947	77	Pan, Reusable, Set(3), 7mm, MB Series	80252478	94
Scoop, Accessory, MB9x MB120	30284477	55	Pan, Reusable, Set(3), 14mm, MB Series	80252479	98
In-Use-Cover, Accessory, MB9x MB120	30284478	86	Anti-Theft Device Lab Balance	80850043	251
Interface Kit, RS232-USB	30304101	157	Filter Glass Fiber, Set(200) Series	80850087	112



Moisture Analysis



Percent Moisture



Percent Solid



Weighing



Temperature



Audible Alerts



Auto Shut-Off



Backlight



GLP Data Output



GMP/GLP



Time/Date



Hinged Cover



Level Indicator



Leveling Feet



Multi-Language



Security Bracket



Stability Indicator



Software Lockout

MB27

Outstanding Performance, Flexible Configuration and Reliable Results

Display

Backlit liquid crystal display (LCD)

Communication

RS232 (included)

Construction

Halogen heat source, ABS housing, metal pan support, metal pan handler, in-use cover

Design Features

3 shut off criteria (manual, timed or auto), 1 standard heating profile, 50° to 160° C heating range (5° C increments)

Operation

Power cord (included)



With 0.01% 0.001 g accuracy, the MB27 Moisture Analyzer is suitable for most applications.

Halogen heating and dual weight-temperature calibration provide fast, reliable results.

User-friendly touch-button design for easy operation.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB27	90 g	1 mg/0.01%	3.5 in (90 mm)	30251683	3180

Accessories	Item Number	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	635
Printer, Impact, SF40A, AM	30064203	1070
Interface Kit, RS232-USB	30304101	157
Interface Kit, RS232-Ethernet	30304102	157
In-Use-Cover, MB23 MB25 MB27	80252475	43
Holder Pan MB23 MB25 MB27	80252476	86

Accessories	Item Number	List Price (USD)
Cage, Sample, MB Series	80252477	113
Pan, Reusable, Set(3), 7mm, MB Series	80252478	94
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Filter Glass Fiber, Set(200) Series	80850087	112



MB23

Outstanding Performance, Flexible Configuration and Reliable Results

Display

Backlit liquid crystal display (LCD)

Communication

RS232 (included)

Construction

Infrared heat source, ABS housing, metal pan support, metal pan handler, in-use cover

Design Features

3 shut off criteria (manual, timed or auto), 1 standard heating profile, 50° to 160° C heating range (5° C increments)

Operation

Power cord (included)



Glass-less infrared heating increases efficiency for faster results.

User-friendly touch-button design for easy operation.

Compact design suits any workspace.

Model	Capacity	Moisture Readability	Pan Size	Item Number	List Price (USD)
MB23	110 g	10 mg/0.1%	3.5 in (90 mm)	83999801	3180

Accessories	Item Number	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	635
Printer, Impact, SF40A, AM	30064203	1070
Interface Kit, RS232-USB	30304101	157
Interface Kit, RS232-Ethernet	30304102	157
In-Use-Cover, MB23 MB25 MB27	80252475	43
Holder Pan MB23 MB25 MB27	80252476	86

Accessories	Item Number	List Price (USD)
Cage, Sample, MB Series	80252477	113
Pan, Reusable, Set(3), 7mm, MB Series	80252478	94
Cable RS232 IBM 9P Male-to-Female	80500525	209
Anti-Theft Device Lab Balance	80850043	251
Filter Glass Fiber, Set(200) Series	80850087	112



TRIPLE BEAM PRO™

Best-in-Class Mechanical Balance!

Display

Easy to-read deep-notched, tiered beams and dial plates

Construction

Metal base and beam, stainless steel pan

Design Features

Two notched and tiered beams, positive poise positioning, spring loaded zero adjust compensator, self-aligning beam design, magnetic dampening to minimize oscillation and speed weighing, security loop, included weight set and storage compartment



The unique, easy-grip carrying handle is ergonomically designed to allow for effortless movement around the classroom.

A convenient compartment provides a place to store the weight set when not in use, preventing the weights from becoming lost.

Prevent theft and accidental dropping by securing the balance to a desk or bench top with the security loop or Kensington-type lock (sold separately).

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
TP2611	2,610 g	0.1 g	5.8 in x 5.8 in (147 mm x 147 mm)	80621692	244

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Kit, Rod and Clamp	80780011	80	Anti-Theft Device, SP PA AV NV	80850000	96
Dust Cover, Triple Beam	80780017	43	Anti-Theft Device Lab Balance	80850043	251
Weight Set, 2x1kg, 1x500g	80780108	78			



TRIPLE BEAM™ 700 SERIES

The Standard by Which All Other Mechanical Balances Are Measured.

Display

Easy-to-read deep-notched, tiered beams and dial plates

Construction

Metal base and beam, stainless steel pan

Design Features

Easy-to-read notched and tiered beams, self-aligning beam design, magnetic dampening to minimize oscillation and speed weighing, zero adjust compensator



Superior magnetic damping provides stable results three times faster than any other three-beam balance on the market.

Five weighing pans of different sizes and designs can accommodate materials for a variety of weighing applications.

A counterbalancing knob provides quick zeroing of the balance while a self-aligning beam helps ensure accurate results.

Model	Readability	Capacity	Tare Beam	Pan Size	Item Number	List Price (USD)
750-S0	0.1 g	610 g		2.38 in x 6 in (60.5 mm x 152 mm)	80000012	170
760-00	0.1 g	610 g	•	2.38 in x 6 in (60.5 mm x 152 mm)	80000013	319
710-00	0.1 g	610 g		0.74 in x 6 in (18.9 mm x 152 mm)	80000011	309
710-T0	0.1 g	610 g	•	0.74 in x 6 in (18.9 mm x 152 mm)	80000031	377
720-00	0.1 g	610 g		12 in x 2.75 in x 6 in (30.5 mm x 70 mm x 152 mm)	80000032	363
720-S0	0.1 g	610 g		12 in x 1.7 in x 7.4 in (305 mm x 43 mm x 188 mm)	80000033	422
730-00	0.1 g	610 g		6 in x 9 in (152 mm x 229 mm)	80000034	455

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Subject Box	80000053	113	Scoop and Counter Weight, SST	80780015	142
Scoop and Counter Weight	80780001	66	Dust Cover, Triple Beam	80780017	43
Scoop, PP, 0.8l	80780006	43	Weight Set, 2x1kg, 1x500g	80780108	78
Kit, Rod and Clamp	80780011	80	Anti-Theft Device, SP PA AV NV	80850000	96



TRIPLE BEAM™ JUNIOR

All the Benefits of a Triple Beam, Just for Younger Students!

Display

Easy to-read deep-notched, tiered beams and dial plates

Construction

Metal base and beam, stainless steel pan

Design Features

Notched and tiered beams, magnetic dampening, zero adjust compensator



The notched and tiered beams provide for easy reading of measurement results.

Prevent theft and accidental dropping by securing the balance to a desk or bench top with the security loop or Kensington-type lock (sold separately).

The zero adjust compensator ensures the balance is at zero and weighing results will be accurate.

Model	Maximum Capacity	Readability	Pan Size	Item Number	List Price (USD)
TJ611	610 g	0.1 g	5.9 in (150 mm)	80252052	166

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Dust Cover, Triple Beam	80780017	43	Anti-Theft Device, SP PA AV NV	80850000	96

TRIPLE BEAM DIAL-O-GRAM™ 1600 SERIES

The Standard by Which All Others Are Measured!

Display

Easy to read deep notched and tiered beams and dial plates

Construction

Metal base and beam, stainless steel pan

Design Features

Counterbalancing knob for quick zeroing, positive poise positioning for repeatable results, self-aligning beam design, magnetic damping to minimize oscillation and speed weighing.



Superior magnetic damping provides three times faster stability reading than any other three-beam balance on the market

Vernier dial convenience

Counterbalancing knob for quick zeroing, self-aligning beam design

Model	Readability	Capacity	Tare Beam	Pan Type	Pan Size	Item Number	List Price (USD)
1650-00	0.1 g	610 g	•	Fixed Plate	6 in (152 mm)	80000006	398
1610-00	0.1 g	610 g	•	Removable Pan	6 in (152 mm)	80000036	461
1650-W0	0.1 g	2,610 g	•	Fixed Plate w/attachment weights	6 in (152 mm)	80000037	461
Accessories		Item Number	List Price (USD)	Accessories		Item Number	List Price (USD)
Scoop, Flat Bottomed, SST, 0.6l		80250400	80	Scoop and Counter Weight, SST		80780015	142
Scoop and Counter Weight		80780001	66	Dust Cover, Triple Beam		80780017	43
Scoop, PP, 0.8l		80780006	43	Weight Set, 2x1kg, 1x500g		80780108	78
Kit, Rod and Clamp		80780011	80	Anti-Theft Device, SP PA AV NV		80850000	96



Weighing

DIAL-O-GRAM™ AND CENT-O-GRAM™ 300 SERIES

Extremely Precise Mechanical Balance with High Readability.

Display

Easy to-read deep-notched, tiered beams and dial plates

Construction

Metal base and beam, stainless steel pan

Design Features

Self-aligning beam design, magnetic damping to minimize oscillation and speed weighing, zero adjust compensator



With aluminum pressure castings for the base and beam assembly, agate bearings, steel knife-edges, and stainless steel pan, the Dial-O-Gram is built to the highest standard of quality.

The three-point base, special floating bearing principle and beam design eliminates the need for level adjustments.

The self-aligning beam ensures accurate results are garnered effortlessly.

Model	Capacity	Readability	Beams	Pan Size	Item Number	List Price (USD)
310-00	310 g	0.01 g	2 Beams with Dial	0.5 in x 3.5 in (13 mm x 89 mm)	80000009	450
311-00	311 g	0.01 g	4 Beams	0.5 in x 3.5 in (13 mm x 89 mm)	80000010	372

Accessories	Item Number	List Price (USD)
Dust Cover, Dial-O-Gram Cent-O-Gram	80780005	43

Accessories	Item Number	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	96



Weighing

HARVARD JUNIOR

Two Pan Balance Designed to Teach Comparative Weighing.

Display

Steel pointer

Construction

ABS base, pans and bowls, metal beam

Design Features

Manual dampening device, spring-loaded zero adjust compensator



The easy-grip carrying handle will help students and teacher alike securely move the balances around the classroom.

The balances can be stacked to minimize the amount of storage space needed, and the lock feature protects the balance from damage when in storage.

An eight piece weight set and bowls that fit on the weighing pans are included with every Harvard Junior.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
HJ2001	2,000 g	0.5 g	6 in (150 mm)	80252050	141

HARVARD TRIP™

Two Pan Balance Designed for Comparative Weighing.

Display

Deep notched and tiered beams

Construction

All-metal base and beam, stainless steel pan

Design Features

Weight set (2000 g model, accessory sold separately), built-in sliding masses, magnetic damping, self-aligning beam design and floating agate bearings, counterbalancing knob for quick zeroing, hardened steel edges



The built-in sliding masses make weighing very simple and quick.

Magnetic damping minimizes oscillation and helps speed up weighing.

A counterbalancing knob provides quick zeroing of the balance while floating agate bearings helps ensure accurate results.

Model	Capacity	Readability	Beams	Pan Size	Item Number	List Price (USD)
1450-SD	2,000 g	0.1 g	1 Beam	6.2 in (152 mm)	80000003	415
1550-SD	2,000 g	0.1 g	2 Beams	6.2 in (152 mm)	80000004	445
1560-SD	2,000 g	0.1 g	2 Beams and Tare Beam	6.2 in (152 mm)	80000005	465

Accessories	Item Number	List Price (USD)
Scoop, PP, 0.8l	80780006	43
Kit, Rod and Clamp	80780011	80
Scoop and Counter Weight, SST	80780015	142

Accessories	Item Number	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	96
Weight Set, 1kg-1g, ASTM 6, CYL	80850115	515
Dust Cover,Storage,Harvard	80850262	43



SCHOOL BALANCE

The Young Scientist's First Balance!

Display

Plastic pointer

Construction

ABS base, beam, and pans

Design Features

Zero adjust compensator



WARNING:
CHOKING HAZARD – Small parts.
Not for children under 3 yrs.

Large, washable pans provide optimal space for samples to be weighed.

18 piece, color coded stackable plastic mass set included

Front and rear pointers allow students to view results from both sides of the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
SB1200	2,000 g	0.5 g	5.5 in x 5.5 in (140 mm x 140 mm)	80000029	73



PRIMER™ BALANCE

The Scale for Budding Scientists!

Display

Plastic pointer

Construction

ABS base, beam, and pans

Design Features

Large, washable weighing pans, dual pointers, 18 piece stackable plastic mass set



An activity guide with 16 exercises is included with every Primer balance.

The easy-to-slide zero adjustment weight makes ensuring the balance is ready for weighing very simple.

Front and rear pointers allow students to view results from both sides of the balance.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
80410-00	2,000 g	1 g	4 in x 4 in (102 mm x 102 mm)	80000024	53



SPRING SCALES

Producing Reproducible Results at Unbeatable Prices!

Display

Dial plates

Construction

ABS housing with metal face plate, pointer, spring and hook

Design Features

Large bright colored dial face, easy-to-read black graduations on a frosted aluminum background



Pull type spring scales feature an internal spring mechanism and offer a versatile and inexpensive way to display measurements in grams, ounces, pounds and Newton's.

Dial type spring scales offer a versatile and inexpensive weight determination in classrooms, laboratories, field studies and much more.

Demonstration spring scales offer a large faceplate for easy viewing and are ideal for all basic weighing applications.

Model	Capacity	Readability	Spring scale type	Item Number	List Price (USD)
8001-MA	9 oz / 250 g	0.25 oz / 10 g	Pull type	80000039	27
8002-MA	18 oz / 500 g	0.5 oz / 20 g	Pull type	80000041	27
8004-MA	72 oz / 20000 g	2 oz / 50 g	Pull type	80000044	27
8001-MN	250 g / 2.5 N	10 g / 0.1 N	Pull type	80000014	26
8002-MN	500 g / 5 N	20 g / 0.2 N	Pull type	80000015	26
8003-MN	1000 g / 10 N	25 g / 0.25 N	Pull type	80000016	26
8004-MN	2000 g / 20 N	50 g / 0.5 N	Pull type	80000017	26
8008-MN	5000 g / 50 N	100 g / 1 N	Pull type	80000018	26
8261-M0	100 g	1 g	Pull type	80000025	29
8262-M0	200 g	2 g	Pull type	80000026	29
8263-M0	500 g	5 g	Pull type	80000027	29
8264-M0	1000 g	10 g	Pull type	80000028	29
8265-M0	2000 g	20 g	Pull type	80000052	29
8001-PN	0.56 lb / 2.5 N	0.02 lb / 0.1 N	Pull type	80000040	30
8002-PN	1.12 lb / 5 N	0.04 lb / 0.2 N	Pull type	80000042	30
8003-PN	2.25 lb / 10 N	0.05 lb / 0.25 N	Pull type	80000043	30
8004-PN	4.5 lb / 20 N	0.1 lb / 0.5 N	Pull type	80000045	30
8008-PN	11.25 lb / 50 N	0.25 lb / 1 N	Pull type	80000046	30
8011-MA	9 oz / 250 g	0.125 oz / 2 g	Dial type	80000047	41
8012-MA	18 oz / 500 g	0.25 oz / 5 g	Dial type	80000048	41
8014-MA	72 oz / 2000 g	0.5 oz / 20 g	Dial type	80000049	41
8011-MN	250 g / 2.5 N	2 g / 0.02 N	Dial type	80000019	40
8012-MN	500 g / 5 N	5 g / 0.05 N	Dial type	80000020	40
8013-MN	1000 g / 10 N	10 g / 0.1 N	Dial type	80000021	41
8014-MN	2000 g / 20 N	20 g / 0.2 N	Dial type	80000022	40
8015-00	22 hg	1/2 hg	Dial type	80000050	80
8016-00	20 N	1/2 N	Dial type	80000023	80
8018-50	50 N	2 N	Dial type	80000051	89



Weighing

RELOADING SCALES

The Original OHAUS Reloading Scales are Back!

Display

Easy to-read deep-notched main beams with large markings for easy reading and multiple poises

Construction

Die-cast base, metal pan support, removable pan, cast metal beams, stainless steel poises, painted metal main poise, hardened steel beam pivots, single leveling foot

Design Features

Mechanical design, magnetic damping system to speed reloading, self-aligning agate bearings, ounce-to-grain conversion label for quick reference, Approach-to-Weight feature, large zero indicator

Operation

No power required



Equipped with cast metal beams designed with widespaced deep notches to prevent accidental poise movement. Self-aligning agate bearings with steel beam pivots guarantee sensitivity to 0.1 grain.

Removable pan with handle and spout. Pan supports cradle the pan so that it doesn't tip off when weighing cases, loaded cartridges, arrows etc. Ounce to grain conversion labels for quick reference.

Die-cast bases with large leveling feet for extra stability and durable stainless steel poises. Mechanical design allows for use on the bench or at the practice range -battery or AC power not needed.

Model	Capacity	Readability	Pan Size	Item Number	List Price (USD)
5-0-5	511 grains	0.1 grains	3.03 in x 0.75 in x 2.95 in (77 mm x 19 mm x 75 mm)	30393272	117



Industrial Weighing



OHAUS offers a full line of products designed for industrial applications, including sophisticated, newly released software for our most powerful products. From shipping scales up to 10,000 lb floor scales, OHAUS has a product for use in every area of your facility.



NEW

	Compact Bench Scales									Counting Scales			Modular Bench & Floor Scales						
	Ranger 7000	Ranger 4000	Ranger 3000	Valor 7000	Valor 4000	Valor 3000	Valor 2000	Valor 1000 (V12)	Catapult 1000	Ranger 7000	Ranger Count 4000	Ranger Count 3000	VX/VN Floor	Drum Scale	Defender 6000	Defender 6000 Hybrid	Defender 5000	Defender 3000	ES / SD
Weighing Capacity Range (lb)	6 to 150	6 to 60	3 to 60	3 to 60	3 to 30	0.4 to 13.2	3 to 60	6 to 60	20 to 165	6 to 150	6 to 60	3 to 60	2,500 to 10,000	500 to 2,500	10 to 300 lb	5 to 250 lb	5 to 1,000	30 to 660	13 to 440
lb, oz, lb:oz	All	All	All	All	All	All	All	All	lb	All	All	All	All	All	All	All	All	All	ES -all SD lb
kg or g	•	•	•	•	•	•	•	•	kg	•	•	•	•	•	•	•	•	•	ES -all SD - kg
Parts Counting	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Checkweighing	•	•	•	•	•	•	• (XW)	•	•	•	•	•	•	•	•	•	•	•	•
Percent Weighing	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Display Hold / Dynamic Weighing	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	SD only
Totalization / Accumulation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Filling	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• (XW)	• (XW)	•	•	•
Barcode Scanner/ Label Printer Support	• / O**	•	•	•	•	•	•	•	•	• / O**	•	•	•	•	• (XW)	• (XW)	O / • ‡	•	•
NTEP Certified or Measurement Canada Approved	•	•	•	•	•	NTEP*	•	•	•	•	•	•	NTEP†	•	•	•	•	•	•
Graphical Display LCD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Backlit LCD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• (PW)	• (PW)	•	•	•
LED	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• (XW)	• (XW)	•	•	•
Numeric Keypad	• A	•	•	•	•	•	•	•	•	• A	•	•	•	•	• (XW)	• (XW)	• A	•	•
Painted Metal	•	•	•	•	•	•	•	•	•	•	•	•	• Base	•	•	•	•* Base	•	•
ABS / PC	•	•	•	•	•*	•	•*	•	•	•	•	•	•* I	•	• (PW)	• (PW)	•* I	•*	•*
Stainless Steel	•	•	•	•	•*	•	•*	•	•	•	•	•	•* I	•	316 Base & Mounting, Indicator (XW)	316 Indicator (XW) / 304 Base & Mounting	•* I	•*	•*
Washdown IP/ NEMA Rating	•	•	•	•	•8	65 / 4X*	•8	•	•	•	•	•	•	•	IP69K/68 all	IP69K/68 Indicator / IP67 Base	67 / 4X†	65 / 4X*	•
NSF Listed/ Certified	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• Indicator only	•	•	•
RS232	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 nd RS232	O	O	O	O	•	•	•	•	•	O	O	O	•	•	O (XW)	O (XW)	O	•	•
RS485/422	•	•	•	•	•	•	•	•	•	•	•	•	•	•	O (XW)	O (XW)	O 485	O	•
USB	•	O	O	O	•	•	•	•	•	•	O	O	•	O	• Host (XW)	• Host (XW)	O	O	•
Ethernet	O	O	O	O	•	•	•	•	•	O	O	O	•	O	O (XW)	O (XW)	O	•	•
AC or DC Relays / Digital I/O	O	•	•	•	•	•	•	•	•	•	•	•	•	•	O (XW)	O (XW)	O	•	•
Wireless Connectivity	•	•	•	•	•	•	•	•	•	•	•	•	•	•	O (XW)	O (XW)	O	•	•
GMP w/Time/Date	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rechargeable Battery	O	•	•	•	•	•	•	•	•	O	•	•	•	•	O (XW)	O (XW)	O	•	•
Disposable Batteries	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• (PW)	• (PW)	•	•	•
Remote Scale Base Input	O	•	•	•	•	•	•	•	•	O	•	•	•	•	•	•	•	•	•
Page No.	81	82	83	84	85	86	87	88	78	81	79	80	54, 55	53	57	59	65	73	76, 77

O Optional A Alphanumeric I Indicator *on specific models † by base chosen ‡ Barcode scanner support is optional, Label Printer uses standard RS232
 ** Barcode scanner support is included, Label Printer requires the 2nd RS232 port option

DEFENDER™ DRUM SCALES - DFD32M

Convenient Portability with Floor Scale Capacity

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port including RS232 interface (included)

Construction

Painted steel platform with treads, front ABS/rear painted carbon steel, indicator & mounting bracket, aluminum junction box, four alloy steel load cells with top height adjustment, front/back access ramps

Design Features

Low-profile design

Operation

AC adapter with Auto Shut-off feature (included)



Our Drum Scales come in 5 models with platform sizes ranging from 30 x 30 to 36 x 36 inch, and capacities ranging from 500 to 2,500 lb, giving you the flexibility to choose what best suits your weighing needs.

The OHAUS Drum Scales feature a platform constructed of mild steel with an epoxy paint finish, which means that the scale can stand up to heavy industrial use.

A low-profile design with front and back access ramps that make it easy to roll pallet jacks, dollies, carts & drums on to the platform. High-density polyurethane wheels provide convenient portability.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
DFD32M500ES	500 lb (250 kg)	0.1 lb (0.05 kg)	30 in x 30 in (762 mm x 762 mm)	30469909	1682
DFD32M1000ES	1,000 lb (500 kg)	0.2 lb (0.1 kg)	30 in x 30 in (762 mm x 762 mm)	30469910	1682
DFD32M2500ES	2,500 lb (1,250 kg)	0.5 lb (0.2 kg)	30 in x 30 in (762 mm x 762 mm)	30469911	1682
DFD32M1000ER	1,000 lb (500 kg)	0.2 lb (0.1 kg)	36 in x 36 in (914.4 mm x 914.4 mm)	30469912	1950
DFD32M2500ER	2,500 lb (1,250 kg)	0.5 lb (0.2 kg)	36 in x 36 in (914.4 mm x 914.4 mm)	30469913	1950

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Floor Scale Column Kit SST	30539553	431
Interface Kit, RS232-USB	30304101	157	Printer, Thermal, STP-103, US	80251992	825
Interface Kit, RS232-Ethernet	30304102	157	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Column Kit Painted Floor Scale	30531244	215	Cable RS232 IBM 9P Male-to-Female	80500525	209



Accumulation



Check-weighing



Display Hold



Parts Counting



Weighing



Auto Shut-Off



Backlight



Environmental Filters



Overload/Underload Indicators



Stability Indicator

VX SERIES

Economical Floor Scale for Basic Washdown Industrial Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port with RS232 interface (included)

Construction

NEMA 4X/IP65 stainless steel indicator with hinged front-cover, 5mm / 0.2 inch fixed top plate, wall bracket, epoxy painted steel platform and frame, NEMA 4/IP67 plastic junction box with side access, 4 IP67 NTEP alloy steel load cells

Design Features

125% overload protection

Operation

Power cord (included) or rechargeable battery (included)



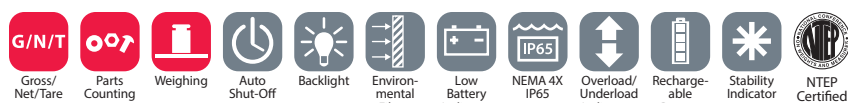
VX is ruggedly constructed and includes an epoxy painted steel frame, a NEMA 4X/IP65 stainless steel indicator, a NEMA 4X/IP67 sealed plastic junction box and IP67 sealed load cells.

The included internal rechargeable battery keeps the scale running and allows for placement of the platform away from outlets while the backlit LCD projects large 1" digits.

Weighing and counting modes produces results in five weighing units, and the included RS232 provides the ability to connect the scale to a printer or PC for data reporting purposes.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
VX32XW2500L	2,500 lb (1,000 kg)	0.5 lb (0.2 kg)	0.5 lb (0.2 kg)	4 ft x 4 ft (1,219 mm x 1,219 mm)	80253294	2967
VX32XW5000L	5,000 lb (2,200 kg)	1 lb (0.5 kg)	1 lb (0.5 kg)	4 ft x 4 ft (1,219 mm x 1,219 mm)	80253295	2967
VX32XW5000X	5,000 lb (2,200 kg)	1 lb (0.5 kg)		5 ft x 5 ft (1,524 mm x 1,524 mm)	80253296	3396
VX32XW10000L	10,000 lb (4,500 kg)	2 lb (1 kg)		4 ft x 4 ft (1,219 mm x 1,219 mm)	80253297	3755
VX32XW10000X	10,000 lb (4,500 kg)	2 lb (1 kg)		5 ft x 5 ft (1,524 mm x 1,524 mm)	80253298	4280

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Foot Plate (2) VX	80252548	93
Column Kit Painted Floor Scale	30531244	215	Ramp, 48x48in, 2.5K/5K, VX	80252766	1025
Floor Scale Column Kit SST	30539553	431	Cable, RS232, CKW TxxXW	80500552	194
Printer, Thermal, STP-103, US	80251992	825	Software, Winwedge	80850080	575
Foot (4) VX	80252545	131			



VN SERIES

Economical Painted Steel Floor Scales for Basic Industrial Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port with RS232 interface

Construction

ABS plastic indicator, black painted steel treaded platform, NEMA 4X/IP65 stainless steel junction box with side access, IP67 NTEP alloy steel load cells, two carbon steel eye bolts, four self-swiveling ball-in-cup feet

Design Features

125% overload protection

Operation

AC adapter (included) or rechargeable battery (included)



The durable VN is constructed of an epoxy painted steel frame, an ABS T31P indicator, NEMA 4X/IP65 sealed stainless steel junction box and IP67 sealed load cells.

With a rechargeable lead acid battery included with each VN, position the floor scale freely in the workspace without having to be forced to work near an outlet.

Painted steel ramps are available to be added to any VN platform, which provide bottom support ribs that prevent the platform from bending under heavy loads.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
VN31P5000L	5,000 lb (2,200 kg)	1 lb (0.5 kg)	1 lb (0.5 kg)	4 ft x 4 ft (1,219 mm x 1,219 mm)	80252563	1923
VN31P5000X	5,000 lb (2,200 kg)	1 lb (0.5 kg)	1 lb (0.5 kg)	5 ft x 5 ft (1,524 mm x 1,524 mm)	80252564	2256

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Printer, Thermal, STP-103, US	80251992	825
Interface Kit, RS232-USB	30304101	157	Ramp, 48in, Painted, VN	80252565	865
Interface Kit, RS232-Ethernet	30304102	157	Ramp, 60in, Painted, VN	80252566	980
Column Kit Painted Floor Scale	30531244	215	Cable RS232 IBM 9P Male-to-Female	80500525	209
Floor Scale Column Kit SST	30539553	431	Software, Winwedge	80850080	575
Foot Plate, Set(2), Painted, VE VN	72198344	65			



Gross/
Net/Tare



Weighing



Parts
Counting



Auto
Shut-Off



Backlight



Environ-
mental
Filters



Recharge-
able
Battery



NTEP
Certified

VN SERIES FLOOR SCALE PLATFORMS

Basic Level Floor Scale Bases

Construction

Black painted steel platform, raised embossed treads, fixed top plate 5mm / 0.2 inch thick, four IP67 NTEP alloy steel load cells, NEMA 4X/IP65 stainless steel junction box with side access, self swiveling stainless steel ball in cup leveling feet.

Design Features

Ball-in-Cup Leveling Feet, Steel Eye Bolts for Easy Lifting and Positioning



Durable epoxy painted steel frame and platform

NEMA4X/IP65 sealed stainless steel junction box

IP67 sealed loadcells

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
VN5000L	5,000 lb (2,200 kg)	1 lb (0.5 kg)	1 lb (0.5 kg)	4 ft x 4 ft (1,219 mm x 1,219 mm)	80252561	1661
VN5000X	5,000 lb (2,200 kg)	1 lb (0.5 kg)	1 lb (0.5 kg)	5 ft x 5 ft (1,524 mm x 1,524 mm)	80252562	1934

Accessories	Item Number	List Price (USD)
Column Kit Painted Floor Scale	30531244	215
Floor Scale Column Kit SST	30539553	431
Foot Plate, Set(2), Painted, VE VN	72198344	65

Accessories	Item Number	List Price (USD)
Ramp, 48in, Painted, VN	80252565	865
Ramp, 60in, Painted, VN	80252566	980



DEFENDER™ 6000 WASHDOWN - METAL INDICATOR

Advanced IP68/IP69k Washdown Bench Scale

Display

6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

Communication

Easy access communication ports including RS232 and USB host (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

316 stainless steel platform and frame, hermetically-sealed, stainless steel load cell, IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel

Design Features

150% overload capacity protection, bar matrix check light, customizable print templates, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto shut-off, auto tare, adjustable non-slip rubber feet

Operation

100-240 VAC / 50/60 Hz universal power supply, hardwired



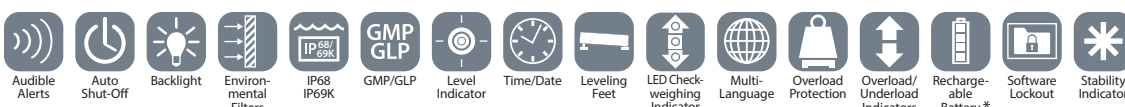
Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/ IP69K washdown protection, 316 stainless steel base and hermetically-sealed load cell.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base and sturdy indicator providing corrosion protection in food, chemical processing, and packaging.

Versatile scales include fast weight display and multiple software modes to meet food, chemical processing, and packaging needs.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61XWE5K1S6	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in x 9.8 in (250 mm x 250 mm)	30575563	1915
D61XWE12K1R6	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575564	1995
D61XWE25K1R6	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575565	1995
D61XWE50K1L7	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575566	2350
D61XWE150K1L7	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575567	2350

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Ethernet kit TD52 DT61XW	30429666	181
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	Seal kit USB Dongle D52	30525459	44
Gland M16 D52	30379716	23	Sealing Kit External Power Bank	30572907	297
Wireless Dongle MTICWD-200	30412537	250	Datalogic Barcode Scanner QD2131	30593703	207
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	Printer Zebra Label GK420T (requires 30037448)	30611855	780
Analog Output Kit, TD52 DT61XW	30424403	181	Wheel Kit SST Defender Series	30616409	181
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181	Printer, Thermal, STP-103, US	80251992	825
Cable Extension 9m/27 ft D52 / D61	30424409	181	PCBA Kit, Alibi Memory, R71 T71	80500503	133
Pan, 12x12 in, 305x305 mm, SST, D52	30427798	101	Cable, RS232, CKW TxxXW	80500552	194
Pan, 10x10 in, 254x254 mm, SST, D52	30427799	84			



*Option

DEFENDER™ 6000 WASHDOWN - PLASTIC INDICATOR

Advanced IP68/IP69K Washdown Bench Scale

Display

6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch high digits, 3 color checkbar

Communication

Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction

316 stainless steel platform and frame, hermetically-sealed stainless steel load cell, IP68/IP69K food grade polycarbonate housing indicator and 316 stainless steel mounting bracket or column

Design Features

150% overload capacity protection, 3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, adjustable rubber feet

Operation

6 D (LR20) Batteries (Included)



Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection, 316 stainless steel base and hermetically-sealed load cell.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base and sturdy indicator providing corrosion protection in food, chemical processing, and packaging.

Versatile scales include fast weight display and multiple software modes to meet food, chemical processing, and packaging needs.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61PW5K1S6*	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in x 9.8 in (250 mm x 250 mm)	30575569	1825
D61PW12K1R6*	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575570	1925
D61PW25K1R6*	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575571	1925
D61PW50K1L7*	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575572	2475
D61PW150K1L7*	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575573	2475
D61PW5K1S5	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in x 9.8 in (250 mm x 250 mm)	30575568	1875
D61PW12K1R5	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575562	1950
D61PW25K1R5	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30608733	1950
D61PW50K1L5	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30608734	2525
D61PW150K1L5	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30608735	2525

*Column Mount

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Gland M16 D52	30379716	23	Pan, 10x10, 254x254 mm, SST, D52	30427799	84
Cable Extension 9m/27 ft D52 / D61	30424409	181	IR Communication Kit	30572910	81
Pan, 12x12 in, 305x305 mm, SST, D52	30427798	101	Wheel Kit SST Defender Series	30616409	181



Check-weighing



Percent Weighing



Weighing



Parts Counting



Display Hold



Dynamic Weighing



Accumulation



NTEP Certified



Measurement Canada Approved



NSF Listed



USDA-AMS Accepted



SUPPORTS HACCP SYSTEMS



Auto Shut-Off



Backlight



Environmental Filters



IP68 IP69K



GMP GLP



Level Indicator



Time/Date



Leveling Feet



LED Check-weighing Indicator



Multi-Language



Overload Protection



Overload/Underload Indicators



Battery Power



Software Lockout



Stability Indicator

DEFENDER™ 6000 HYBRID - METAL INDICATOR

Washdown Bench Scale for Standard Industrial Applications

Display

6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

Communication

Easy access communication ports including RS232 and USB host (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

304 stainless steel platform and frame, IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel, IP67 load cell

Design Features

150% overload capacity protection, bar matrix check light, customizable print templates, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, auto shut-off, auto tare, adjustable non-slip rubber feet

Operation

100-240 VAC / 50/60 Hz universal power supply, hardwired



Defender 6000 indicator, constructed of 316 stainless steel stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

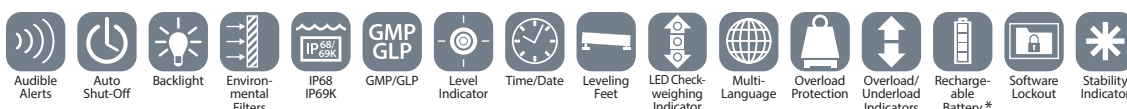
White LED displays clear results for fast processing. The indicator's configurable color bar matrix allows for detailed package weight checking to ensure compliance.

Durably constructed with a 304 stainless steel platform, frame, IP67 loadcell, Defender 6000 hybrid meets NTEP/Measurement Canada approvals.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61XWE2WQS6	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30631706	1795
D61XWE5WQS6	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30631707	1795
D61XWE12WQS6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30631718	1795
D61XWE12WQR6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30631719	1935
D61XWE25WQR6	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30631720	1935
D61XWE50WQR6	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30631721	1935
D61XWE25WQL7	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (458 mm x 457 mm)	30631722	2660
D61XWE50WQL7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (458 mm x 457 mm)	30631723	2660
D61XWE125WQL7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (458 mm x 457 mm)	30631724	2660

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168
Gland M16 D52	30379716	23
Wireless Dongle MTICWD-200	30412537	250
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210
Analog Output Kit, TD52 DT61XW	30424403	181
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181
Cable Extension 9m/27 ft D52 / D61	30424409	181

Accessories	Item Number	List Price (USD)
Ethernet kit TD52 DT61XW	30429666	181
Seal kit USB Dongle D52	30525459	44
Datalogic Barcode Scanner QD2131	30593703	207
Printer Zebra Label GK420T (requires 30037448)	30611855	780
Wheel Kit SST Defender Series	30616409	181
Printer, Thermal, STP-103, US	80251992	825
PCBA Kit, Alibi Memory, R71 T71	80500503	133
Cable, RS232, CKW TxxXW	80500552	194



*Option

DEFENDER™ 6000 HYBRID - PLASTIC INDICATOR

Washdown Bench Scale for Standard Industrial Applications

Display

6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch high digits, 3 color checkbar

Communication

Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction

321 stainless steel platform and frame, IP68/IP69K polycarbonate housing indicator and 316 stainless steel mounting bracket for D61PW-5 models, 304 stainless steel columns for D61PW-6 or 7 models, IP67 load cell

Design Features

150% overload capacity protection, 3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare, adjustable rubber feet

Operation

6 D (LR20) batteries (included)



Defender 6000 indicator constructed of polycarbonate stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

Large, bright backlit LCD clearly displays results for fast processing. The color bar can be used for quick checking of package weights for fast go/no-go alert.

Durably constructed with a 304 stainless steel platform, frame, IP67 loadcell, Defender 6000 hybrid meets NTEP/Measurement Canada approvals.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D61PW2WQS6*	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30626679	1570
D61PW5WQS6*	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30626680	1570
D61PW12WQS6*	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30626681	1570
D61PW12WQR6*	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30626682	1705
D61PW25WQR6*	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30626683	1705
D61PW50WQR6*	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30626684	1705
D61PW25WQL7*	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (457 mm x 457 mm)	30631703	2415
D61PW50WQL7*	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30631704	2415
D61PW125WQL7*	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (457 mm x 457 mm)	30631705	2415
D61PW2WQSS	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30631725	1720
D61PW5WQSS	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30631726	1720
D61PW12WQSS	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30631727	1720
D61PW12WQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30631728	1855
D61PW25WQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30631729	1855
D61PW50WQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30631730	1855
D61PW25WQL5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (457 mm x 457 mm)	30572969	2315
D61PW50WQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30572970	2315
D61PW125WQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (457 mm x 457 mm)	30572971	2315

*Column Mount

Accessories	Item Number	List Price (USD)
Gland M16 D52	30379716	23
Cable Extension 9m/27 ft D52 / D61	30424409	181

Accessories	Item Number	List Price (USD)
IR Communication Kit	30572910	81
Wheel Kit SST Defender Series	30616409	181



Check-weighing



Percent Weighing



Weighing



Parts Counting



Display Hold



Dynamic Weighing



Accumulation



NTEP Certified



Measurement Canada Approved



NSF Listed



USDA-AMS Accepted



SUPPORTS HACCP SYSTEMS



Auto Shut-Off



Backlight



Environmental Filters



IP68 IP69K



GMP GLP



Level Indicator



Time/Date



Leveling Feet



LED Check-weighing Indicator



Multi-Language



Overload Protection



Overload/Underload Indicators



Battery Power



Software Lockout



Stability Indicator

DEFENDER™ 5000 WASHDOWN

Multifunctional Stainless Steel Washdown Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

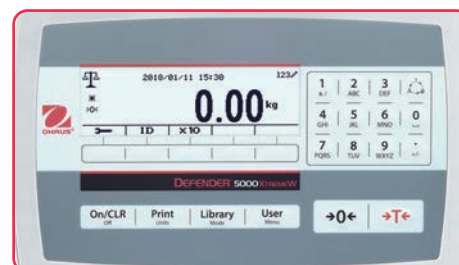
304-grade stainless steel platform and frame, stainless steel IP68 indicator, IP67 stainless steel load cell (single range), non-slip adjustable rubber feet

Design Features

Resolution up to 12,500d, 150% overload capacity, checkweighing display and beep, menu lock switch, selectable display languages, selectable filter, stability indicator, overload/underload indicators, selectable display controls, auto print and tare

Operation

Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)



User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

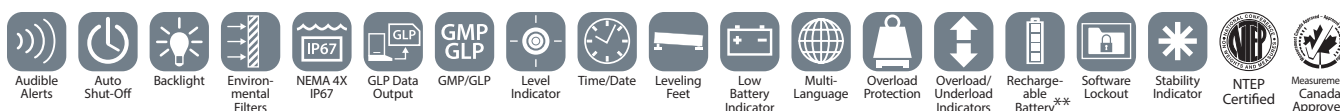
Durably constructed of a stainless steel platform, frame & IP68 indicator; IP67 stainless steel loadcell (NTEP/MC/OIML/EC Type single range).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW2WQS6	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30461673	1682
D52XW5WQS6	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30461674	1682
D52XW12WQS6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30461675	1682
D52XW12WQR6	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461676	1827
D52XW25WQR6	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461677	1827
D52XW50WQR6	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30461678	1827
D52XW25WQL7	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (457 mm x 457 mm)	30461679	2587
D52XW50WQL7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30461680	2587
D52XW125WQL7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (457 mm x 457 mm)	30461681	2587
D52XW50WTX7	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30461682	2844
D52XW125WTX7	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461683	2844
D52XW250WTX7	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461684	2844
D52XW50WQV8	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30461685	3305
D52XW125WQV8	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30461686	3305
D52XW250WQV8	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30461687	3423
D52XW500WQV8*	1,000 lb (500 kg)	0.02 lb (20 g)	0.2 lb (100 g)	24 in x 24 in (610 mm x 610 mm)	30461688	3423

* Aluminum loadcell

Accessories on next page



**Option

DEFENDER™ 5000 WASHDOWN ACCESSORIES

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168
Micro SD Card 8G	30303533	61
Wheel Kit, Defender Series	30372146	145
Gland M16 D52	30379716	23
Wireless Dongle MTICWD-200	30412537	250
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210
In-Use-Cover, TD52XW	30424023	30
Holder Kit Printer SST	30424025	67
Wall Mount Kit, SST, TD52XW	30424026	91
Analog Output Kit, TD52 DT61XW	30424403	181
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	216
USB Host Interface for Dongle TD52	30424406	151
Cable Extension 9m/27 ft D52 / D61	30424409	181
Ethernet kit TD52 DT61XW	30429666	181
In-Use-Cover, Set(10), TD52XW	30469949	240
Auxiliary display AD7-RS	30472064	78
USB host interface for flash drive	30572923	146
Datalogic Barcode Scanner QD2131	30593703	207
Printer Zebra Label GK420T (requires 30037448)	30611855	780
Printer, Thermal, STP-103, US	80251992	825
Cable, RS232, CKW TxxXW	80500552	194
Software, Winwedge	80850080	575

DEFENDER™ 5000 WASHDOWN LOW PROFILE

Multifunctional Stainless Steel Washdown Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

304-grade stainless steel platform and frame, stainless steel IP68 indicator, IP67 stainless steel load cell (single range), non-slip adjustable rubber feet

Design Features

Resolution up to 12,500d, 150% overload capacity, checkweighing display and beep, menu lock switch, selectable display languages, selectable filter, stability indicator, overload/underload indicators, selectable display controls, auto print and tare

Operation

Internal power supply with power cord (included) or rechargeable battery (option)



User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durably constructed of a stainless steel platform, frame & IP68 indicator; IP67 stainless steel loadcell (NTEP/MC/OIML/EC Type single range).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW2WQS5	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30461661	1730
D52XW5WQS5	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30461662	1730
D52XW12WQS5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30461663	1730
D52XW12WQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461664	1875
D52XW25WQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461665	1875
D52XW50WQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30461464	1875
D52XW25WQL5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (457 mm x 457 mm)	30461465	2367
D52XW50WQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30461466	2367
D52XW125WQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (457 mm x 457 mm)	30461467	2367
D52XW50WTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30461668	2770
D52XW125WTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461669	2770
D52XW250WTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461670	2770
D52XW50WQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30461671	3176
D52XW125WQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30461672	3176

Accessories on next page



*Option

DEFENDER™ 5000 WASHDOWN LOW PROFILE ACCESSORIES

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168
Micro SD Card 8G	30303533	61
Wheel Kit, Defender Series	30372146	145
Gland M16 D52	30379716	23
Wireless Dongle MTICWD-200	30412537	250
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210
In-Use-Cover, TD52XW	30424023	30
Holder Kit Printer SST	30424025	67
Wall Mount Kit, SST, TD52XW	30424026	91
Analog Output Kit, TD52 DT61XW	30424403	181
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181

Accessories	Item Number	List Price (USD)
Rechargeable battery Li-ion TD52	30424405	216
USB Host Interface for Dongle TD52	30424406	151
Cable Extension 9m/27 ft D52 / D61	30424409	181
Ethernet kit TD52 DT61XW	30429666	181
In-Use-Cover, Set(10), TD52XW	30469949	240
Auxiliary display AD7-RS	30472064	78
USB host interface for flash drive	30572923	146
Datalogic Barcode Scanner QD2131	30593703	207
Printer Zebra Label GK420T (requires 30037448)	30611855	780
Printer, Thermal, STP-103, US	80251992	825
Cable, RS232, CKW TxxXW	80500552	194

DEFENDER™ 5000 - METAL INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features

User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings, menu lock switch, multiple selectable operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim display, auto-off, brightness adjustment, screensaver, auto tare

Operation

Internal power supply with power cord (included) or rechargeable battery (option)



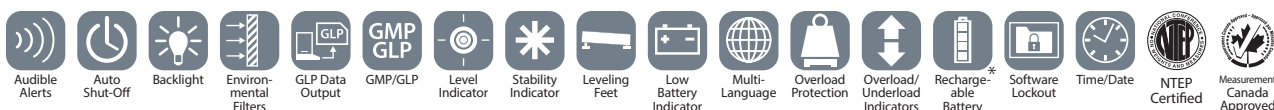
User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW12RQR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in x 12 in (305 mm x 305 mm)	30461689	1730
D52XW25RQR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461690	1730
D52XW50RQR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30461691	1730
D52XW12RTR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in x 12 in (355 mm x 305 mm)	30461692	1730
D52XW25RTR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30461693	1730
D52XW50RTR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30461694	1730
D52XW50RQL2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30461695	2079
D52XW125RQL2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in x 18 in (457 mm x 457 mm)	30461696	2079
D52XW50RTX2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30461697	2191
D52XW125RTX2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 18 in (610 mm x 457 mm)	30461698	2191
D52XW250RTX2	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461699	2191
D52XW50RQV3	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30461700	2367
D52XW125RQV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 24 in (610 mm x 610 mm)	30461701	2367
D52XW250RQV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30461702	2427
D52XW500RQV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in x 24 in (610 mm x 610 mm)	30461703	2427
D52XW125RTV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461704	2941
D52XW250RTV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461705	2941
D52XW500RTV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461706	2941

Accessories on 2nd page following



*Option

DEFENDER™ 5000 - PLASTIC INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features

User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings, menu lock switch, multiple selectable operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim display, auto-off, brightness adjustment, screensaver, auto tare

Operation

Internal power supply with power cord (included) or rechargeable battery (option)

User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.



Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52P12RQR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in x 12 in (305 mm x 305 mm)	30461630	1553
D52P25RQR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461631	1553
D52P50RQR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30461632	1553
D52P12RTR1	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in x 12 in (355 mm x 305 mm)	30461633	1553
D52P25RTR1	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30461634	1553
D52P50RTR1	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30461635	1553
D52P50RQL2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30461636	1896
D52P125RQL2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in x 18 in (457 mm x 457 mm)	30461637	1896
D52P50RTX2	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30461638	2009
D52P125RTX2	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 18 in (610 mm x 457 mm)	30461639	2009
D52P250RTX2	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461640	2009
D52P50RQV3	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30461641	2180
D52P125RQV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 24 in (610 mm x 610 mm)	30461642	2180
D52P250RQV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30461643	2357
D52P500RQV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in x 24 in (610 mm x 610 mm)	30461644	2357
D52P125RTV3	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461645	2758
D52P250RTV3	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461646	2758
D52P500RTV3	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30461647	2758

Accessories on next page



*Option

DEFENDER™ 5000 ACCESSORIES

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	53	Rechargeable battery Li-ion TD52	30424405	216
Printer, Impact, SF40A, AM	30064203	1070	USB Host Interface for Dongle TD52	30424406	151
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	Cable Extension 9m/27 ft D52 / D61	30424409	181
Micro SD Card 8G	30303533	61	Ethernet kit TD52 DT61XW	30429666	181
Wheel Kit, Defender Series	30372146	145	In-Use-Cover, Set(10), TD52P	30469948	181
Gland M16 D52	30379716	23	In-Use-Cover, Set(10), TD52XW	30469949	240
Wireless Dongle MTICWD-200	30412537	250	Auxiliary display AD7-RS	30472064	78
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	USB host interface for flash drive	30572923	146
In-Use-Cover, TD52P	30424022	23	Datalogic Barcode Scanner QD2131	30593703	207
In-Use-Cover, TD52XW	30424023	30	Printer Zebra Label GK420T (requires 30037448)	30611855	780
Holder Kit Printer SST	30424025	67	Printer, Thermal, STP-103, US	80251992	825
Wall Mount Kit, SST, TD52XW	30424026	91	Cable RS232 IBM 9P Male-to-Female	80500525	209
Wall Mount Kit, CS, TD52P	30424027	67	Cable, RS232, CKW TxxXW	80500552	194
Analog Output Kit, TD52 DT61XW	30424403	181	Software, Winwedge	80850080	575
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181			

DEFENDER™ 5000 LOW PROFILE - METAL INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features

User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings

Operation

Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)



User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52XW12RQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in x 12 in (305 mm x 305 mm)	30467608	1644
D52XW25RQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30467609	1644
D52XW50RQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30467610	1644
D52XW12RTR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in x 12 in (355 mm x 305 mm)	30467611	1704
D52XW25RTR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30467612	1704
D52XW50RTR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30467613	1704
D52XW50RQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30467614	1961
D52XW125RQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in x 18 in (457 mm x 457 mm)	30467615	1961
D52XW50RTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30467616	2079
D52XW125RTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 18 in (610 mm x 457 mm)	30467617	2079
D52XW250RTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30467618	2079
D52XW50RQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30467619	2191
D52XW125RQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 24 in (610 mm x 610 mm)	30467620	2191
D52XW250RQV5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30470990	2191
D52XW125RTV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30467621	2598

Accessories on next page



*Option

DEFENDER™ 5000 LOW PROFILE - METAL INDICATOR ACCESSORIES

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Rechargeable battery Li-ion TD52	30424405	216
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	USB Host Interface for Dongle TD52	30424406	151
Micro SD Card 8G	30303533	61	Cable Extension 9m/27 ft D52 / D61	30424409	181
Wheel Kit, Defender Series	30372146	145	Ethernet kit TD52 DT61XW	30429666	181
Gland M16 D52	30379716	23	In-Use-Cover, Set(10), TD52XW	30469949	240
Wireless Dongle MTICWD-200	30412537	250	Auxiliary display AD7-RS	30472064	78
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	USB host interface for flash drive	30572923	146
In-Use-Cover, TD52XW	30424023	30	Datalogic Barcode Scanner QD2131	30593703	207
Holder Kit Printer SST	30424025	67	Printer Zebra Label GK420T (requires 30037448)	30611855	780
Wall Mount Kit, SST, TD52XW	30424026	91	Printer, Thermal, STP-103, US	80251992	825
Analog Output Kit, TD52 DT61XW	30424403	181	Cable, RS232, CKW TxxXW	80500552	194
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181	Software, Winwedge	80850080	575

DEFENDER™ 5000 LOW PROFILE - PLASTIC INDICATOR

Multifunctional Bench Scale for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), USB Host, second RS232/RS485/USD device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

ABS plastic (TD52P) or stainless steel (TD52XW) indicator, 304-grade stainless steel platform with sand gray powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet

Design Features

User-configurable resolution up to 25,000d, 150% overload capacity protection, checkweighing symbols with selectable operation and audible signal settings

Operation

Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)



User-friendly model with an easy-to-use keypad, large backlit display and plain text on-screen prompts which guide you through operation.

Durable construction with a stainless steel platform, sand gray powder-coated steel frame & aluminum load cell. Defender meets NTEP/Measurement Canada or OIML/EC type approvals (depending on region).

Features common industrial modes and supports a 50,000-item library with 1,000 user profiles for easy data management. Includes GMP/GLP with time/date for result traceability.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D52P12RQR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in x 12 in (305 mm x 305 mm)	30461648	1436
D52P25RQR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30461649	1436
D52P50RQR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30461650	1436
D52P12RTR5	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in x 12 in (355 mm x 305 mm)	30461651	1495
D52P25RTR5	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30461652	1495
D52P50RTR5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30461653	1495
D52P50RQL5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30461654	1752
D52P125RQL5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in x 18 in (457 mm x 457 mm)	30461655	1752
D52P50RTX5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30461656	1838
D52P125RTX5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 18 in (610 mm x 457 mm)	30461657	1838
D52P250RTX5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30461658	1838
D52P50RQV5	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30461659	1956
D52P125RQV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 24 in (610 mm x 610 mm)	30461660	1956
D52P250RQV5	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30467606	1956
D52P125RTV5	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30467607	2587

Accessories on next page



*Option

DEFENDER™ 5000 LOW PROFILE - PLASTIC INDICATOR ACCESSORIES

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	53	Rechargeable battery Li-ion TD52	30424405	216
Printer, Impact, SF40A, AM	30064203	1070	USB Host Interface for Dongle TD52	30424406	151
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	Cable Extension 9m/27 ft D52 / D61	30424409	181
Micro SD Card 8G	30303533	61	Ethernet kit TD52 DT61XW	30429666	181
Wheel Kit, Defender Series	30372146	145	In-Use-Cover, Set(10), TD52P	30469948	181
Gland M16 D52	30379716	23	Auxiliary display AD7-RS	30472064	78
Wireless Dongle MTICWD-200	30412537	250	USB host interface for flash drive	30572923	146
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	Datalogic Barcode Scanner QD2131	30593703	207
In-Use-Cover, TD52P	30424022	23	Printer Zebra Label GK420T (requires 30037448)	30611855	780
Holder Kit Printer SST	30424025	67	Printer, Thermal, STP-103, US	80251992	825
Wall Mount Kit, CS, TD52P	30424027	67	Cable RS232 IBM 9P Male-to-Female	80500525	209
Analog Output Kit, TD52 DT61XW	30424403	181	Software, Winwedge	80850080	575
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181			

DEFENDER™ 3000 STAINLESS STEEL

Versatile Bench Scales Meet Basic Industrial Requirements for Washdown Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port with RS232 interface (included)

Construction

IP65 stainless steel indicator with hinged front cover and eye bolt mounting holes, stainless steel column and wall bracket, 304 grade stainless steel platform with steel tubular frame, IP67 stainless steel load cell

Design Features

125% overload protection

Operation

Power cord (included) or rechargeable battery (included)



The NEMA 4X/IP65 stainless steel indicator is built to endure tough industrial elements. The 58-hour rechargeable battery offers continuous operation for multi-day operations.

Durable construction with a 304 stainless steel platform, stainless steel tubular frame, column and indicator bracket, and IP67 stainless steel load cell.

Easy-to-read display & basic counting mode allow for simple operation for everyday basic industrial applications. Offered with NTEP/Measurement Canada or OIML/EC Type approvals (depending on region).

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D32XW15VR	33 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30369114	1575
D32XW30VR	66 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	83999817	1575
D32XW60VR	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	14 in x 12 in (355 mm x 305 mm)	83999818	1575
D32XW60VL	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.7 in x 16.5 in (550 mm x 420 mm)	83999819	1982
D32XW150VL	330 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.7 in x 16.5 in (550 mm x 420 mm)	83999820	1982
D32XW150VX	330 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in x 19.7 in (650 mm x 500 mm)	83999821	2609
D32XW300VX	660 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in x 19.7 in (650 mm x 500 mm)	83999822	2609

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Wheel Kit, Defender Series	30372146	145
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable, RS232, CKW TxxXW	80500552	194
Software, Winwedge	80850080	575



DEFENDER™ 3000

Versatile Bench Scales Meet Basic Industrial Requirements for Dry Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port with RS232 interface (included)

Construction

ABS indicator with reversible rear cover, painted steel column and wall bracket, 304 grade stainless steel platform with painted steel tubular frame, IP67 aluminum load cell, self-adjusting stainless steel feet with removable rubber caps

Design Features

125% overload protection

Operation

AC adapter (included) or rechargeable battery (included)



Durable ABS plastic terminal houses a 100-hour rechargeable battery which allows for continuous operation for five straight days.

This tough industrial scale features a 304 stainless steel platform, painted steel tubular frame, column and indicator bracket, and aluminum load cell.

Easy-to-read display & basic counting mode allow for simple operation for everyday basic industrial applications. Offered with NTEP/Measurement Canada or OIML/EC Type approvals (depending on region).

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D31P15BR	33 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30369116	877
D31P30BR	66 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	83998111	877
D31P60BR	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	14 in x 12 in (355 mm x 305 mm)	83998112	877
D31P60BL	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.7 in x 16.5 in (550 mm x 420 mm)	83998113	1074
D31P150BL	330 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.7 in x 16.5 in (550 mm x 420 mm)	83998114	1074
D31P150BX	330 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in x 19.7 in (650 mm x 500 mm)	83998115	1139
D31P300BX	660 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in x 19.7 in (650 mm x 500 mm)	83998116	1139

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
In-Use-Cover, T24P T31P	30101017	39
Interface Kit, RS232-USB	30304101	157
Interface Kit, RS232-Ethernet	30304102	157
Wheel Kit, Defender Series	30372146	145

Accessories	Item Number	List Price (USD)
Handle Kit, D3K	30381321	111
Printer, Thermal, STP-103, US	80251992	825
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575



DEFENDER™ 3000 LOW PROFILE

Versatile Low-Profile Bench Scales Meet Basic Industrial Requirements for Industrial Applications

Display

Backlit Liquid Crystal Display (LCD)

Communication

Easy access communication port with RS232 interface (included)

Construction

ABS indicator with reversible rear cover, painted steel base mount bracket with handle, 304 grade stainless steel platform with painted steel tubular frame, IP67 aluminum load cell, self-adjusting stainless steel feet with removable rubber caps

Design Features

125% overload protection, selectable span calibration points, averaging level, auto-zero tracking, battery saving auto-off, Geo Code geographical gravity calibration adjustment and software menu lockouts

Operation

AC adapter (included) or rechargeable battery (included)



Durable ABS plastic terminal houses a 100-hour rechargeable battery which allows for continuous operation for five straight days.

This tough industrial scale features a 304 stainless steel platform, painted steel tubular frame, aluminum load cell, and painted steel base mount bracket. Includes a handle for easy scale mobility.

Easy-to-read display & basic counting mode allow for simple operation for everyday basic industrial applications. Offered with NTEP/Measurement Canada or OIML/EC Type approvals (depending on region).

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D31P15BR5	33 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30490640	732
D31P30BR5	66 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30490641	732
D31P60BR5	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.7 in x 16.5 in (550 mm x 420 mm)	30490642	732
D31P60BL5	132 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.7 in x 16.5 in (550 mm x 420 mm)	30490643	845
D31P150BL5	330 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.7 in x 16.5 in (550 mm x 420 mm)	30490644	845

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Wheel Kit, Defender Series	30372146	145
In-Use-Cover, T24P T31P	30101017	39	Printer, Thermal, STP-103, US	80251992	825
Interface Kit, RS232-USB	30304101	157	Cable RS232 IBM 9P Male-to-Female	80500525	209
Interface Kit, RS232-Ethernet	30304102	157	Software, Winwedge	80850080	575



DEFENDER™ 3000 FIELD TEST

Portable Precision Ready for the Field

Display

Backlit Liquid Crystal Display (LCD)

Communication

Easy access communication port with RS232 interface (included)

Construction

ABS plastic indicator housing with reinforced ribs and reversible rear cover, durable painted steel platform with raised embossed tread, flexible coiled cable (extendable up to 9 ft.)

Design Features

125% overload protection, selectable span calibration points, auto-zero tracking, battery-saving auto-off, Geo Code geographical gravity calibration adjustment and software menu lockouts

Operation

AC adapter and rechargeable battery (included)



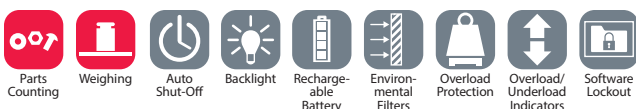
A capacity of 165 lb with a readability of 0.05 lb and the painted steel base in a case means that the Digital Field Test Scale provides precise, clear measurements, no matter where you're working.

The Field Test Scale comes packaged in a durable metal carrying case with steel latches and carrying handle, ensuring maximum portability for use anywhere on the job - without limiting you to the lab.

The backlit LCD display allows for easy reading of results - even in low-light conditions. The internal battery means that you can operate for up to 70 hours between recharges.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
D31P75SD	165 lb (75 kg)	0.05 lb (0.02 kg)	12.44 in x 11 in (316 mm x 280 mm)	30448500	406

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Printer, Thermal, STP-103, US	80251992	825
In-Use-Cover, T24P T31P	30101017	39	Cable, 25 Pin-9 Pin, PC-TxxP	80500524	209
Interface Kit, RS232-USB	30304101	157	Cable RS232 IBM 9P Male-to-Female	80500525	209
Interface Kit, RS232-Ethernet	30304102	157	Software, Winwedge	80850080	575
Carrying Case SD	30454761	98			



ES SERIES

Multipurpose Low Profile Shipping Scale.

Display

Liquid crystal display (LCD)

Construction

ABS indicator, stainless steel platform, painted steel frame, 3 way mounting bracket

Design Features

Auto-zero tracking, auto shut-off

Operation

AC adapter (included) or 6 AA batteries (not included)



With different size low-profile platforms, there are ES scales that can accommodate weighing loads of different shapes and sizes.

The three-way mounting bracket allows you to mount the indicator to the scale base, above the scale platform, or on any vertical surface for maximum flexibility.

The sturdy and durable ES has a stainless steel platform and painted steel frame.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
ES6R	13.22 lb (6 kg)	0.005 lb (2 g)	12.2 in x 10.8 in (310 mm x 270 mm)	71138830	922
ES30R	66.1 lb (30 kg)	0.05 lb (10 g)	12.2 in x 10.8 in (310 mm x 270 mm)	71138831	922
ES50R	110.2 lb (50 kg)	0.05 lb (20 g)	12.2 in x 10.8 in (310 mm x 270 mm)	71138832	922
ES50L	110.2 lb (50 kg)	0.05 lb (20 g)	20.5 in x 15.7 in (520 mm x 400 mm)	71138833	977
ES100L	220.4 lb (100 kg)	0.1 lb (50 g)	20.5 in x 15.7 in (520 mm x 400 mm)	71138834	977
ES200L	440.8 lb (200 kg)	0.2 lb (100 g)	20.5 in x 15.7 in (520 mm x 400 mm)	71138835	977



Weighing



Auto Shut-Off



Battery Power



Low Battery Indicator



Overload/Underload Indicators



Stability Indicator

SD SERIES

Rugged Economical Shipping Scales.

Display

Liquid crystal display (LCD)

Construction

ABS indicator, painted steel base, raised, embossed tread platform (non-L models), rubber feet (adjustable on L models), mounting brackets, transportation handle, extendable coiled cable

Design Features

Transportation handle on packaging (non-L models)

Operation

AC adapter (included) or 3 C (LR14) batteries (not included)



The SD is available in three capacities of 35kg, 75kg and 200kg and two platform sizes to meet the weighing needs of jobs of different physical sizes and capacities.

SD's painted steel platform and frame provides sturdy support for all materials placed on the platform.

SD provides accurate general weight determination and dynamic/animal weighing. WeighAlert™ mode flashes weight display when package is above 70 lb—the USPS shipping limit—but under 150 lb—when a package requires less-than-truckload shipment.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
SD35	77 lb (35 kg)	0.05 lb (20 g)	12.4 in x 11 in (316 mm x 280 mm)	83998234	256
SD75	165 lb (75 kg)	0.1 lb (50 g)	12.4 in x 11 in (316 mm x 280 mm)	83998235	266
SD75L	165 lb (75 kg)	0.1 lb (50 g)	20.5 in x 15.7 in (520 mm x 400 mm)	83998236	441
SD200	440 lb (200 kg)	0.2 lb (100 g)	12.4 in x 11 in (316 mm x 280 mm)	83998237	306
SD200L	440 lb (200 kg)	0.2 lb (100 g)	20.5 in x 15.7 in (520 mm x 400 mm)	83998238	471



Display Hold



Dynamic Weighing



Weighing



Auto Shut-Off



Battery Power



Low Battery Indicator



Overload/Underload Indicators



Stability Indicator

CATAPULT™ 1000

Economical Compact Shipping Scales.

Display

Liquid crystal display (LCD)

Construction

ABS housing and platform, stainless steel platform (accessory sold separately), transportation handle

Design Features

Low profile, compact design

Operation

AC adapter (included) or 3 C (LR14) batteries (not included)



The sturdy ABS plastic housing and platform with optional stainless steel platform make Catapult® 1000 sturdy yet easy to maneuver and fit into your workspace.

Bring the Catapult 1000 right to your work with the integrated carrying handle and its battery powered operation.

Catapult 1000 provides accurate general weight determination and dynamic/animal weighing. WeighAlert™ mode flashes weight display when package is above 70 lb—the USPS shipping limit—but under 150 lb—when a package requires less-than-truckload shipment.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
C11P9	20 lb (9 kg)	0.01 lb (0.005 kg)	11 in x 12.4 in (280 mm x 316 mm)	83998137	286
C11P20	44 lb (20 kg)	0.02 lb (0.01 kg)	11 in x 12.4 in (280 mm x 316 mm)	83998138	286
C11P75	165 lb (75 kg)	0.1 lb (0.05 kg)	11 in x 12.4 in (280 mm x 316 mm)	83998139	316

Accessories	Item Number	List Price (USD)
Pan, SST, C11P	80251248	59



Dynamic Weighing



Weighing



Auto Shut-Off



Battery Power



Low Battery Indicator



Overload Protection



Stability Indicator

RANGER™ COUNT 4000

Top-of-the-Line Counting Scales for Even the Toughest Industrial Weighing Conditions.

Display

3 window backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication

Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction

Rugged cast aluminum housing, stainless steel platform

Design Features

Cast Aluminum Housing, stainless steel platform, sealed front panel, menu lockswitch, up front level indicator, adjustable leveling feet, selectable environmental and auto-print settings, stability indicator, overload and underload indicators, low battery indicator, auto shut-off, auto tare, rechargeable battery with 100 hours between charges.

Operation

AC power (included) or rechargeable battery (included)



Sturdy metal housing and slip-resistant rubber feet provide the protection, stability and long product life needed for tough industrial weighing.

Accurate weighing and counting performance is assured with 1:1,500,000 internal counting resolution and auto-optimization software that reduces errors.

Easy-to-operate with SmarText™ software, a centrally located count display and dedicated Sample and Tare keys.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
RC41M3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236779	1082
RC41M6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236940	1082
RC41M15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236941	1082
RC41M30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236942	1082

Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	168
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168
USB Kit R31 RC31 R41 RC41 V71	30037449	168
Printer, Impact, SF40A, AM	30064203	1070
In-Use-Cover, R41 RC41	30240697	40

Accessories	Item Number	List Price (USD)
Auxiliary display AD7-RS	30472064	78
In Use Cover R41 RC41 5PCS	30656205	40
Printer, Thermal, STP-103, US	80251992	825
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575



Accumulation



Checkweighing



Gross/Net/Tare



Audible Alerts



Auto Shut-Off



Backlight



Environmental Filters



External Analog Base Input



Level Indicator



LED Checkweighing Indicator



NTEP Certified



Parts Counting



Weighing



Leveling Feet



Low Battery Indicator



Overload Protection



Overload/Underload Indicators



Rechargeable Battery



Stability Indicator



Weigh Below Hook



Measurement Canada Approved

* Not in parts counting mode
**Option

RANGER™ COUNT 3000

Reliable Counting Scales to Ensure Accurate Results

Display

3 window backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication

Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction

ABS housing, stainless steel platform, numeric keypad, menu lock switch, up front level indicator, transportation handle

Design Features

30 item library, 210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, auto tare, selectable environmental and auto-print settings, auto shut-off, optional 2nd scale input

Operation

AC power (included) or rechargeable battery (included)



Accurate weighing and counting are assured with high-resolution, 30-item library function, and auto-optimization software that reduces errors.

Easy to use in multi-step counting operations. Counting performance is assured with 1:1,500,000 internal counting resolution and auto-optimization software that reduces errors.

Eliminate waiting time and increase control of your operation with accurate one-second results.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
RC31P1502	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031787	891
RC31P3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031788	891
RC31P6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031789	891
RC31P15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031790	891
RC31P30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031791	891

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	168	Printer, Impact, SF40A, AM	30064203	1070
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168	In Use Cover R21 RC21 R31 RC31 5PCS	30656204	40
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168	Printer, Thermal, STP-103, US	80251992	825
USB Kit R31 RC31 R41 RC41 V71	30037449	168	Cable RS232 IBM 9P Male-to-Female	80500525	209
Hook R21 RC21 RC31 RC41 V71	30037450	120	Software, Winwedge	80850080	575
In-Use-Cover, R21 RC21 R31 RC31	30037451	42	Carrying Case, TR TC R31 RC31 V71	80850084	403



Accumulation



Checkweighing



Gross/Net/Tare



Auto Shut-Off



Backlight



Environmental Filters



Level Indicator



Leveling Feet



Low Battery Indicator



NTEP Certified

*



Parts Counting



Weighing



Overload/Underload Indicators



Rechargeable Battery



Stability Indicator



Weigh Below Hook **



LED Checkweighing Indicator



Measurement Canada Approved

*

* Not in parts counting mode

** Option

RANGER™ 7000

Top-of-the-Line Compact Scales for Even the Most Complex Industrial Applications

Display

4.3" (109 mm) Full-color WQVGA graphic display with user-controlled brightness

Communication

Easy access communication port including standard USB and RS232 (included) and an optional third port of RS232 or Ethernet or Discrete IO (accessories sold separately). GLP/GMP Data Output with Real Time Clock. Data Transfer Function.

Construction

Modular design, die-cast housing, removable stainless steel platform, integral weigh below hook, menu lock switch, level indicator

Design Features

Checkweighing lights with selectable operation and audible signal settings, several selectable operating languages, selectable environmental and autoprnt settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-dim, auto-sleep, auto tare, chain tare

Operation

AC power (included) or rechargeable battery (accessory sold separately)



Simplify complex applications and minimize the need for manual calculations with 10 advanced application modes, peripheral device control and an optional kit for a second scale platform.

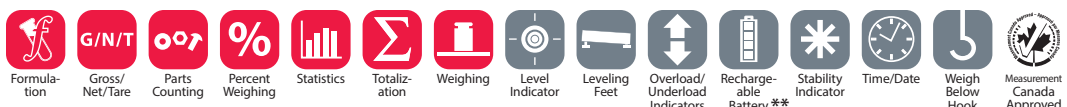
The most precise scale in its class with one-second stabilization time, up to 75,000d or 350,000d display resolution and legal-for-trade certifications.

Extremely durable scale designed to thrive in rugged industrial environments. Features IP54-rated metal housing and sealed metal terminal.

Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R71MD3	-	6 lb (3 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	11 in x 11 in (280 mm x 280 mm)	30070289	2047
R71MD6	-	15 lb (6 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	11 in x 11 in (280 mm x 280 mm)	30070310	2047
R71MD15	-	30 lb (15 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	12.2 in x 14.8 in (311 mm x 377 mm)	30070311	2047
R71MD35	-	70 lb (35 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	12.2 in x 14.8 in (311 mm x 377 mm)	30070312	2047
R71MD60	-	150 lb (60 kg)	0.002 lb (1 g)	0.02 lb (10 g)	12.2 in x 14.8 in (311 mm x 377 mm)	30212873	2047
R71MHD3	•	6 lb (3 kg)	0.00002 lb (0.01 g)	0.0002 lb (0.1 g)	8.3 in x 8.3 in (210 mm x 210 mm)	30088840	3276
R71MHD6	•	15 lb (6 kg)	0.00005 lb (0.02 g)	0.0005 lb (0.2 g)	8.3 in x 8.3 in (210 mm x 210 mm)	30088841	3646
R71MHD15	•	30 lb (15 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	12.2 in x 14.8 in (311 mm x 377 mm)	30088842	4819
R71MHD35	•	70 lb (35 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	12.2 in x 14.8 in (311 mm x 377 mm)	30088843	5808

Accessories	Item Number	List Price (USD)
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168
BATTERY,pack,Li-ion,R,14.8V,2600mAh	30041295	420
Cable, RS232, 1.5m, R71 to balance	30057595	53
Printer, Impact, SF40A, AM	30064203	1070
Column Kit, Painted, R71	30095408	168
PCBA Kit, 2nd Platform, R71	30097590	169
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168

Accessories	Item Number	List Price (USD)
Cable, Extension, 9m, R71	30101495	118
Accessory, In Use Cover, R71	30135320	50
Datalogic Barcode Scanner QD2131	30593703	207
Printer Zebra Label GK420T (requires 30037448)	30611855	780
Printer, Thermal, STP-103, US	80251992	825
PCBA Kit, Alibi Memory, R71 T71	80500503	133
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575



* Not in parts counting mode
** Option

RANGER™ 4000

Durable Compact Scales for the Toughest Industrial Weighing Environments

Display

Light-emitting diode display (LED), 3 color checkweighing LEDs

Communication

Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction

Rugged Cast Aluminum Housing, Stainless Steel Platform

Design Features

Cast Aluminum Housing, stainless steel platform, integral weigh-below hook, sealed front panel, menu lock switch, up front level indicator, adjustable leveling feet, selectable environmental and auto-print settings, stability indicator, overload and underload indicators, low battery indicator, auto shut-off, auto tare

Operation

AC power (included) or rechargeable battery (included)



Sturdy metal housing and slip-resistant rubber feet provide the protection, stability and long product life needed for tough industrial weighing.

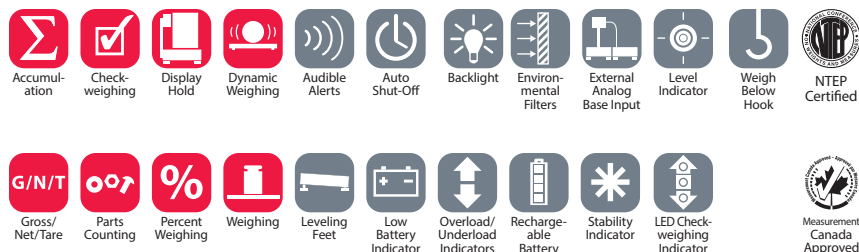
The most user-friendly scale on the market features SmartText™ for easy operation and setup to ensure efficiency in the workplace. Includes rechargeable battery with 100 hours between charges.

With the largest display in its class, checkweighing LED indicators and backlit LCD display, the Ranger 4000 can function in almost any industrial environment.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R41ME3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236775	1024
R41ME6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236776	1024
R41ME15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236777	1024
R41ME30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30236778	1024

Accessories	Item Number	List Price (USD)
PCBA Kit 2nd Platform RC31 R41 RC41	30037446	168
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168
USB Kit R31 RC31 R41 RC41 V71	30037449	168
Printer, Impact, SF40A, AM	30064203	1070
In-Use-Cover, R41 RC41	30240697	40

Accessories	Item Number	List Price (USD)
Auxiliary display AD7-RS	30472064	78
In Use Cover R41 RC41 5PCS	30656205	40
Printer, Thermal, STP-103, US	80251992	825
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575



RANGER™ 3000

Multi-Purpose Compact Bench Scales for Industrial Weighing Applications

Display

Backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication

Easy access communication port including standard RS232 (included) and second RS232, USB or Ethernet (accessories sold separately)

Construction

ABS housing, stainless steel platform, menu lock switch, up-front level indicator, integral weigh-below hook, transportation handle

Design Features

210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, selectable environmental and auto-print settings, auto shut-off, auto tare

Operation

AC power (included) or rechargeable battery (included)



With the largest display in its class, checkweighing LED indicators and backlit LCD display, the Ranger 3000 can function in tough industrial environments.

User-friendly scale with easy setup to ensure efficiency in the workplace.

Eliminate waiting time and increase control of your operation with accurate one-second results.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
R31P1502	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031707	720
R31P3	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031708	720
R31P6	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031709	720
R31P15	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031710	720
R31P30	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031711	720

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168	In Use Cover R21 RC21 R31 RC31 5PCS	30656204	40
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168	Printer, Thermal, STP-103, US	80251992	825
USB Kit R31 RC31 R41 RC41 V71	30037449	168	Cable RS232 IBM 9P Male-to-Female	80500525	209
In-Use-Cover, R21 RC21 R31 RC31	30037451	42	Software, Winwedge	80850080	575
Printer, Impact, SF40A, AM	30064203	1070	Carrying Case, TR TC R31 RC31 V71	80850084	403



Accumulation



Checkweighing



Display Hold



Dynamic Weighing



Auto Shut-Off



Backlight



Environmental Filters



Level Indicator



Leveling Feet



Weigh Below Hook



NTEP Certified



NSF Listed



Parts Counting



Percent Weighing



Weighing



Low Battery Indicator



Overload/Underload Indicators



Rechargeable Battery



Stability Indicator



LED Checkweighing Indicator



Measurement Canada Approved

VALOR™ 7000

Improve Productivity & Handle Demanding Applications With This Adaptable Multi-Functional Scale

Display

Dual backlit Liquid Crystal Display (LCD), 3 color checkweigh LEDs

Communication

RS232 (included); USB, Ethernet, or second RS232 (accessories sold separately)

Construction

ABS housing, stainless steel platform, touchless sensor, transportation handle, menu lock switch, up front level indicator

Design Features

210 hours of battery life, 3 LED checkweighing lights with selectable operation and audible signal settings, selectable environmental and auto-print settings, auto shut-off, auto tare

Operation

AC power (included) or rechargeable battery (included)



Food-safe Valor 7000 is NSF-certified, USDA-AMS accepted, and supports HACCP-certified systems -- suitable for food applications in dry areas.

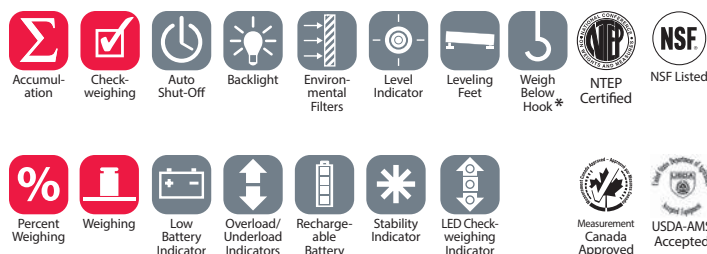
Large displays with backlight allow for easy viewing of results. Easy access communication ports for fast and useful data transfer and storage.

Valor 7000 produces repeatable and accurate results within less than one second to virtually eliminate your wait time and improve productivity.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
V71P1502T	3 lb (1.5 kg)	0.0001 lb (0.05 g)	0.001 lb (0.5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031827	751
V71P3T	6 lb (3 kg)	0.0002 lb (0.1 g)	0.002 lb (1 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031828	751
V71P6T	15 lb (6 kg)	0.0005 lb (0.2 g)	0.005 lb (2 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031829	751
V71P15T	30 lb (15 kg)	0.001 lb (0.5 g)	0.01 lb (5 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031830	751
V71P30T	60 lb (30 kg)	0.002 lb (1 g)	0.02 lb (10 g)	8.9 in x 11.8 in (225 mm x 300 mm)	30031831	751

Accessories	Item Number	List Price (USD)
In-Use-Cover, V71	30037445	42
Ethernet Kit R31 RC31 R41 RC41 R71 V71	30037447	168
RS232 Kit R31 RC31 R41 RC41 R71 V71	30037448	168
USB Kit R31 RC31 R41 RC41 V71	30037449	168
Hook R21 RC21 RC31 RC41 V71	30037450	120
In-Use-Cover, Set(10), V71	30037469	85

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Printer, Thermal, STP-103, US	80251992	825
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575
Carrying Case, TR TC R31 RC31 V71	80850084	403



* Option

VALOR™ 4000

High-Performance, Legal-for-Trade Food Scale Perfect for Harsh, Wet Workplace Conditions

Display

Dual light emitting diode (LED) displays, checkweighing LEDs on XW models

Construction

ABS housing with stainless steel platform (PW), stainless steel housing and platform (XW), illuminated up-front level indicator, rear touchless sensor

Design Features

Auto-close power jack cover, menu and mode setup navigation prompts on keys, transportation handle

Operation

AC adapter (included) or rechargeable battery (included)



Food-safe Valor 4000 is NSF-certified, USDA-AMS accepted, and supports HACCP-certified systems, making it suitable demanding food processing applications.

Increase productivity with its touchless Tare sensor, half-second stabilization time, checkweighing mode and LEDs, and percent weighing mode.

Unique knife-resistant keypad and IPX8 protection ensures durability and safe operation in wet conditions.

Model	Capacity	Readability	Certified Readability	Top Housing	Platform Size	Item Number	List Price (USD)
V41XWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)	Stainless Steel	7.5 in x 9.5 in (190 mm x 242 mm)	30035444	642
V41XWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	Stainless Steel	7.5 in x 9.5 in (190 mm x 242 mm)	30035445	642
V41XWE6T	15 lb (6 kg)	0.002 lb (1 g)	0.005 lb (2 g)	Stainless Steel	7.5 in x 9.5 in (190 mm x 242 mm)	30035446	642
V41XWE15T	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	Stainless Steel	7.5 in x 9.5 in (190 mm x 242 mm)	30035447	642
V41PWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)	Plastic	7.5 in x 9.5 in (190 mm x 242 mm)	30035434	547
V41PWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	Plastic	7.5 in x 9.5 in (190 mm x 242 mm)	30035435	547
V41PWE6T	15 lb (6 kg)	0.002 lb (1 g)	0.005 lb (2 g)	Plastic	7.5 in x 9.5 in (190 mm x 242 mm)	30035436	547
V41PWE15T	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	Plastic	7.5 in x 9.5 in (190 mm x 242 mm)	30035437	547

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Large Pan, 11.8x8.8 in, 300x225mm V22 V41	30251753	65	In-Use Cover Set 10 V22PW V41PW	30572906	195
In-Use-Cover V22PW V41PW	30479818	10			



Accumulation



Checkweighing



Percent Weighing



Weighing



Backlight



Environmental Filters



IPX8



LED Checkweighing Indicator



Level Indicator



Leveling Feet



Low Battery Indicator



Overload/Underload Indicators



Rechargeable Battery



Stability Indicator



NTEP Certified



Measurement Canada Approved



NSF Listed



USDA-AMS Accepted

VALOR™ 3000

Rugged, Full Stainless Steel Design in a High Performance, Portable Scale.

Display

Backlit liquid crystal display (LCD)

Construction

Stainless steel housing and platform, up-front level indicator, load cell lock

Design Features

Selectable environmental settings, auto tare, auto shut-off, selectable power-up unit, optional food accessories

Operation

AC adapter (included) or 4 C (LR14) batteries (not included)



The stainless steel Valor 3000 Xtreme is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of all food products weighed on the scale.

The compact Valor 3000 Xtreme requires minimal counter space and offers resolutions up to 40,000d and 0.01g, providing precise measurements in demanding environments.

With software for general weighing, percent weighing and specific gravity, the Valor 3000 can be used for a variety of food weighing and measurement needs.

Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
V31XH202	-	0.44 lb (200 g)	0.00005 lb (0.01 g)	-	4.7 in (120 mm)	83998130	842
V31XH402	-	0.88 lb (400 g)	0.00005 lb (0.01 g)	-	4.7 in (120 mm)	83998178	1150
V31X501	-	1.1 lb (500 g)	0.0005 lb (0.1 g)	-	4.7 in (120 mm)	83998176	615
V31XH2	-	4.4 lb (2 kg)	0.0005 lb (0.1 g)	-	6.2 in x 5.8 in (158 mm x 146 mm)	83998131	842
V31XH4	-	8.8 lb (4 kg)	0.0005 lb (0.1 g)	-	6.2 in x 5.8 in (158 mm x 146 mm)	83998177	1150
V31X3	-	6.6 lb (3 kg)	0.005 lb (1 g)	-	6.2 in x 5.8 in (158 mm x 146 mm)	83998132	556
V31X3N*	-	6.6 lb (3 kg)	0.002 lb (0.5 g)	0.005 lb (1 g)	6.2 in x 5.8 in (158 mm x 146 mm)	83999992	648
V31X6	-	13.22 lb (6 kg)	0.005 lb (1 g)	-	6.2 in x 5.8 in (158 mm x 146 mm)	83998133	556
V31X6N*	-	13.22 lb (6 kg)	0.005 lb (1 g)	0.005 lb (2 g)	6.2 in x 5.8 in (158 mm x 146 mm)	83999996	648
V31XW301	IP65; NEMA 4X	0.66 lb (300 g)	0.0005 lb (0.1 g)	-	6.2 in x 5.8 in (158 mm x 146 mm)	83998134	653
V31XW3*	IP65; NEMA 4X	6.6 lb (3 kg)	0.002 lb (0.5 g)	0.005 lb (1 g)	6.2 in x 5.8 in (158 mm x 146 mm)	83998135	642
V31XW6*	IP65; NEMA 4X	13.22 lb (6 kg)	0.005 lb (1 g)	0.005 lb (2 g)	6.2 in x 5.8 in (158 mm x 146 mm)	83998136	642

Accessories	Item Number	List Price (USD)
Pan, SST, Sandwich, V31	80251147	93
Holder, SST, French Fries, V31	80251148	93

Accessories	Item Number	List Price (USD)
Holder, SST, Ice Cream Cone, V31	80251149	93
Carrying Case, V31	80251216	143



VALOR™ 2000

High-Performance Food Scale Suitable for Harsh, Wet Workplace Conditions

Display

Dual light emitting diode (LED) displays, checkweighing LEDs on XW models

Construction

ABS housing with stainless steel platform (PW), stainless steel housing and platform (XW), up-front level indicator

Design Features

Auto-close power jack cover, transportation handle

Operation

AC adapter (included) or rechargeable battery (included)



The sturdy polycarbonate keypad offers protection from knives and other sharp instruments used in food preparation, processing and portioning applications.

A unique IPX8 flow-thru design ensures that the NSF-certified Valor 2000 will drain moisture in the scale when used in wet conditions.

Stabilization time is less than a half-second. Large front and rear LED displays allow for easy viewing so two operators can share one scale.

Model	Capacity	Readability	Platform Size	Top Housing	Item Number	List Price (USD)
V22XWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Stainless Steel	30035439	584
V22XWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Stainless Steel	30035440	584
V22XWE6T	15 lb (6 kg)	0.002 lb (1 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Stainless Steel	30035441	584
V22XWE15T	30 lb (15 kg)	0.005 lb (2 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Stainless Steel	30035442	584
V22XWE30T	60 lb (30 kg)	0.01 lb (5 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Stainless Steel	30251705	584
V22PWE1501T	3 lb (1.5 kg)	0.0005 lb (0.2 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Plastic	30035682	492
V22PWE3T	6 lb (3 kg)	0.001 lb (0.5 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Plastic	30035683	492
V22PWE6T	15 lb (6 kg)	0.002 lb (1 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Plastic	30035684	492
V22PWE15T	30 lb (15 kg)	0.005 lb (2 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Plastic	30035685	492
V22PWE30T	60 lb (30 kg)	0.01 lb (5 g)	7.5 in x 9.5 in (190 mm x 242 mm)	Plastic	30251704	492

Accessories	Item Number	List Price (USD)
Large Pan, 11.8x8.8 in, 300x225mm V22 V41	30251753	65
In-Use-Cover V22PW V41PW	30479818	10

Accessories	Item Number	List Price (USD)
In-Use Cover Set 10 V22PW V41PW	30572906	195



VALOR™ 1000 - V12P

Reliable Food-Safe Scale for Dry Environments

Display

LCD display with white backlight (dual display for T models)

Communication

Optional RS232 (for T models)

Construction

ABS housing, stainless steel pan, carry handles

Design Features

External digital calibration software, integrated level bubble and adjustable feet, selectable weighing units

Operation

D-cell alkaline battery or power adapter (included)



NSF-certified and USDA AMS-accepted design supports HACCP systems, making Valor 1000 perfect for food preparation tasks. Stainless steel pans and plastic in-use covers available for extra protection.

Save money on batteries. Energy-efficient design operates for up to one year or up to 1,500 hours.

Intuitive two-button operation allows for quick weight checking to simplify repetitive operations and increase operator efficiency.

Model	Capacity	Readability	Platform Size	Item Number	List Price (USD)
V12P3	6 lb (3 kg)	0.001 lb (0.5 g)	9.65 in x 7.48 in (245 mm x 190 mm)	30539390	223
V12P6	15 lb (6 kg)	0.002 lb (1 g)	9.65 in x 7.48 in (245 mm x 190 mm)	30539391	223
V12P15	30 lb (15 kg)	0.005 lb (2 g)	9.65 in x 7.48 in (245 mm x 190 mm)	30539392	223
V12P30	60 lb (30 kg)	0.01 lb (5 g)	9.65 in x 7.48 in (245 mm x 190 mm)	30539393	223

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
In use cover 1 pcs V12P	30559105	11	Stainless Steel Platform, 11.8x8.9 in, 300x225 mm	30559107	54
In use cover 10 pcs V12P	30559106	108			



Weighing



Auto Shut-Off



Battery Power



Low Battery Indicator



Overload/Underload Indicators



Stability Indicator



NSF Listed



USDA-AMS Accepted

DT61XW

Advanced IP68/IP69K Washdown Indicator

Display

6-digit, 7-segment white LED, 20 mm / 0.8 inch high digits, 3 color checkweigh bar matrix

Communication

Easy access communication ports including RS232 and USB Host; second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog output (available as accessories); GLP/GMP data output with real-time clock

Construction

IP68/IP69K 316 stainless steel housing indicator and mounting bracket, knife-resistant front panel

Design Features

3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare

Operation

100-240 VAC / 50/60 Hz universal power supply, hardwired



Defender 6000 indicator, constructed of 316 stainless steel, stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

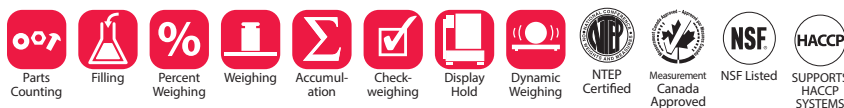
White LED displays clear results for fast processing. The indicator's configurable color bar matrix allows for detailed package weight checking to ensure compliance.

With knife-proof numeric touch keypad, indicator is suitable in harsh processing environments.

Model	Resolution	Certified Resolution	Protection Rating	Item Number	List Price (USD)
DT61XWE	75,000	10,000	IP69K/IP68	30575584	950

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168
Gland M16 D52	30379716	23
Wireless Dongle MTICWD-200	30412537	250
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210
Analog Output Kit, TD52 DT61XW	30424403	181
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181
Cable Extension 9m/27 ft D52 / D61	30424409	181

Accessories	Item Number	List Price (USD)
Ethernet kit TD52 DT61XW	30429666	181
Seal kit USB Dongle D52	30525459	44
Sealing Kit External Power Bank	30572907	297
Datalogic Barcode Scanner QD2131	30593703	207
Printer Zebra Label GK420T (requires 30037448)	30611855	780
Printer, Thermal, STP-103, US	80251992	825
PCBA Kit, Alibi Memory, R71 T71	80500503	133
Cable, RS232, CKW TxxXW	80500552	194



*Option

DT61PW

Advanced IP68/IP69K Washdown Indicator

Display

6-digit, 7-segment LCD display with white backlight, 45 mm / 1.8 inch mm high digits, 3 color checkweigh bar matrix

Communication

Easy access IR communication kit (available as an accessory); GLP/GMP data output with real-time clock

Construction

IP68/IP69K food grade polycarbonate housing and 316 stainless steel mounting bracket

Design Features

3-color check light bar, menu and key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator, auto shut-off, auto tare

Operation

6 D (LR20) Batteries (Included)



Defender 6000 indicator, constructed of polycarbonate, stands up to harsh cleaning in processing and packaging environments with IP68 immersion/IP69K washdown protection.

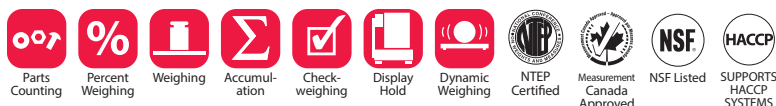
Large, bright backlit LCD clearly displays results for fast processing. The color bar can be used for quick checking of package weights for fast go/no-go alert.

Indicator operates for up to 1,600 hours on one set of batteries for months of use. Battery-powered design eliminates the need for a main connection for increased flexibility.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
DT61PW	75,000	10,000	1600 Hours with Disposable Batteries	IP69K; IP68	30575583	695
DT61PW Front Mount	75,000	10,000	1600 Hours with Disposable Batteries	IP69K; IP68	30575585	695

Accessories	Item Number	List Price (USD)
Gland M16 D52	30379716	23
Cable Extension 9m/27 ft D52 / D61	30424409	181

Accessories	Item Number	List Price (USD)
IR Communication Kit	30572910	81



TD52XW

Multifunctional Indicator for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

IP68/NEMA 4X stainless steel housing and mounting bracket

Design Features

Check weighing symbols with selectable operation and audible signal settings, menu lock switch, multiple operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim, auto-off, auto tare, screensaver

Operation

Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)



See results clearly on the large backlit display. The alphanumeric keypad & function keys allow for a simplified user experience. On-screen prompts and soft keys will guide you through the operation.

Results can be stored in the Micro SD card. Data output via built-in RS232 or optional interfaces including RS232/RS485/USB device, Ethernet & Bluetooth/WiFi. Analog Output & Discrete I/O with relays.

Features common industrial modes & supports a 50,000 item library & 1,000 user profiles which can be downloaded/uploaded for easy set-up (with SD Card). GMP/GLP with time/date for result traceability.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
TD52XW	75,000	10,000	20 Hours with Rechargeable Battery	IP68	30424079	902

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Cable Extension 9m/27 ft D52 / D61	30424409	181
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	Ethernet kit TD52 DT61XW	30429666	181
Micro SD Card 8G	30303533	61	Auxiliary display AD7-RS	30472064	78
Gland M16 D52	30379716	23	Sealing cover for D52 LC connector	30538022	70
Wireless Dongle MTICWD-200	30412537	250	LC cable adaptor for TD52 indicator	30548596	28
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	USB host interface for flash drive	30572923	146
In-Use-Cover, TD52XW	30424023	30	Datalogic Barcode Scanner QD2131	30593703	207
Wall Mount Kit, SST, TD52XW	30424026	91	Printer Zebra Label GK420T (requires 30037448)	30611855	780
Analog Output Kit, TD52 DT61XW	30424403	181	Printer, Thermal, STP-103, US	80251992	825
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181	Cable, RS232, CKW TxxXW	80500552	194
Rechargeable battery Li-ion TD52	30424405	216	Software, Winwedge	80850080	575
USB Host Interface for Dongle TD52	30424406	151			



TD52P

Multifunctional Indicator for Standard Industrial Applications

Display

Backlit Liquid Crystal Display (LCD), 256 x 80 pixels

Communication

Easy access communication ports including RS232 and Micro SD slot (included), second RS232/RS485/USB device, Ethernet and WiFi/Bluetooth, Discrete I/O and Analog Output (sold separately as accessories); GLP/GMP data output with real-time clock

Construction

ABS plastic housing, painted steel mounting bracket.

Design Features

Check weighing symbols with selectable operation and audible signal settings, menu lock switch, multiple operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable adjust contrast settings, auto-dim, auto-off, auto tare, screensaver

Operation

Internal power supply with power cord (included) or rechargeable battery (sold separately as an accessory)



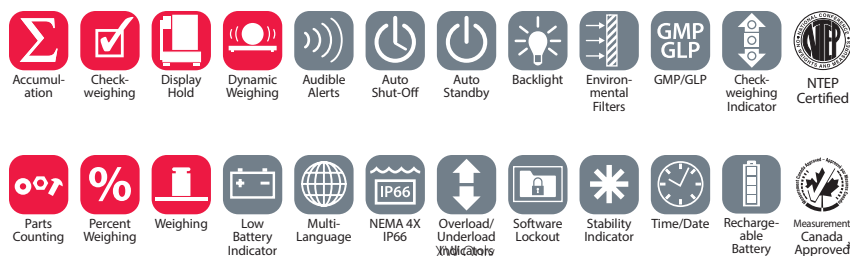
See results clearly on the large backlit display. The alphanumeric keypad & function keys allow for a simplified user experience. On-screen prompts and soft keys will guide you through the operation.

Results can be stored in the Micro SD card. Data output via built-in RS232 or optional interfaces including RS232/RS485/USB device, Ethernet & Bluetooth/WiFi. Analog Output & Discrete I/O with relays.

Features common industrial modes & supports a 50,000 item library & 1,000 user profiles which can be downloaded/uploaded for easy set-up (with SD Card). GMP/GLP with time/date for result traceability.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
TD52P	75,000	10,000	20 Hours with Rechargeable Battery	-	30424078	731

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cable, RS232, 1.5m, R71 to balance	30057595	53	Cable Extension 9m/27 ft D52 / D61	30424409	181
Printer, Impact, SF40A, AM	30064203	1070	Ethernet kit TD52 DT61XW	30429666	181
Discrete I/O Kit, R71 TD52 DT61XW	30097591	168	In-Use-Cover, Set(10), TD52P	30469948	181
Micro SD Card 8G	30303533	61	In-Use-Cover, Set(10), TD52XW	30469949	240
Gland M16 D52	30379716	23	Auxiliary display AD7-RS	30472064	78
Wireless Dongle MTICWD-200	30412537	250	Sealing cover for D52 LC connector	30538022	70
Alarm Beacon Kit 3 Colors 243mm OHAUS	30424021	210	LC cable adaptor for TD52 indicator	30548596	28
In-Use-Cover, TD52P	30424022	23	USB host interface for flash drive	30572923	146
Wall Mount Kit, CS, TD52P	30424027	67	Datalogic Barcode Scanner QD2131	30593703	207
Analog Output Kit, TD52 DT61XW	30424403	181	Printer Zebra Label GK420T (requires 30037448)	30611855	780
2nd RS232/RS485/USB Kit TD52 DT61XW	30424404	181	Printer, Thermal, STP-103, US	80251992	825
Rechargeable battery Li-ion TD52	30424405	216	Cable RS232 IBM 9P Male-to-Female	80500525	209
USB Host Interface for Dongle TD52	30424406	151	Software, Winwedge	80850080	575



*Option

T72XW

Advanced Performance Stainless Steel Indicator with External Device Control Capabilities

Display

Transflective graphic LCD with white backlight, 240 x 96 pixels

Communication

Easy access communication port including RS232 (included), USB, Ethernet and second RS232 or RS485 (accessories sold separately). GLP/GMP data output with real-time clock.

Construction

IP66/NEMA 4X stainless steel housing and mounting bracket

Design Features

Checkweighing lights with selectable operation and audible signal settings, sealed front panel, 5 operating languages (English, Spanish, French, German and Italian), selectable environmental and auto-print settings, stability and overload/underload indicators

Operation

AC power (included)



With a 50,000 displayed resolution and the ability to support up to 10 load cells, T72XW was designed for heavy-duty industrial applications such as vehicle weighing.

Two option slots are available to enable a wide range of connectivity interfaces. Control external devices using the discrete I/O interface and transfer data through the serial, USB or Ethernet ports.

T72XW is very easy to set up and navigate - featuring a vivid graphic display with on-screen prompts and an alphanumeric keypad with designated keys for common functions such as Tare & ID information.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
T72XW	50,000	10,000	-	IP66	30126959	954

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Ethernet Kit, T72XW	30132163	168
USB with I/O Kit, T72XW	30132164	187
COM2 Kit, T72XW	30132165	168
Column Adapter, SST, T32XW T51XW T71XW	72209340	59

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	825
Cable, ST103-CKW55 TxxXW	80252584	234
Cable, RS232, CKW TxxXW	80500552	194
Software, Winwedge	80850080	575



T51XW

Multifunctional Stainless Steel Washdown Indicator for Standard Industrial Applications

Display

Backlit liquid crystal display (LCD), 3 color checkweighing LEDs

Communication

Easy access communication port including RS232 (included) and 2nd RS232 or RS422/RS485 (accessories sold separately). GLP/GMP data output with real-time clock.

Construction

IP66/NEMA 4X stainless steel housing and mounting bracket, four-key membrane keypad, easy-open hinged front cover

Design Features

User-configurable resolution up to 30,000d/10,000e, OIML Approved, NTEP Certified and Measurement Canada Approved

Operation

Power cord (included)



T51XW features software for parts counting, dynamic weighing, percent weighing, checkweighing, display hold for large containers and can meet traceability requirements.

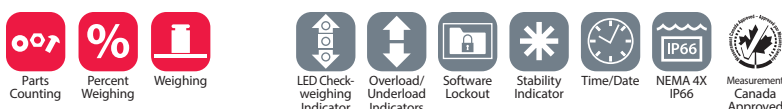
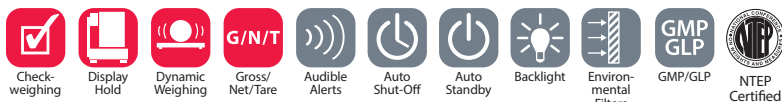
Multiple connectivity capabilities include built-in RS232 bi-directional interface and external input as well as optional AC or DC relay.

The durably-built T51XW NEMA 4X/IP66 stainless steel water resistant indicator has a hinged front cover that opens easily for servicing and installation of the connectivity options.

Model	Resolution	Certified Resolution	Protection Rating	Item Number	List Price (USD)
T51XW	30,000	10,000	IP66; NEMA 4X	83999840	742

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Column Adapter, SST, T32XW T51XW T71XW	72209340	59
Printer, Thermal, STP-103, US	80251992	825
Cable, ST103-CKW55 TxxXW	80252584	234
Cable, RS232, CKW TxxXW	80500552	194

Accessories	Item Number	List Price (USD)
Relay Kit, AC, T51 T71	80500720	384
Relay Kit, DC, T51 T71	80500727	330
Wall Mount Kit, SST, T51XW T71XW	80500735	91
Software, Winwedge	80850080	575



T32XW

Economical Stainless Steel Washdown Indicator for Basic Industrial Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port including RS232 interface (included)

Construction

IP65/NEMA 4X stainless steel housing and mounting bracket, easy-open hinged front cover

Design Features

User-configurable resolution up to 20,000d/6,000e, OIML Approved, NTEP Certified and Measurement Canada Approved

Operation

Power cord (included) or rechargeable battery (included)



The NEMA 4X/IP65 stainless steel construction protects the indicator from water damage and a hinged front cover opens up easily, offering instant access for servicing.

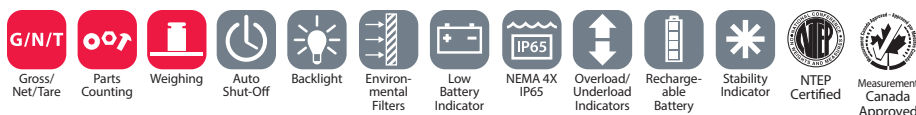
The long-lasting internal rechargeable battery provides continuous operation for up to 58 hours, ensuring uninterrupted operation for more than two straight days.

Simple operation enhanced by an easy-to-read display and even basic counting mode round out this industrial indicator, making it ideal for everyday basic industrial use.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
T32XW	20,000	6,000	58 Hours with Rechargeable Battery	IP65; NEMA 4X	83999823	493

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Column Adapter, SST, T32XW T51XW T71XW	72209340	59
Wall Mount Kit, SST, T32XW	80251748	59
Printer, Thermal, STP-103, US	80251992	825

Accessories	Item Number	List Price (USD)
Cable, ST103-CKW55 TxxXW	80252584	234
Cable, RS232, CKW TxxXW	80500552	194
Software, Winwedge	80850080	575



T32M

Economical Metal Indicator for Basic Industrial Applications

Display

T32MC: Backlit liquid crystal display (LCD) T32ME: Light-emitting diode display (LED), 3 color checkweigh LEDs

Communication

Easy access communication port including RS232 interface (included)

Construction

Front ABS/rear painted steel housing and painted steel mounting bracket

Design Features

User-configurable resolution up to 20,000d/6,000e, OIML Approved, NTEP Certified and Measurement Canada Approved

Operation

AC adapter (included)



T32MC and T32ME are OIML approved, NTEP certified, and Measurement Canada approved for use in all legal-for-trade applications.

Application modes include weighing, simple parts counting, basic checkweighing, dynamic weighing and accumulation of results.

Constructed of painted steel housing and high-impact ABS faceplate, T32MC and T32ME are highly durable.

Model	Resolution	Certified Resolution	Protection Rating	Item Number	List Price (USD)
T32ME	20,000	6,000	-	83998166	319
T32MC	20,000	6,000	-	83998167	319

Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070
Interface Kit, RS232-USB	30304101	157
Interface Kit, RS232-Ethernet	30304102	157
Column Adapter, Painted, T31P T51P T71P	72209339	30

Accessories	Item Number	List Price (USD)
Printer, Thermal, STP-103, US	80251992	825
Cable RS232 IBM 9P Male-to-Female	80500525	209
Software, Winwedge	80850080	575



Accumulation



Checkweighing



Display Hold



Parts Counting



Totalization



Weighing



Auto Shut-Off



Backlight



Environmental Filters



Overload/Underload Indicators



Stability Indicator



LED Checkweighing Indicator



NTEP Certified



Measurement Canada Approved

T31P

Economical ABS Plastic Indicator for Basic Industrial Applications

Display

Backlit liquid crystal display (LCD)

Communication

Easy access communication port including RS232 interface (included)

Construction

ABS housing and painted steel mounting bracket, non-slip rubber feet

Design Features

User-configurable resolution up to 20,000d/6,000e, OIML Approved, NTEP Certified and Measurement Canada Approved

Operation

AC adapter (included) or rechargeable battery (included)



T31P is OIML approved, NTEP certified and Measurement Canada approved for use in all legal-for-trade applications.

The ultra-long-lasting internal rechargeable battery provides operation on a single charge for up to 100 hours.

The reversible rear cover offers the flexibility for connected cables to exit above or below the indicator housing.

Model	Resolution	Certified Resolution	Battery Life	Protection Rating	Item Number	List Price (USD)
T31P	20,000	6,000	100 Hours with Rechargeable Battery	-	83998110	406

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Printer, Impact, SF40A, AM	30064203	1070	Column Adapter, Painted, T31P T51P T71P	72209339	30
In-Use-Cover, T24P T31P	30101017	39	Wall Mount Kit, Painted, T31P	80251747	49
Interface Kit, RS232-USB	30304101	157	Printer, Thermal, STP-103, US	80251992	825
Interface Kit, RS232-Ethernet	30304102	157	Cable RS232 IBM 9P Male-to-Female	80500525	209
Handle Kit, D3K	30381321	111	Software, Winwedge	80850080	575



CKW BASE

High Quality Washdown Checkweighing Base.

Construction

304 grade stainless steel platform with no visible threads, rounded corners, drain holes, extended skirt and open frame, IP67 stainless steel loadcell.

Design Features

No visible threads for conformance to food safety requirements, NSF Certified, USDA-AMS Accepted, and supports HACCP-certified systems



The CKW base is NSF Certified, USDA-AMS Accepted, and supports HACCP-certified systems, and is safe for use in food processing applications.

Constructed of IP67 stainless steel, the CKW base is protected from harsh elements and can be thoroughly washed down to ensure cleanliness.

The external level indicator and adjustable non-slip leveling feet assure that the base is stable and producing accurate results.

Model	Maximum Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
CKW3R	6 lb (3 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30379430	1008
CKW6R	15 lb (6 kg)	0.002 lb (1 g)	0.005 lb (2 g)	10 in x 10 in (254 mm x 254 mm)	30379431	1008
CKW15L	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30379432	1163



DEFENDER™ 6000 WASHDOWN BASE

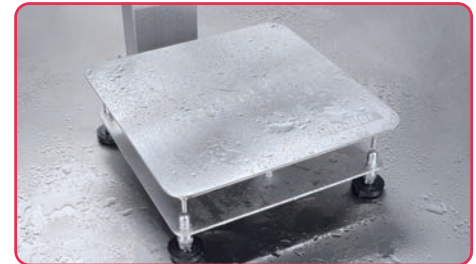
Advanced IP68/IP69K Washdown Base

Construction

316 stainless steel platform and frame, hermetically-sealed stainless steel load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% overload capacity protection, open design to minimize build-up and support easy cleaning



Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/ IP69K washdown protection, 316 stainless steel construction and hermetically-sealed load cell.

The Defender 6000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender 5000 and 6000 indicators, speeding installation.

Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base providing corrosion protection in food, chemical processing, and packaging.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D5K1S	10 lb (5 kg)	0.001 lb (0.5 g)	0.002 lb (1 g)	9.8 in x 9.8 in (250 mm x 250 mm)	30575603	1140
D12K1R	25 lb (12.5 kg)	0.002 lb (1 g)	0.005 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575604	1223
D25K1R	50 lb (25 kg)	0.005 lb (2 g)	0.01 lb (5 g)	11.8 in x 11.8 in (300 mm x 300 mm)	30575605	1223
D50K1L	100 lb (50 kg)	0.01 lb (5 g)	0.02 lb (10 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575606	1542
D150K1L	300 lb (150 kg)	0.02 lb (10 g)	0.1 lb (50 g)	19.7 in x 15.7 in (500 mm x 400 mm)	30575607	1542

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cable Extension 9m/27 ft D52 / D61	30424409	181	Column Kit Column Kit 10.2 in/260mm high, 316 stainless steel D61	30572908	162
Pan, 12x12 in, 305x305 mm, SST, D52	30427798	101	Column Kit Column Kit 26.4 in/670mm high, 316 stainless steel D61	30572909	195
Pan, 10x10 in, 254x254 mm, SST, D52	30427799	84	Wheel Kit SST Defender Series	30616409	181
Cable Kit Extension for base	30429931	55	Mounting Set Front SST DT61	30626654	152



DEFENDER™ 5000 STAINLESS STEEL BASE

Durable Bases for the Most Demanding of Industrial Applications

Construction

304-grade stainless steel platform, stainless steel frame, IP67 load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% capacity overload protection



The W series features a stainless steel platform, frame and IP67 load cell to withstand harsh industrial environments.

The Defender 5000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender TD52 or i-DT61 indicators, speeding up installation.

Defender 5000 bases are NTEP-certified and Measurement Canada approved. These bases also carry OIML and EC Type approvals, which make them ideal for legal-for-trade use.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D2WQS	5 lb (2.5 kg)	0.0002 lb (0.1 g)	0.001 lb (0.5 g)	10 in x 10 in (254 mm x 254 mm)	30419628	900
D5WQS	10 lb (5 kg)	0.0005 lb (0.2 g)	0.002 lb (1 g)	10 in x 10 in (254 mm x 254 mm)	30419629	900
D12WQS	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	10 in x 10 in (254 mm x 254 mm)	30419630	900
D12WQR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30419634	954
D25WQR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30419635	954
D50WQR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30419636	954
D25WQL	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	18 in x 18 in (457 mm x 457 mm)	30419642	1516
D50WQL	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30419643	1516
D125WQL	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	18 in x 18 in (457 mm x 457 mm)	30419644	1516
D50WTX	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30419648	1768
D125WTX	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30419649	1768
D250WTX	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30419650	1768
D50WQV	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30419655	2105
D125WQV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30419656	2105
D250WQV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30419657	2239
D500WQV*	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in x 24 in (610 mm x 610 mm)	30419658	2239

* Aluminum loadcell

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	145	Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	174
Mounting Set Front SST D52	30424024	120	Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	222
Holder Kit Printer SST	30424025	67	Column Kit 38.8 in / 98 cm 304 Stainless Steel D52xx	30424415	240
Cable Extension 9m/27 ft D52 / D61	30424409	181	Cable Kit Extension for base	30429931	55
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	79			
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	103			
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	115			



DEFENDER™ 5000 BASE

Durable Bases for the Most Demanding of Industrial Applications

Construction

304-grade stainless steel platform, sand grey powder-coated steel frame, aluminum load cell, non-slip adjustable rubber feet, level indicator

Design Features

150% capacity overload protection



The R Series features a stainless steel platform, powder-coated steel frame and an aluminum load cell to withstand harsh industrial environments.

The Defender 5000 bases are equipped with an EasyConnect cable, which allows instant configuration with Defender 5000 (TD52) or 6000 indicators, speeding up installation.

Defender 5000 bases are NTEP-certified and Measurement Canada approved. These bases also carry OIML and EC Type approvals, which make them ideal for legal-for-trade use.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D12RQR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	12 in x 12 in (305 mm x 305 mm)	30419631	787
D25RQR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	12 in x 12 in (305 mm x 305 mm)	30419632	787
D50RQR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	12 in x 12 in (305 mm x 305 mm)	30419633	787
D12RTR	25 lb (12.5 kg)	0.001 lb (0.5 g)	0.005 lb (2 g)	14 in x 12 in (355 mm x 305 mm)	30419637	900
D25RTR	50 lb (25 kg)	0.002 lb (1 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30419638	900
D50RTR	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30419639	900
D50RQL	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	18 in x 18 in (457 mm x 457 mm)	30419640	1125
D125RQL	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	18 in x 18 in (457 mm x 457 mm)	30419641	1125
D50RTX	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 18 in (610 mm x 457 mm)	30419645	1179
D125RTX	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 18 in (610 mm x 457 mm)	30419646	1179
D250RTX	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 18 in (610 mm x 457 mm)	30419647	1179
D50RQV	100 lb (50 kg)	0.005 lb (2 g)	0.02 lb (10 g)	24 in x 24 in (610 mm x 610 mm)	30419651	1318
D125RQV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	24 in x 24 in (610 mm x 610 mm)	30419652	1318
D250RQV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	24 in x 24 in (610 mm x 610 mm)	30419653	1344
D500RQV	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	24 in x 24 in (610 mm x 610 mm)	30419654	1344
D125RTV	250 lb (125 kg)	0.01 lb (5 g)	0.05 lb (20 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30419659	1768
D250RTV	500 lb (250 kg)	0.02 lb (10 g)	0.1 lb (50 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30419660	1768
D500RTV	1,000 lb (500 kg)	0.05 lb (20 g)	0.2 lb (100 g)	31.5 in x 23.6 in (800 mm x 600 mm)	30419661	1768

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	145	Column Kit 13.9 in / 35 cm 304 Stainless Steel D52xx	30424413	174
Mounting Set Front SST D52	30424024	120	Column Kit 26.9 in / 68 cm 304 Stainless Steel D52xx	30424414	222
Holder Kit Printer SST	30424025	67	Column Kit 38.8 in / 98 cm 304 Stainless Steel D52xx	30424415	240
Cable Extension 9m/27 ft D52 / D61	30424409	181	Cable Kit Extension for base	30429931	55
Column Kit 13.9 in / 35 cm Painted Steel D52xx	30424410	79			
Column Kit 26.9 in / 68 cm Painted Steel D52xx	30424411	103			
Column Kit 38.8 in / 98 cm Painted Steel D52xx	30424412	115			



DEFENDER™ V SERIES STAINLESS STEEL

Economical Base for Washdown Industrial Weighing.

Construction

304 grade stainless steel platform, stainless steel tubular frame, IP67 stainless steel load cell, level indicator

Design Features

125% capacity overload protection



The sturdy tubular 304 stainless steel platform provides ample support for industrial weighing applications.

The IP67 load cells ensure accurate and repeatable results.

The non-slip adjustable rubber leveling feet provide stability during the weighing process.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D15VR	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30379441	847
D30VR	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30379442	847
D60VR	150 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	14 in x 12 in (355 mm x 305 mm)	30379443	847
D60VL	150 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.7 in x 16.5 in (550 mm x 420 mm)	30379444	1425
D150VL	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.7 in x 16.5 in (550 mm x 420 mm)	30379445	1425
D150VX	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in x 19.7 in (650 mm x 500 mm)	30379446	2116
D300VX	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in x 19.7 in (650 mm x 500 mm)	30379447	2116

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	145
Handle Kit, D3K	30381321	111
Column Adapter, SST, T32XW T51XW T71XW	72209340	59

Accessories	Item Number	List Price (USD)
Column Kit 13.9 in / 350 mm 304 Stainless Steel T31P	80251745	220
Column Kit 27.6 in / 700 mm 304 Stainless Steel T31P	80251746	276
Wall Mount Kit, SST, T51XW T71XW	80500735	91



DEFENDER™ B SERIES

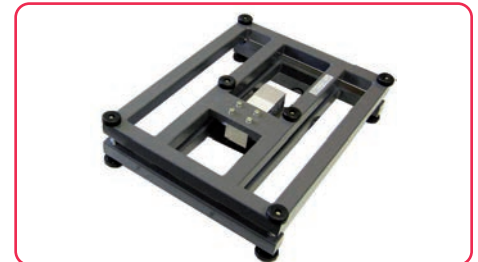
Economical Base for Industrial Weighing.

Construction

304 grade stainless steel platform, black painted steel tubular frame, IP67 aluminum load cell, level indicator

Design Features

125% capacity overload protection



The sturdy tubular 304 stainless steel platform provides ample support for industrial weighing applications.

The IP67 load cells ensure accurate and repeatable results.

The non-slip adjustable rubber leveling feet provide stability during the weighing process.

Model	Capacity	Readability	Certified Readability	Platform Size	Item Number	List Price (USD)
D15BR	30 lb (15 kg)	0.005 lb (2 g)	0.01 lb (5 g)	14 in x 12 in (355 mm x 305 mm)	30379434	751
D30BR	60 lb (30 kg)	0.01 lb (5 g)	0.02 lb (10 g)	14 in x 12 in (355 mm x 305 mm)	30379435	751
D60BR	150 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	14 in x 12 in (355 mm x 305 mm)	30379436	751
D60BL	150 lb (60 kg)	0.02 lb (10 g)	0.05 lb (20 g)	21.6 in x 16.5 in (550 mm x 420 mm)	30379437	777
D150BL	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	21.6 in x 16.5 in (550 mm x 420 mm)	30379438	777
D150BX	300 lb (150 kg)	0.05 lb (20 g)	0.1 lb (50 g)	25.6 in x 19.7 in (650 mm x 500 mm)	30379439	863
D300BX	600 lb (300 kg)	0.1 lb (50 g)	0.2 lb (100 g)	25.6 in x 19.7 in (650 mm x 500 mm)	30379440	863

Accessories	Item Number	List Price (USD)
Wheel Kit, Defender Series	30372146	145
Handle Kit, D3K	30381321	111
Column Kit, For T71XW, CKW	30454644	275
Column Adapter, Painted, T31P T51P T71P	72209339	30
Column Adapter, SST, T32XW T51XW T71XW	72209340	59
Column Kit 13.9 in / 350 mm Painted Steel T31P	80251743	98

Accessories	Item Number	List Price (USD)
Column Kit 27.6 in / 700 mm Painted Steel T31P	80251744	110
Column Kit 13.9 in / 350 mm 304 Stainless Steel T31P	80251745	220
Column Kit 27.6 in / 700 mm 304 Stainless Steel T31P	80251746	276
Wall Mount Kit, SST, T51XW T71XW	80500735	91

NOTES

Weights & Weight Sets



OHAUS' portfolio now includes the Troemner library of weights, backed by exclusive construction and more than 100 years of expertise. With a wide selection of weight classes backed by both ASTM and OIML, OHAUS weights offer a comprehensive range of 1 mg to 5,000 lb, and are available with certifications.





Our weights and weight sets are backed by the world's leading supplier of precision weights and mass standards. Since 1838, Troemner has enhanced its reputation as being the premier precision weight company by having industry recognized metrologists and highly trained calibrators on staff. Troemner's production of precision weights involves using the finest materials and equipment available in a state-of-the-art facility. For these important reasons, Troemner is capable of providing unmatched measurements and metrological analysis, to provide our customers with the precision weights they need.

Only the finest raw materials are selected in order to manufacture high quality weights. Troemner is the only supplier that has a special stainless steel blend called Troemner Alloy 8, which possesses closely controlled density (8.03 g/cm³), extremely low magnetic properties, good stability and resistance to corrosion.

Weight Selector Guide

Troemner UltraClass - For analytical and microbalances with readability as low as 1 g. These are the most precise two-piece weights available, with weight tolerances 40 to 50% better than ANSI/ASTM Class 1. Ultra Class weights combine high precision with the advantage of two-piece construction (1 g and larger) to avoid costly issues associated with one-piece weights.

ANSI/ASTM Class 1 - Can be used as a reference standard in calibrating other weights and is appropriate for calibrating high-precision analytical balances with a readability as low as 0.1 mg to 0.01 mg.

ANSI/ASTM Class 4 - For calibration of semi-analytical balances and for student use.

ANSI/ASTM Class 6 - This class meets the specifications of OIML R 111 Class M2.

OIML Class E1 - Used as a primary reference for calibrating other reference standards and weights where the stability of the environment and careful handling are assured. Class E1 weights have no method of adjustment and are not suitable for general laboratory use. The uncertainty is guaranteed to be 1/3 the tolerance.

OIML Class E2 - Can be used as a reference standard in calibrating other weights and is appropriate for calibrating high-precision analytical balances with a readability as low as 0.1 mg to 0.01 mg.

OIML Class F1 - Appropriate for calibrating high-precision top loading balances with a readability as low as 0.01 g to 0.001 g.

OIML Class F2 - For calibration of semi-analytical balances and for student use.

NIST Class F - Primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians.

ULTRAClass IND WEIGHTS WITHOUT CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390204	11098
30 kg	38 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390203	7515
25 kg	31 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390202	5957
20 kg	25 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390201	3222
10 kg	13 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390200	2761
5 kg	6 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390199	1495
3 kg	3.8 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390198	1293
2 kg	2.5 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390197	1007
1 kg	1.3 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390196	636
500 g	0.6 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390195	311
300 g	0.38 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390194	228
200 g	0.25 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390193	213
100 g	0.13 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390192	132
50 g	0.06 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390191	123
30 g	0.037 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390190	117
20 g	0.037 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390189	110
10 g	0.025 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390188	110
5 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390187	110
3 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390186	110
2 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390185	99
1 g	0.017 mg	UltraClass	No Certificate	Cylindrical	Troemner Alloy 8.	30390184	99



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390183	96
300 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390182	96
200 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390181	96
100 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390180	96
50 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390179	96
30 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390178	96
20 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390177	96
10 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390176	96
5 mg	0.005 mg	UltraClass	No Certificate	Flat	304 Stainless Steel	30390175	96
3 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390174	96
2 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390173	96
1 mg	0.005 mg	UltraClass	No Certificate	Flat	3003-H14 Aluminum	30390172	96

ULTRAClass IND WEIGHTS WITH TRACEABLE CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390236	11872
30 kg	38 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390235	7563
25 kg	31 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390234	6031
20 kg	25 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390233	3392
10 kg	13 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390232	2904
5 kg	6 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390231	1564
3 kg	3.8 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390230	1362
2 kg	2.5 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390229	1087
1 kg	1.3 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390228	721
500 g	0.6 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390227	357
300 g	0.38 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390226	293
200 g	0.25 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390225	261
100 g	0.13 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390224	179
50 g	0.06 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390223	174
30 g	0.037 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390222	167
20 g	0.037 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390221	161
10 g	0.025 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390220	161
5 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390219	161
3 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390218	161
2 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390217	149
1 g	0.017 mg	UltraClass	Traceable	Cylindrical	Troemner Alloy 8.	30390216	149



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
1 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390270	131
500 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390215	131
300 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390214	131
200 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390213	131
100 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390212	131
50 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390211	131
30 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390210	131
20 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390209	131
10 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390208	131
5 mg	0.005 mg	UltraClass	Traceable	Flat	304 Stainless Steel	30390207	131
3 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390206	131
2 mg	0.005 mg	UltraClass	Traceable	Flat	3003-H14 Aluminum	30390205	131

ULTRAClass IND WEIGHTS WITH NVLAP CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	63 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390269	12073
30 kg	38 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390268	8300
25 kg	31 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390267	6100
20 kg	25 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390266	3482
10 kg	13 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390265	3275
5 kg	6 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390264	1749
3 kg	3.8 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390263	1452
2 kg	2.5 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390262	1177
1 kg	1.3 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390261	816
500 g	0.6 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390260	402
300 g	0.38 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390259	337
200 g	0.25 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390258	329
100 g	0.13 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390257	213
50 g	0.06 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390256	193
30 g	0.037 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390255	193
20 g	0.037 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390254	179
10 g	0.025 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390253	169
5 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390252	169
3 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390251	169
2 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390250	169
1 g	0.017 mg	UltraClass	NVLAP	Cylindrical	Troemner Alloy 8.	30390249	169



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390248	155
300 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390247	155
200 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390246	155
100 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390245	155
50 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390244	155
30 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390243	155
20 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390242	155
10 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390241	155
5 mg	0.005 mg	UltraClass	NVLAP	Flat	304 Stainless Steel	30390240	155
3 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390239	155
2 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390238	155
1 mg	0.005 mg	UltraClass	NVLAP	Flat	3003-H14 Aluminum	30390237	155

ULTRAClass EB WEIGHTS WITHOUT CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to
Troemner UltraClass Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390301	2730
25 kg	31 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390300	2310
24 kg	28 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390299	2163
20 kg	25 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390298	1927
16 kg	18 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390297	1796
10 kg	13 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390296	1297
8 kg	9.5 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390295	1139
5 kg	6 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390294	950
4 kg	4.9 mg	UltraClass	No Certificate	Grip Handle	303 Stainless Steel	30390292	877



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390293	604
4 kg	4.9 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390291	510
3 kg	3.8 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390290	402
2 kg	2.5 mg	UltraClass	No Certificate	Cylindrical	303 Stainless Steel	30390289	268
1,500 g	1.9 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390288	260
1,000 g	1.3 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390287	231
600 g	0.95 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390286	206
500 g	0.6 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390285	192
400 g	0.49 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390284	183
300 g	0.38 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390283	155
200 g	0.25 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390282	135
160 g	0.19 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390281	141
150 g	0.19 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390280	141
100 g	0.13 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390279	112
80 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390278	122
70 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390277	122
60 g	0.095 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390276	113
50 g	0.06 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390275	93
40 g	0.049 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390274	95
30 g	0.037 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390273	88
20 g	0.037 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390272	88
10 g	0.025 mg	UltraClass	No Certificate	Cylindrical	316 Stainless Steel	30390271	88

ULTRAClass EB WEIGHTS WITH TRACEABLE CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390332	2865
25 kg	31 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390331	2406
24 kg	28 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390330	2203
20 kg	25 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390329	1973
16 kg	18 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390328	1845
10 kg	13 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390327	1374
8 kg	9.5 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390326	1210
5 kg	6 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390325	980
4 kg	4.9 mg	UltraClass	Traceable	Grip Handle	303 Stainless Steel	30390323	900



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390324	666
4 kg	4.9 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390322	600
3 kg	3.8 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390321	491
2 kg	2.5 mg	UltraClass	Traceable	Cylindrical	303 Stainless Steel	30390320	337
1,500 g	1.9 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390319	337
1,000 g	1.3 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390318	265
600 g	0.95 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390317	262
500 g	0.6 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390316	238
400 g	0.49 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390315	229
300 g	0.38 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390314	205
200 g	0.25 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390313	194
160 g	0.19 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390312	183
150 g	0.19 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390311	183
100 g	0.13 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390310	141
80 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390309	154
70 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390308	154
60 g	0.095 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390307	154
50 g	0.06 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390306	125
40 g	0.049 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390305	130
30 g	0.037 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390304	125
20 g	0.037 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390303	125
10 g	0.025 mg	UltraClass	Traceable	Cylindrical	316 Stainless Steel	30390302	125

ULTRAClass EB WEIGHTS WITH NVLAP CERTIFICATE

Reference Calibration Weights and Mass Standards Adjusted to Troemner UltraClass Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	38 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390363	3152
25 kg	31 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390362	2509
24 kg	28 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390361	2299
20 kg	25 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390360	2086
16 kg	18 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390359	1860
10 kg	13 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390358	1505
8 kg	9.5 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390357	1263
5 kg	6 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390356	1037
4 kg	4.9 mg	UltraClass	NVLAP	Grip Handle	303 Stainless Steel	30390354	1012



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	6 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390355	718
4 kg	4.9 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390353	692
3 kg	3.8 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390352	598
2 kg	2.5 mg	UltraClass	NVLAP	Cylindrical	303 Stainless Steel	30390351	403
1,500 g	1.9 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390350	443
1,000 g	1.3 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390349	328
600 g	0.95 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390348	345
500 g	0.6 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390347	306
400 g	0.49 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390346	292
300 g	0.38 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390345	280
200 g	0.25 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390344	257
160 g	0.19 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390343	292
150 g	0.19 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390342	292
100 g	0.13 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390341	196
80 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390340	188
70 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390339	188
60 g	0.095 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390338	188
50 g	0.06 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390337	188
40 g	0.049 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390336	188
30 g	0.037 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390335	188
20 g	0.037 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390334	188
10 g	0.025 mg	UltraClass	NVLAP	Cylindrical	316 Stainless Steel	30390333	188

ULTRAClass WEIGHT SETS WITHOUT CERTIFICATE

Reference Calibration Weight Sets and Mass Standards Adjusted to
Troemner UltraClass Tolerances



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390097	28541
50 kg - 1 mg	UltraClass	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390096	29063
30 kg - 1 g	UltraClass	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390095	19927
30 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390094	20885
25 kg - 1 g	UltraClass	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390093	19581
25 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390092	20188
20 kg - 1 g	UltraClass	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390091	12705
20 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390090	13050
10 kg - 1 g	UltraClass	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390089	9922
10 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390088	10443
5 kg - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390087	6789
5 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390086	7484
(2) 2 kg - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390011	5398
(2) 2 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390010	5919
2 kg - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390085	4527
2 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390084	5224
1 kg - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390083	3352
1 kg - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390082	4091
500 g - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390081	2262
500 g - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390080	2956
(2) 200 g - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390009	1282
(2) 200 g - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390008	1811
200 g - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390079	1159
200 g - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390078	1654
100 g - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390077	971
100 g - 100 mg	UltraClass	No Certificate	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390076	1184
100 g - 10 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390075	1426
100 g - 5 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390074	1486
100 g-1 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390073	1546
50 g - 1 g	UltraClass	No Certificate	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390072	1039
50 g - 100 mg	UltraClass	No Certificate	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390071	1144
50 g - 10 mg	UltraClass	No Certificate	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390070	1356
50 g - 5 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390069	1436
50 g - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390068	1635
20 g - 1 g	UltraClass	No Certificate	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390067	873
20 g - 100 mg	UltraClass	No Certificate	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390066	1090
20 g - 10 mg	UltraClass	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390065	1287
20 g - 5 mg	UltraClass	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390064	1378
20 g - 1 mg	UltraClass	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390063	1576
500 mg - 10 mg	UltraClass	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390062	631
500 mg - 1 mg	UltraClass	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390061	942

ULTRAClass WEIGHT SETS WITH TRACEABLE CERTIFICATE

Reference Calibration Weight Sets and Mass Standards Adjusted to
Troemner UltraClass Tolerances

Traceable



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390134	30711
50 kg - 1 mg	UltraClass	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390133	31912
30 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390132	21876
30 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390131	22819
25 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390130	19992
25 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390129	20758
20 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390128	14241
20 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390127	15099
10 kg - 1 g	UltraClass	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390126	10294
10 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390125	11324
5 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390124	7550
5 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390123	8623
(2) 2 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390015	6265
(2) 2 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390014	7293
2 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390122	4977
2 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390121	5922
1 kg - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390120	3877
1 kg - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390119	4927
500 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390118	2830
500 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390117	3862
(2) 200 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390013	1552
(2) 200 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390012	2617
200 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390116	1359
200 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390115	2394
100 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390114	1165
100 g - 100 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390113	1455
100 g - 10 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390112	1845
100 g - 5 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390111	1907
100 g-1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390110	2049
50 g - 1 g	UltraClass	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390109	1181
50 g - 100 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390108	1466
50 g - 10 mg	UltraClass	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390107	1812
50 g - 5 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390106	1923
50 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390105	2077
20 g - 1 g	UltraClass	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390104	1027
20 g - 100 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390103	1241
20 g - 10 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390102	1689
20 g - 5 mg	UltraClass	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390101	1580
20 g - 1 mg	UltraClass	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390100	1964
500 mg - 10 mg	UltraClass	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390099	987
500 mg - 1 mg	UltraClass	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390098	1159

ULTRAClass WEIGHT SETS WITH NVLAP CERTIFICATE

Reference Calibration Weight Sets and Mass Standards Adjusted to
Troemner UltraClass Tolerances
NVLAP



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	UltraClass	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390171	31244
50 kg - 1 mg	UltraClass	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390170	32354
30 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390169	22316
30 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390168	23684
25 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390167	20368
25 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390166	21531
20 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390165	14556
20 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390164	15913
10 kg - 1 g	UltraClass	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390163	10851
10 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390162	12122
5 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390161	8299
5 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390160	9442
(2) 2 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390019	6677
(2) 2 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390018	8031
2 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390159	5336
2 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390158	6660
1 kg - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390157	4322
1 kg - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390156	5653
500 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390155	3202
500 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390154	4560
(2) 200 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390017	1987
(2) 200 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390016	3544
200 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390153	1793
200 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390152	3159
100 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390151	1566
100 g - 100 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390150	2051
100 g - 10 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30390149	2521
100 g - 5 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390148	2382
100 g-1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390147	2894
50 g - 1 g	UltraClass	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390146	1502
50 g - 100 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30390145	1921
50 g - 10 mg	UltraClass	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30390144	2382
50 g - 5 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30390143	2314
50 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390142	2767
20 g - 1 g	UltraClass	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30390141	1175
20 g - 100 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30390140	1716
20 g - 10 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30390139	2067
20 g - 5 mg	UltraClass	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30390138	2145
20 g - 1 mg	UltraClass	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390137	2477
500 mg - 10 mg	UltraClass	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30390136	1306
500 mg - 1 mg	UltraClass	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390135	1622

CAL-PAKS

*Reference Calibration Weight Sets and Mass Standards Adjusted to
Troemner UltraClass Tolerances*



NVLAP

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
2 g - 1 mg	UltraClass	NVLAP	200 mg; 2 g; 1 mg	30391799	456
5 g - 1 mg	UltraClass	NVLAP	5 g; 500 mg; 1 mg	30391798	456

CLASS I IND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391425	10738
30 kg	75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391424	6837
25 kg	62 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391423	5411
20 kg	50 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391422	3684
10 kg	25 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391421	2518
5 kg	12 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391420	1367
3 kg	7.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391419	1171
2 kg	5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391418	917
1 kg	2.5 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	30391417	583
500 g	1.2 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	30391416	273
300 g	0.75 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	30391415	209
200 g	0.5 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781143	202
100 g	0.25 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781141	125
50 g	0.12 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781139	119
30 g	0.074 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	30391411	112
20 g	0.074 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781135	107
10 g	0.05 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781133	107
5 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781131	107
3 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	30391407	96
2 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781127	96
1 g	0.034 mg	1	No Certificate	Cylindrical	Troemner Alloy 8.	80781125	90



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781123	89
300 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	30391403	89
200 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781119	89
100 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781117	89
50 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781115	89
30 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	30391399	89
20 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781111	89
10 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781109	89
5 mg	0.01 mg	1	No Certificate	Flat	304 Stainless Steel	80781107	89
3 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	30391395	89
2 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	80781103	89
1 mg	0.01 mg	1	No Certificate	Flat	3003-H14 Aluminum	80781101	89

CLASS I IND WEIGHTS WITH TRACEABLE CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391607	11628
30 kg	75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391606	7372
25 kg	62 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391605	5464
20 kg	50 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391604	3832
10 kg	25 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391603	2581
5 kg	12 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391602	1489
3 kg	7.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391601	1341
2 kg	5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391600	1012
1 kg	2.5 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391599	684
500 g	1.2 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391598	333
300 g	0.75 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391597	280
200 g	0.5 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391596	260
100 g	0.25 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391595	173
50 g	0.12 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391594	167
30 g	0.074 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391593	162
20 g	0.074 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391592	157
10 g	0.05 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391591	157
5 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391590	157
3 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391589	146
2 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391588	146
1 g	0.034 mg	1	Traceable	Cylindrical	Troemner Alloy 8.	30391587	134



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391586	123
300 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391585	123
200 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391584	123
100 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391583	123
50 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391582	123
30 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391581	123
20 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391580	123
10 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391579	123
5 mg	0.01 mg	1	Traceable	Flat	304 Stainless Steel	30391578	123
3 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391577	123
2 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391576	123
1 mg	0.01 mg	1	Traceable	Flat	3003-H14 Aluminum	30391575	123

CLASS I IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	125 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391458	11830
30 kg	75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391457	7908
25 kg	62 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391456	5666
20 kg	50 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391455	3880
10 kg	25 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391454	2639
5 kg	12 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391453	1654
3 kg	7.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391452	1367
2 kg	5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391451	1081
1 kg	2.5 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	30391450	758
500 g	1.2 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	30391449	390
300 g	0.75 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	30391448	324
200 g	0.5 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781144	315
100 g	0.25 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781142	186
50 g	0.12 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781140	180
30 g	0.074 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	30391444	174
20 g	0.074 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781136	172
10 g	0.05 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781134	170
5 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781132	167
3 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	30391440	158
2 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781128	158
1 g	0.034 mg	1	NVLAP	Cylindrical	Troemner Alloy 8.	80781126	145



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781124	139
300 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	30391436	139
200 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781120	139
100 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781118	139
50 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781116	139
30 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	30391432	139
20 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781112	139
10 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781110	139
5 mg	0.01 mg	1	NVLAP	Flat	304 Stainless Steel	80781108	139
3 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	30391428	139
2 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	80781104	139
1 mg	0.01 mg	1	NVLAP	Flat	3003-H14 Aluminum	80781102	139

CLASS 4 IND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	No Certificate	Cylindrical	316 Stainless Steel	30391295	10335
30 kg	600 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391294	6445
25 kg	500 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391293	4881
20 kg	400 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391292	2682
10 kg	200 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391291	1696
5 kg	100 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391290	1256
3 kg	60 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391289	1028
2 kg	40 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391288	806
1 kg	20 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391287	511
500 g	10 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391286	240
300 g	6 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391285	169
200 g	4 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391284	149
100 g	2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780063	99
50 g	1.2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780075	99
30 g	0.9 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391281	85
20 g	0.7 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780068	85
10 g	0.5 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780062	78
5 g	0.36 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780074	61
3 g	0.3 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	30391277	61
2 g	0.26 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780067	61
1 g	0.2 mg	4	No Certificate	Cylindrical	Troemner Alloy 8.	80780061	61



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	No Certificate	Flat	304 Stainless Steel	80780073	40
300 mg	0.14 mg	4	No Certificate	Flat	304 Stainless Steel	30391273	40
200 mg	0.12 mg	4	No Certificate	Flat	304 Stainless Steel	80780066	40
100 mg	0.1 mg	4	No Certificate	Flat	304 Stainless Steel	80780060	40
50 mg	0.085 mg	4	No Certificate	Flat	304 Stainless Steel	80780072	40
30 mg	0.075 mg	4	No Certificate	Flat	304 Stainless Steel	30391269	40
20 mg	0.07 mg	4	No Certificate	Flat	304 Stainless Steel	80780065	40
10 mg	0.06 mg	4	No Certificate	Flat	304 Stainless Steel	80780059	40
5 mg	0.055 mg	4	No Certificate	Flat	304 Stainless Steel	80780071	40
3 mg	0.052 mg	4	No Certificate	Flat	3003-H14 Aluminum	30391265	40
2 mg	0.05 mg	4	No Certificate	Flat	3003-H14 Aluminum	80780064	40
1 mg	0.05 mg	4	No Certificate	Flat	3003-H14 Aluminum	80780058	40

CLASS 4 IND WEIGHTS WITH TRACEABLE CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	Traceable	Cylindrical	316 Stainless Steel	30391108	10351
30 kg	600 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391107	6508
25 kg	500 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391106	4982
20 kg	400 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391105	2730
10 kg	200 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391104	1723
5 kg	100 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391103	1330
3 kg	60 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391102	1081
2 kg	40 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391101	933
1 kg	20 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391100	567
500 g	10 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391099	246
300 g	6 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391098	196
200 g	4 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391097	181
100 g	2 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391096	130
50 g	1.2 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391095	123
30 g	0.9 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391094	123
20 g	0.7 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391093	112
10 g	0.5 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391092	112
5 g	0.36 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391091	95
3 g	0.3 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391090	92
2 g	0.26 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391089	92
1 g	0.2 mg	4	Traceable	Cylindrical	Troemner Alloy 8.	30391088	92



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	Traceable	Flat	304 Stainless Steel	30391087	78
300 mg	0.14 mg	4	Traceable	Flat	304 Stainless Steel	30391086	78
200 mg	0.12 mg	4	Traceable	Flat	304 Stainless Steel	30391085	78
100 mg	0.1 mg	4	Traceable	Flat	304 Stainless Steel	30391084	78
50 mg	0.085 mg	4	Traceable	Flat	304 Stainless Steel	30391083	78
30 mg	0.075 mg	4	Traceable	Flat	304 Stainless Steel	30391082	78
20 mg	0.07 mg	4	Traceable	Flat	304 Stainless Steel	30391081	78
10 mg	0.06 mg	4	Traceable	Flat	304 Stainless Steel	30391080	78
5 mg	0.055 mg	4	Traceable	Flat	304 Stainless Steel	30391079	78
3 mg	0.052 mg	4	Traceable	Flat	3003-H14 Aluminum	30391078	78
2 mg	0.05 mg	4	Traceable	Flat	3003-H14 Aluminum	30391077	78
1 mg	0.05 mg	4	Traceable	Flat	3003-H14 Aluminum	30391076	78

CLASS 4 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	1 g	4	NVLAP	Cylindrical	316 Stainless Steel	30391328	10478
30 kg	600 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391327	6673
25 kg	500 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391326	5136
20 kg	400 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391325	2910
10 kg	200 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391324	2147
5 kg	100 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391323	1468
3 kg	60 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391322	1166
2 kg	40 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391321	975
1 kg	20 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391320	615
500 g	10 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391319	329
300 g	6 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391318	258
200 g	4 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391317	239
100 g	2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850287	157
50 g	1.2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850297	154
30 g	0.9 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391314	149
20 g	0.7 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850292	145
10 g	0.5 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850286	141
5 g	0.36 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850296	136
3 g	0.3 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	30391310	136
2 g	0.26 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850291	136
1 g	0.2 mg	4	NVLAP	Cylindrical	Troemner Alloy 8.	80850285	129



Flat

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.16 mg	4	NVLAP	Flat	304 Stainless Steel	80850295	111
300 mg	0.14 mg	4	NVLAP	Flat	304 Stainless Steel	30391306	113
200 mg	0.12 mg	4	NVLAP	Flat	304 Stainless Steel	80850290	113
100 mg	0.1 mg	4	NVLAP	Flat	304 Stainless Steel	80850284	113
50 mg	0.085 mg	4	NVLAP	Flat	304 Stainless Steel	80850294	113
30 mg	0.075 mg	4	NVLAP	Flat	304 Stainless Steel	30391302	113
20 mg	0.07 mg	4	NVLAP	Flat	304 Stainless Steel	80850289	113
10 mg	0.06 mg	4	NVLAP	Flat	304 Stainless Steel	80850283	113
5 mg	0.055 mg	4	NVLAP	Flat	304 Stainless Steel	80850293	113
3 mg	0.052 mg	4	NVLAP	Flat	3003-H14 Aluminum	30391298	113
2 mg	0.05 mg	4	NVLAP	Flat	3003-H14 Aluminum	80850288	113
1 mg	0.05 mg	4	NVLAP	Flat	3003-H14 Aluminum	80850282	113

CLASS I EB WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781007	2310
25 kg	62 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391488	1974
24 kg	56 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391487	1916
20 kg	50 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781005	1651
16 kg	37.5 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391485	1533
10 kg	25 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781003	1097
8 kg	18.5 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391483	1061
5 kg	12 mg	1	No Certificate	Grip Handle	303 Stainless Steel	80781001	803
4 kg	9.75 mg	1	No Certificate	Grip Handle	303 Stainless Steel	30391480	746



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	No Certificate	Cylindrical	303 Stainless Steel	30391481	730
4 kg	9.75 mg	1	No Certificate	Cylindrical	303 Stainless Steel	80780027	630
3 kg	7.5 mg	1	No Certificate	Cylindrical	303 Stainless Steel	30391478	376
2 kg	5 mg	1	No Certificate	Cylindrical	303 Stainless Steel	80780024	231
1,500 g	3.75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391476	209
1,000 g	2.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780021	202
600 g	1.85 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391474	198
500 g	1.2 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780029	158
400 g	0.975 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780026	155
300 g	0.75 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391471	143
200 g	0.5 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780023	137
160 g	0.375 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391469	134
150 g	0.375 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391468	120
100 g	0.25 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780020	114
80 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391466	110
70 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391465	107
60 g	0.185 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391464	102
50 g	0.12 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780028	98
40 g	0.097 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780025	98
30 g	0.074 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391461	98
20 g	0.074 mg	1	No Certificate	Cylindrical	316 Stainless Steel	80780022	98
10 g	0.05 mg	1	No Certificate	Cylindrical	316 Stainless Steel	30391459	98

CLASS I EB WEIGHTS WITH TRACEABLE CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391520	2559
25 kg	62 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391519	2093
24 kg	56 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391518	2050
20 kg	50 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391517	1777
16 kg	37.5 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391516	1612
10 kg	25 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391515	1225
8 kg	18.5 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391514	1158
5 kg	12 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391513	868
4 kg	9.75 mg	1	Traceable	Grip Handle	303 Stainless Steel	30391511	791



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391512	815
4 kg	9.75 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391510	728
3 kg	7.5 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391509	472
2 kg	5 mg	1	Traceable	Cylindrical	303 Stainless Steel	30391508	315
1,500 g	3.75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391507	308
1,000 g	2.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391506	296
600 g	1.85 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391505	264
500 g	1.2 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391504	233
400 g	0.975 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391503	222
300 g	0.75 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391502	208
200 g	0.5 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391501	202
160 g	0.375 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391500	199
150 g	0.375 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391499	186
100 g	0.25 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391498	158
80 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391497	154
70 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391496	151
60 g	0.185 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391495	149
50 g	0.12 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391494	146
40 g	0.097 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391493	146
30 g	0.074 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391492	146
20 g	0.074 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391491	146
10 g	0.05 mg	1	Traceable	Cylindrical	316 Stainless Steel	30391490	146

CLASS I EB WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	75 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781008	2659
25 kg	62 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391537	2126
24 kg	56 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391536	2044
20 kg	50 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781006	1792
16 kg	37.5 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391535	1639
10 kg	25 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781004	1261
8 kg	18.5 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391534	1195
5 kg	12 mg	1	NVLAP	Grip Handle	303 Stainless Steel	80781002	972
4 kg	9.75 mg	1	NVLAP	Grip Handle	303 Stainless Steel	30391532	922



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	12 mg	1	NVLAP	Cylindrical	303 Stainless Steel	30391533	888
4 kg	9.75 mg	1	NVLAP	Cylindrical	303 Stainless Steel	80850275	801
3 kg	7.5 mg	1	NVLAP	Cylindrical	303 Stainless Steel	30391531	545
2 kg	5 mg	1	NVLAP	Cylindrical	303 Stainless Steel	80850272	401
1,500 g	3.75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391530	391
1,000 g	2.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850269	362
600 g	1.85 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391529	340
500 g	1.2 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850277	303
400 g	0.975 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850274	295
300 g	0.75 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391528	285
200 g	0.5 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850271	279
160 g	0.375 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391527	276
150 g	0.375 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391526	259
100 g	0.25 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850268	179
80 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391525	179
70 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391524	179
60 g	0.185 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391523	179
50 g	0.12 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850276	179
40 g	0.097 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850273	179
30 g	0.074 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391522	179
20 g	0.074 mg	1	NVLAP	Cylindrical	316 Stainless Steel	80850270	179
10 g	0.05 mg	1	NVLAP	Cylindrical	316 Stainless Steel	30391521	179

CLASS 4 EB WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391139	1591
25 kg	500 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391138	1418
24 kg	450 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391137	1349
20 kg	400 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391136	1155
16 kg	300 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391135	1013
10 kg	200 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391134	777
8 kg	150 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391133	756
5 kg	100 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391132	525
4 kg	80 mg	4	No Certificate	Grip Handle	303 Stainless Steel	30391130	490



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391131	506
4 kg	80 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391129	496
3 kg	60 mg	4	No Certificate	Cylindrical	303 Stainless Steel	30391128	308
2 kg	40 mg	4	No Certificate	Cylindrical	303 Stainless Steel	80780145	196
1,500 g	30 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391126	193
1,000 g	20 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780143	183
600 g	15 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391124	171
500 g	10 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780141	133
400 g	8 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780139	133
300 g	6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780137	120
200 g	4 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780135	117
160 g	3 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391119	112
150 g	3 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391118	102
100 g	2 mg	4	No Certificate	Cylindrical	316 Stainless Steel	80780133	98
80 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391116	95
70 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391115	92
60 g	1.6 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391114	91
50 g	1.2 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391113	88
40 g	1.05 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391112	82
30 g	0.9 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391111	82
20 g	0.7 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391110	82
10 g	0.5 mg	4	No Certificate	Cylindrical	316 Stainless Steel	30391109	82

CLASS 4 EB WEIGHTS WITH TRACEABLE CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391170	1828
25 kg	500 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391169	1449
24 kg	450 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391168	1407
20 kg	400 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391167	1237
16 kg	300 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391166	1140
10 kg	200 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391165	854
8 kg	150 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391164	784
5 kg	100 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391163	575
4 kg	80 mg	4	Traceable	Grip Handle	303 Stainless Steel	30391161	556



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391162	543
4 kg	80 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391160	517
3 kg	60 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391159	362
2 kg	40 mg	4	Traceable	Cylindrical	303 Stainless Steel	30391158	268
1,500 g	30 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391157	266
1,000 g	20 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391156	222
600 g	15 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391155	208
500 g	10 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391154	173
400 g	8 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391153	168
300 g	6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391152	160
200 g	4 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391151	158
160 g	3 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391150	153
150 g	3 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391149	158
100 g	2 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391148	127
80 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391147	120
70 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391146	120
60 g	1.6 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391145	120
50 g	1.2 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391144	118
40 g	1.05 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391143	110
30 g	0.9 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391142	110
20 g	0.7 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391141	110
10 g	0.5 mg	4	Traceable	Cylindrical	316 Stainless Steel	30391140	110

CLASS 4 EB WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Grip Handle

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
30 kg	600 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391194	1956
25 kg	500 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391193	1550
24 kg	450 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391192	1506
20 kg	400 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391191	1324
16 kg	300 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391190	1220
10 kg	200 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391189	914
8 kg	150 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391188	839
5 kg	100 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391187	664
4 kg	80 mg	4	NVLAP	Grip Handle	303 Stainless Steel	30391185	598



Cylindrical

Weight Value	Weight Tolerance	ASTM Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 kg	100 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391186	618
4 kg	80 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391184	588
3 kg	60 mg	4	NVLAP	Cylindrical	303 Stainless Steel	30391183	403
2 kg	40 mg	4	NVLAP	Cylindrical	303 Stainless Steel	80780146	289
1,500 g	30 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391182	352
1,000 g	20 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780144	253
600 g	15 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391181	239
500 g	10 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780142	229
400 g	8 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780140	213
300 g	6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780138	204
200 g	4 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780136	201
160 g	3 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391180	219
150 g	3 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391179	219
100 g	2 mg	4	NVLAP	Cylindrical	316 Stainless Steel	80780134	149
80 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391178	149
70 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391177	149
60 g	1.6 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391176	149
50 g	1.2 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391175	141
40 g	1.05 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391174	141
30 g	0.9 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391173	141
20 g	0.7 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391172	141
10 g	0.5 mg	4	NVLAP	Cylindrical	316 Stainless Steel	30391171	141

CLASS I WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Class 1



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391360	24540
50 kg - 1 mg	1	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391359	25062
30 kg - 1 g	1	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391358	17228
30 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391357	17840
25 kg - 1 g	1	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391356	16883
25 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391355	17404
20 kg - 1 g	1	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391354	10965
20 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391353	12705
10 kg - 1 g	1	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391352	8618
10 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391351	9049
5 kg - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391350	5877
5 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391349	6440
(2) 2 kg - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390054	4701
(2) 2 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390053	5045
2 kg - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391348	3828
2 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391347	4527
1 kg - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391346	2872
1 kg - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391345	3523
500 g - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391344	1950
500 g - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391343	2645
(2) 200 g - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80781033	1058
(2) 200 g - 1 mg	1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781031	1559
200 g - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391342	950
200 g - 1 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391341	1423
100 g - 1 g	1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80781029	812
100 g - 100 mg	1	No Certificate	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391340	961
100 g - 10 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391339	1184
100 g - 5 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391338	1249
100g - 1mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781027	1350
50 g - 1 g	1	No Certificate	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80781025	784
50 g - 100 mg	1	No Certificate	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391337	950
50 g - 10 mg	1	No Certificate	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391336	1093
50 g - 5 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391335	1171
50 g - 1 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781023	1295
20 g - 1 g	1	No Certificate	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391334	734
20 g - 100 mg	1	No Certificate	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391333	883
20 g - 10 mg	1	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391332	1048
20 g - 5 mg	1	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391331	1089
20 g - 1 mg	1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391330	1266
500 mg - 10 mg	1	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391329	532
500 mg - 1 mg	1	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80781021	743

CLASS I WEIGHT SETS WITH TRACEABLE CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Class 1



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391574	26766
50 kg - 1 mg	1	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391573	27796
30 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391572	19043
30 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391571	19903
25 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391570	17331
25 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391569	18186
20 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391568	12182
20 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391567	13127
10 kg - 1 g	1	Traceable	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391566	8924
10 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391565	9868
5 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391564	6607
5 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391563	7465
(2) 2 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390060	5405
(2) 2 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390059	6348
2 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391562	4247
2 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391561	5139
1 kg - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391560	3380
1 kg - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391559	4272
500 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391558	2456
500 g - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391557	3398
(2) 200 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390058	1492
(2) 200 g - 1 mg	1	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390057	2401
200 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391556	1299
200 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391555	2148
100 g - 1 g	1	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391554	1067
100 g - 100 mg	1	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391553	1324
100 g - 10 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391552	1668
100 g - 5 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391551	1689
(2) 2g - 1mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391550	1907
50 g - 1 g	1	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391549	1069
50 g - 100 mg	1	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391548	1268
50 g - 10 mg	1	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391547	1513
50 g - 5 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391546	1612
50 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391545	1827
20 g - 1 g	1	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391544	870
20 g - 100 mg	1	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391543	1123
20 g - 10 mg	1	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391542	1455
20 g - 5 mg	1	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391541	1481
20 g - 1 mg	1	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391540	1740
500 mg - 10 mg	1	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391539	856
500 mg - 1 mg	1	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30391538	1068

CLASS I WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Class 1

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391392	27148
50 kg - 1 mg	1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391391	28136
30 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391390	19487
30 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391389	20599
25 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391388	17653
25 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391387	18721
20 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391386	12608
20 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391385	13778
10 kg - 1 g	1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391384	9407
10 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391383	10551
5 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391382	7035
5 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391381	8194
(2) 2kg - 1g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390056	5822
(2) 2kg - 1mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390055	6983
2 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30391380	4635
2 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391379	5797
1 kg - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391378	3742
1 kg - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391377	4902
500 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391376	2794
500 g - 1 mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391375	4120
(2) 200 g - 1g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80781034	1716
(2) 200 g - 1mg	1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781032	3057
200 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391374	1506
200 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391373	2816
100 g - 1 g	1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80781030	1411
100 g - 100 mg	1	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391372	1785
100 g - 10 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391371	2279
100 g - 5 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391370	2067
100 g-1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781028	2648
50 g - 1 g	1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80781026	1352
50 g - 100 mg	1	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391369	1700
50 g - 10 mg	1	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391368	2123
50 g - 5 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391367	2204
50 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80781024	2477
20 g - 1 g	1	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391366	1022
20 g - 100 mg	1	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391365	1408
20 g - 10 mg	1	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; 1 g; 5 g; 50 mg; 500 mg	30391364	1716
20 g - 5 mg	1	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391363	1803
20 g - 1 mg	1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391362	2238
500 mg - 10 mg	1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391361	1137
500 mg - 1 mg	1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80781022	1354

CLASS 4 WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances



Class 4

Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391228	20188
50 kg - 1 mg	4	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391227	20491
30 kg - 1 g	4	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391226	14096
30 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391225	14663
25 kg - 1 g	4	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391224	13664
25 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391223	14360
20 kg - 1 g	4	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391222	9009
20 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391221	10565
10 kg - 1 g	4	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391220	7050
10 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391219	7434
5 kg - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391218	4858
5 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391217	5273
(2) 2 kg - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390048	3828
(2) 2 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390047	4508
2 kg - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391216	3167
2 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391215	3692
1 kg - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391214	2384
1 kg - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391213	2925
500g - 1g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391212	1595
500 g - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391211	2053
(2) 200 g - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390046	846
(2) 200 g - 1 mg	4	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390045	1090
200 g - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391210	725
200 g - 1 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391209	999
100 g - 1 g	4	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391208	670
100 g - 100 mg	4	No Certificate	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391207	767
100 g - 10 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391206	916
100 g - 5 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391205	922
100 g - 1 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780101	944
50 g - 1 g	4	No Certificate	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391204	515
50 g - 100 mg	4	No Certificate	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391203	615
50 g - 10 mg	4	No Certificate	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391202	715
50 g - 5 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391201	743
50 g - 1 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780111	816
20 g - 1 g	4	No Certificate	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391200	428
20 g - 100 mg	4	No Certificate	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391199	510
20 g - 10 mg	4	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391198	566
20 g - 5 mg	4	No Certificate	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391197	616
20 g - 1 mg	4	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391196	687
500 mg - 10 mg	4	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391195	263
500 mg - 1 mg	4	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780100	383

CLASS 4 WEIGHT SETS WITH TRACEABLE CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Class 4



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391075	23162
50 kg - 1 mg	4	Traceable	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391074	24018
30 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391073	16420
30 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391072	17157
25 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391071	15014
25 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391070	15788
20 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391069	10553
20 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391068	11324
10 kg - 1 g	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391067	7720
10 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391066	8494
5 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391065	5665
5 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391064	6519
(2) 2 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390044	4718
(2) 2 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390043	5490
2 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391063	3689
2 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391062	4436
1 kg - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391061	2916
1 kg - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391060	3689
500 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391059	2127
500 g - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391058	2905
(2) 200 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390042	972
(2) 200 g - 1 mg	4	Traceable	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390041	1579
200 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391057	919
200 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391056	1345
100 g - 1 g	4	Traceable	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391055	826
100 g - 100 mg	4	Traceable	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391054	997
100 g - 10 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391053	1143
100 g - 5 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391052	1269
100 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391051	1325
50 g - 1 g	4	Traceable	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391050	633
50 g - 100 mg	4	Traceable	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391049	794
50 g - 10 mg	4	Traceable	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391048	1027
50 g - 5 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391047	1219
50 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391046	1257
20 g - 1 g	4	Traceable	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391045	541
20 g - 100 mg	4	Traceable	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391044	688
20 g - 10 mg	4	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391043	817
20 g - 5 mg	4	Traceable	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391042	959
20 g - 1 mg	4	Traceable	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391041	1069
500 mg - 10 mg	4	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391040	515
500 mg - 1 mg	4	Traceable	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30391039	626

CLASS 4 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed ASTM Class 1-4 Tolerances

Class 4



Weight Set Range	ASTM Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	4	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391262	23877
50 kg - 1 mg	4	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391261	24449
30 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391260	16877
30 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391259	17849
25 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391258	15331
25 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391257	16306
20 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391256	10970
20 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391255	12038
10 kg - 1 g	4	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391254	8156
10 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391253	9168
5 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30391252	6113
5 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30391251	6966
(2) 2 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390052	5029
(2) 2 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390051	6205
2 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30391250	4072
2 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391249	5149
1 kg - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30391248	3398
1 kg - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391247	4269
500 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30391246	2476
500 g - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30391245	3440
(2) 200 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390050	1224
(2) 200 g - 1 mg	4	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390049	2051
200 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30391244	1068
200 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391243	1887
100 g - 1 g	4	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30391242	952
100 g - 100 mg	4	NVLAP	10 g; (2) 20 g; 100 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391241	1293
100 g - 10 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 50 mg	30391240	1545
100 g - 5 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391239	1604
100 g-1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80850265	1818
50 g - 1 g	4	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30391238	875
50 g - 100 mg	4	NVLAP	10 g; (2) 20 g; 100 mg; (2) 2 g; (2) 200 mg; 1 g; 50 g; 5 g; 500 mg	30391237	1127
50 g - 10 mg	4	NVLAP	10 g; (2) 20 g; 100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 50 g; 5 g; 50 mg; 500 mg	30391236	1506
50 g - 5 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 50 mg	30391235	1651
50 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80850264	1700
20 g - 1 g	4	NVLAP	10 g; 20 g; (2) 2 g; 1 g; 5 g	30391234	771
20 g - 100 mg	4	NVLAP	10 g; 100 mg; 20 g; (2) 2 g; (2) 200 mg; 1 g; 5 g; 500 mg	30391233	906
20 g - 10 mg	4	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 50 mg; 500 mg	30391232	1107
20 g - 5 mg	4	NVLAP	10 g; 100 mg; 20 g; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; 50 mg; 500 mg	30391231	1329
20 g - 1 mg	4	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; 100 mg; 20 g; 10 mg; (2) 200 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30391230	1527
500 mg - 10 mg	4	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 50 mg; 500 mg	30391229	829
500 mg - 1 mg	4	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80850263	913

E1 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	25 mg	E1	NVLAP	Cylindrical	316 Stainless Steel	30390927	11701
20 kg	10 mg	E1	NVLAP	Cylindrical	316 Stainless Steel	30390928	5326
10 kg	5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390929	3504
5 kg	2.5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390930	2595
2 kg	1 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390931	1894
1 kg	0.5 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390932	1290
500 g	0.25 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390933	1058
200 g	0.1 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390934	863
100 g	0.05 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390935	762
50 g	0.03 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390936	683
20 g	0.025 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390937	646
10 g	0.02 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390938	616
5 g	0.016 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390939	595
2 g	0.012 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390940	574
1 g	0.01 mg	E1	NVLAP	Cylindrical	Troemner Alloy 8.	30390941	574



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.005 mg	E1	NVLAP	Flat	304 Stainless Steel	30390942	310
200 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390943	310
100 mg	0.005 mg	E1	NVLAP	Flat	304 Stainless Steel	30390944	310
50 mg	0.004 mg	E1	NVLAP	Flat	304 Stainless Steel	30390945	310
20 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390946	310
10 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390947	310
5 mg	0.003 mg	E1	NVLAP	Flat	304 Stainless Steel	30390948	310
2 mg	0.003 mg	E1	NVLAP	Flat	3003-H14 Aluminum	30390949	310
1 mg	0.003 mg	E1	NVLAP	Flat	3003-H14 Aluminum	30390950	310

E2 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	80 mg	E2	NVLAP	Cylindrical	316 Stainless Steel	30390903	10368
20 kg	30 mg	E2	NVLAP	Cylindrical	316 Stainless Steel	80780306	3366
10 kg	16 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780305	2604
5 kg	8 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780304	1491
2 kg	3 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780303	941
1 kg	1.6 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780302	700
500 g	0.8 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780301	488
200 g	0.3 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780300	386
100 g	0.16 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780299	292
50 g	0.1 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780298	263
20 g	0.05 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780297	252
10 g	0.06 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780296	243
5 g	0.05 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780295	237
2 g	0.04 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780294	230
1 g	0.03 mg	E2	NVLAP	Cylindrical	Troemner Alloy 8.	80780293	230



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.025 mg	E2	NVLAP	Flat	304 Stainless Steel	80780292	144
200 mg	0.02 mg	E2	NVLAP	Flat	304 Stainless Steel	80780291	144
100 mg	0.016 mg	E2	NVLAP	Flat	304 Stainless Steel	80780290	144
50 mg	0.012 mg	E2	NVLAP	Flat	304 Stainless Steel	80780289	144
20 mg	0.01 mg	E2	NVLAP	Flat	304 Stainless Steel	80780288	144
10 mg	0.008 mg	E2	NVLAP	Flat	304 Stainless Steel	80780287	144
5 mg	0.006 mg	E2	NVLAP	Flat	304 Stainless Steel	80780286	144
2 mg	0.006 mg	E2	NVLAP	Flat	3003-H14 Aluminum	80780285	144
1 mg	0.006 mg	E2	NVLAP	Flat	3003-H14 Aluminum	80780284	144

F1 IND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	250 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780330	7402
20 kg	100 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780329	2677
10 kg	50 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780328	1927
5 kg	25 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780327	1129
2 kg	10 mg	F1	No Certificate	Cylindrical	316 Stainless Steel	80780326	664
1 kg	5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780325	468
500 g	2.5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780324	269
200 g	1 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780323	210
100 g	0.5 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780322	149
50 g	0.3 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780321	131
20 g	0.25 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780320	131
10 g	0.2 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780319	131
5 g	0.16 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780318	131
2 g	0.12 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780317	131
1 g	0.1 mg	F1	No Certificate	Cylindrical	Troemner Alloy 8.	80780316	131



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.08 mg	F1	No Certificate	Flat	304 Stainless Steel	80780315	54
200 mg	0.06 mg	F1	No Certificate	Flat	304 Stainless Steel	80780314	54
100 mg	0.05 mg	F1	No Certificate	Flat	304 Stainless Steel	80780313	54
50 mg	0.04 mg	F1	No Certificate	Flat	304 Stainless Steel	80780312	54
20 mg	0.03 mg	F1	No Certificate	Flat	304 Stainless Steel	80780311	54
10 mg	0.025 mg	F1	No Certificate	Flat	304 Stainless Steel	80780310	54
5 mg	0.02 mg	F1	No Certificate	Flat	304 Stainless Steel	80780309	54
2 mg	0.02 mg	F1	No Certificate	Flat	3003-H14 Aluminum	80780308	54
1 mg	0.02 mg	F1	No Certificate	Flat	3003-H14 Aluminum	80780307	54

F1 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	250 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	30390901	7471
20 kg	100 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780353	2816
10 kg	50 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780352	2061
5 kg	25 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780351	1294
2 kg	10 mg	F1	NVLAP	Cylindrical	316 Stainless Steel	80780350	829
1 kg	5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780349	610
500 g	2.5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780348	411
200 g	1 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780347	352
100 g	0.5 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780346	211
50 g	0.3 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780345	193
20 g	0.25 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780344	193
10 g	0.2 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780343	193
5 g	0.16 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780342	193
2 g	0.12 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780341	193
1 g	0.1 mg	F1	NVLAP	Cylindrical	Troemner Alloy 8.	80780340	193



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.08 mg	F1	NVLAP	Flat	304 Stainless Steel	80780339	116
200 mg	0.06 mg	F1	NVLAP	Flat	304 Stainless Steel	80780338	116
100 mg	0.05 mg	F1	NVLAP	Flat	304 Stainless Steel	80780337	116
50 mg	0.04 mg	F1	NVLAP	Flat	304 Stainless Steel	80780336	116
20 mg	0.03 mg	F1	NVLAP	Flat	304 Stainless Steel	80780335	116
10 mg	0.025 mg	F1	NVLAP	Flat	304 Stainless Steel	80780334	116
5 mg	0.02 mg	F1	NVLAP	Flat	304 Stainless Steel	80780333	116
2 mg	0.02 mg	F1	NVLAP	Flat	3003-H14 Aluminum	80780332	116
1 mg	0.02 mg	F1	NVLAP	Flat	3003-H14 Aluminum	80780331	116

F2 IND WEIGHTS WITHOUT CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	800 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390853	5239
20 kg	300 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390854	2307
10 kg	160 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390855	1447
5 kg	80 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390856	789
2 kg	30 mg	F2	No Certificate	Cylindrical	316 Stainless Steel	30390857	624
1 kg	16 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390858	403
500 g	8 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390859	269
200 g	3 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390860	204
100 g	1.6 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390861	125
50 g	1 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390862	125
20 g	0.8 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390863	125
10 g	0.6 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390864	125
5 g	0.5 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390865	125
2 g	0.4 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390866	125
1 g	0.3 mg	F2	No Certificate	Cylindrical	Troemner Alloy 8.	30390867	125



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.25 mg	F2	No Certificate	Flat	304 Stainless Steel	30390868	48
200 mg	0.2 mg	F2	No Certificate	Flat	304 Stainless Steel	30390869	48
100 mg	0.16 mg	F2	No Certificate	Flat	304 Stainless Steel	30390870	48
50 mg	0.12 mg	F2	No Certificate	Flat	304 Stainless Steel	30390871	48
20 mg	0.1 mg	F2	No Certificate	Flat	304 Stainless Steel	30390872	48
10 mg	0.08 mg	F2	No Certificate	Flat	304 Stainless Steel	30390873	48
5 mg	0.06 mg	F2	No Certificate	Flat	304 Stainless Steel	30390874	48
2 mg	0.06 mg	F2	No Certificate	Flat	3003-H14 Aluminum	30390875	48
1 mg	0.06 mg	F2	No Certificate	Flat	3003-H14 Aluminum	30390876	48

F2 IND WEIGHTS WITH NVLAP CERTIFICATE

Individual Calibration Weights Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Cylindrical

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
50 kg	800 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390877	5376
20 kg	300 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390878	2517
10 kg	160 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390879	1612
5 kg	80 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390880	953
2 kg	30 mg	F2	NVLAP	Cylindrical	316 Stainless Steel	30390881	789
1 kg	16 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390882	545
500 g	8 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390883	411
200 g	3 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390884	346
100 g	1.6 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390885	187
50 g	1 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390886	187
20 g	0.8 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390887	187
10 g	0.6 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390888	152
5 g	0.5 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390889	187
2 g	0.4 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390890	187
1 g	0.3 mg	F2	NVLAP	Cylindrical	Troemner Alloy 8.	30390891	187



Flat

Weight Value	Weight Tolerance	OIML Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
500 mg	0.25 mg	F2	NVLAP	Flat	304 Stainless Steel	30390892	110
200 mg	0.2 mg	F2	NVLAP	Flat	304 Stainless Steel	30390893	110
100 mg	0.16 mg	F2	NVLAP	Flat	304 Stainless Steel	30390894	110
50 mg	0.12 mg	F2	NVLAP	Flat	304 Stainless Steel	30390895	110
20 mg	0.1 mg	F2	NVLAP	Flat	304 Stainless Steel	30390896	110
10 mg	0.08 mg	F2	NVLAP	Flat	304 Stainless Steel	30390897	110
5 mg	0.06 mg	F2	NVLAP	Flat	304 Stainless Steel	30390898	110
2 mg	0.06 mg	F2	NVLAP	Flat	3003-H14 Aluminum	30390899	110
1 mg	0.06 mg	F2	NVLAP	Flat	3003-H14 Aluminum	30390900	110

E1 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	E1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390904	44149
50 kg - 1 mg	E1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390905	45551
20 kg - 1 g	E1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390906	21023
20 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390907	22426
10 kg - 1 g	E1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390908	16818
10 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390909	17379
5 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390911	12497
5 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390912	13455
2 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390913	7850
2 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390914	9985
(2) 2 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390037	9391
(2) 2 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390038	11212
1 kg - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390915	6587
1 kg - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390916	8270
500 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390917	5607
500 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390918	7569
200 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390919	4767
200 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390920	6073
(2) 200 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390039	5185
(2) 200 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390040	6308
100 g - 1 g	E1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390921	4346
100 g-1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390922	5887
50 g - 1 g	E1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390923	3785
50 g - 1 mg	E1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390924	4906
500 mg - 1 mg	E1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390926	2383
5 g - 1 mg	E1	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390925	3785
5 kg - 1 kg	E1	NVLAP	(2) 2 kg; 1 kg; 5 kg	30390910	7850

E2 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	E2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780407	25369
50 kg - 1 mg	E2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780406	25788
20 kg - 1 g	E2	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780405	12487
20 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780404	13236
10 kg - 1 g	E2	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780403	9391
10 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780402	9672
5 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780400	6448
5 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780399	7429
2 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780398	4485
2 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780397	5467
(2) 2 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780396	5129
(2) 2 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780395	5679
1 kg - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780394	4058
1 kg - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780393	5293
500 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780392	2804
500 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780391	3529
200 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780390	1822
200 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780389	3199
(2) 200 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780388	2523
(2) 200 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780387	3084
100 g - 1 g	E2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780386	1438
100 g-1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780385	2370
50 g - 1 g	E2	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780384	1261
50 g - 1 mg	E2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780383	2102
500 mg - 1 mg	E2	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780381	1430
5 g - 1 mg	E2	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780382	1647
5 kg - 1 kg	E2	NVLAP	(2) 2 kg; 1 kg; 5 kg	80780401	4330

FI WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F1	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780433	16258
50 kg - 1 mg	F1	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780434	16844
20 kg - 1 g	F1	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780432	10031
20 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780431	10326
10 kg - 1 g	F1	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780430	7637
10 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780429	7903
5 kg - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780427	4726
5 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780426	5021
2 kg - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780425	3137
2 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780424	4056
(2) 2 kg - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780423	3711
(2) 2 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780422	4244
1 kg - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780421	2763
1 kg - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780420	2980
500 g - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780419	1560
500 g - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780418	2100
200 g - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780417	1101
200 g - 1 mg	F1	No Certificate	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780416	1730
(2) 200 g - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780415	1192
(2) 200 g - 1 mg	F1	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780414	1776
100 g - 1 g	F1	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780413	811
100 g-1 mg	F1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780412	1231
50 g - 1 g	F1	No Certificate	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780411	704
50 g - 1 mg	F1	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780410	1158
500 mg - 1 mg	F1	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780408	596
5 g - 1 mg	F1	No Certificate	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780409	687
5 kg - 1 kg	F1	No Certificate	(2) 2 kg; 1 kg; 5 kg	80780428	3766

FI WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780461	18220
50 kg - 1 mg	F1	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780460	18921
20 kg - 1 g	F1	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780459	11489
20 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780458	12232
10 kg - 1 g	F1	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780457	8976
10 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780456	9606
5 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	80780454	5946
5 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	80780453	6610
2 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	80780452	4090
2 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780451	5236
(2) 2 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	80780450	4800
(2) 2 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780449	5410
1 kg - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	80780448	3813
1 kg - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780447	4771
500 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	80780446	2287
500 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	80780445	3370
200 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	80780444	1714
200 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780443	2978
(2) 200 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	80780442	1783
(2) 200 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780441	2933
100 g - 1 g	F1	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	80780440	1214
100 g-1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780439	2173
50 g - 1 g	F1	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	80780438	1055
50 g - 1 mg	F1	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	80780437	2054
500 mg - 1 mg	F1	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780435	1129
5 g - 1 mg	F1	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	80780436	1163
5 kg - 1 kg	F1	NVLAP	(2) 2 kg; 1 kg; 5 kg	80780455	4100

F2 WEIGHT SETS WITHOUT CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F2	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390807	14061
50 kg - 1 mg	F2	No Certificate	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390808	14355
20 kg - 1 g	F2	No Certificate	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390809	8936
20 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390810	9186
10 kg - 1 g	F2	No Certificate	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390811	6802
10 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390812	7024
5 kg - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390814	4056
5 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390815	4596
2 kg - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390816	3103
2 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390817	3518
(2) 2 kg - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390029	3518
(2) 2 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390030	3575
1 kg - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390818	2741
1 kg - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390819	2877
500 g - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390820	1385
500 g - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390821	1787
200 g - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390822	1078
200 g - 1 mg	F2	No Certificate	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390823	1701
(2) 200 g - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390031	1134
(2) 200 g - 1 mg	F2	No Certificate	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390032	1730
100 g - 1 g	F2	No Certificate	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390824	777
100 g-1 mg	F2	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390825	970
50 g - 1 g	F2	No Certificate	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390826	693
50 g - 1 mg	F2	No Certificate	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390827	948
500 mg - 1 mg	F2	No Certificate	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390829	590
5 g - 1 mg	F2	No Certificate	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390828	649
5 kg - 1 kg	F2	No Certificate	(2) 2 kg; 1 kg; 5 kg	30390813	3432

F2 WEIGHT SETS WITH NVLAP CERTIFICATE

Calibration Weight Sets Adjusted to Meet or Exceed OIML Class E1, E2, F1, and F2 Tolerances



Weight Set Range	OIML Class	Certificate Type	Set Contents	Item Number	List Price (USD)
50 kg - 1 g	F2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390830	14297
50 kg - 1 mg	F2	NVLAP	(2) 20 kg; 50 kg; (2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390831	14997
20 kg - 1 g	F2	NVLAP	(2) 2 g; (2) 200 g; 20 kg; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390832	10394
20 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 20 kg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390833	11092
10 kg - 1 g	F2	NVLAP	(2) 2 g; (2) 200 g; 10 g; (2) 20 g; 100 g; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390834	8141
10 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 10 kg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390835	8726
5 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g; 5 kg	30390837	5277
5 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg; 5 kg	30390838	6184
2 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 2 kg; 500 g	30390839	4056
2 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 2 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390840	5004
(2) 2 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 500 g	30390033	4664
(2) 2 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; (2) 2 kg; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390034	5140
1 kg - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 1 kg; 500 g	30390841	3569
1 kg - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 1 kg; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390842	4250
500 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g; 500 g	30390843	2111
500 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; 500 g; (2) 2 mg; 50 mg; 1 mg	30390844	3058
200 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g; 200 g	30390845	1572
200 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 200 g; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390846	2756
(2) 200 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; (2) 200 g; 1 g; 50 g; 5 g	30390035	1691
(2) 200 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 200 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390036	2888
100 g - 1 g	F2	NVLAP	10 g; (2) 20 g; 100 g; (2) 2 g; 1 g; 50 g; 5 g	30390847	1180
100 g-1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390848	1912
50 g - 1 g	F2	NVLAP	10 g; (2) 20 g; (2) 2 g; 1 g; 50 g; 5 g	30390849	1044
50 g - 1 mg	F2	NVLAP	(2) 2 g; (2) 20 mg; 500 mg; 10 g; (2) 20 g; 100 mg; 10 mg; (2) 200 mg; 1 g; 50 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 1 mg	30390850	1844
500 mg - 1 mg	F2	NVLAP	100 mg; 10 mg; (2) 200 mg; (2) 20 mg; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390852	1123
5 g - 1 mg	F2	NVLAP	100 mg; 10 mg; (2) 2 g; (2) 200 mg; (2) 20 mg; 1 g; 5 g; 5 mg; (2) 2 mg; 50 mg; 500 mg; 1 mg	30390851	1141
5 kg - 1 kg	F2	NVLAP	(2) 2 kg; 1 kg; 5 kg	30390836	3870

CAST IRON GRIP METRIC WEIGHTS

Individual Scale Calibration Weights Adjusted to Meet or Exceed NIST Class F Tolerances



Grip Handle

Weight Value	NIST Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
2 kg	F	No Certificate	Grip Handle	Cast Iron	80850300	75
5 kg	F	No Certificate	Grip Handle	Cast Iron	80850301	86
10 kg	F	No Certificate	Grip Handle	Cast Iron	80850302	143
20 kg	F	No Certificate	Grip Handle	Cast Iron	80850303	148
25 kg	F	No Certificate	Grip Handle	Cast Iron	80850304	198
50 kg	F	No Certificate	Grip Handle	Cast Iron	80850305	630
100 kg	F	No Certificate	Grip Handle	Cast Iron	30391713	1433
200 kg	F	No Certificate	Grip Handle	Cast Iron	30391714	1565
250 kg	F	No Certificate	Grip Handle	Cast Iron	30391715	1817
500 kg	F	No Certificate	Grip Handle	Cast Iron	30391716	3171
1,000 kg	F	No Certificate	Grip Handle	Cast Iron	30391717	7807
2 kg	F	Traceable	Grip Handle	Cast Iron	30391736	118
5 kg	F	Traceable	Grip Handle	Cast Iron	30391737	134
10 kg	F	Traceable	Grip Handle	Cast Iron	30391738	167
20 kg	F	Traceable	Grip Handle	Cast Iron	30391739	215
25 kg	F	Traceable	Grip Handle	Cast Iron	30391740	274
50 kg	F	Traceable	Grip Handle	Cast Iron	30391741	866
100 kg	F	Traceable	Grip Handle	Cast Iron	30391742	1790
200 kg	F	Traceable	Grip Handle	Cast Iron	30391743	2037
250 kg	F	Traceable	Grip Handle	Cast Iron	30391744	2252
500 kg	F	Traceable	Grip Handle	Cast Iron	30391745	3938
1,000 kg	F	Traceable	Grip Handle	Cast Iron	30391746	8516
2 kg	F	NVLAP	Grip Handle	Cast Iron	30391695	153
5 kg	F	NVLAP	Grip Handle	Cast Iron	30391696	170
10 kg	F	NVLAP	Grip Handle	Cast Iron	30391697	215
20 kg	F	NVLAP	Grip Handle	Cast Iron	30391698	268
25 kg	F	NVLAP	Grip Handle	Cast Iron	30391699	303
50 kg	F	NVLAP	Grip Handle	Cast Iron	30391700	810
100 kg	F	NVLAP	Grip Handle	Cast Iron	30391701	1901
200 kg	F	NVLAP	Grip Handle	Cast Iron	30391702	2142
250 kg	F	NVLAP	Grip Handle	Cast Iron	30391703	2363
500 kg	F	NVLAP	Grip Handle	Cast Iron	30391704	4037
1,000 kg	F	NVLAP	Grip Handle	Cast Iron	30391705	8636

CAST IRON GRIP AVD WEIGHTS

Individual Scale Calibration Weights Adjusted to Meet or Exceed NIST Class F Tolerances



Grip Handle

Weight Value	NIST Class	Certificate Type	Design	Weight Material	Item Number	List Price (USD)
5 lb	F	No Certificate	Grip Handle	Cast Iron	80850306	62
10 lb	F	No Certificate	Grip Handle	Cast Iron	80850307	80
20 lb	F	No Certificate	Grip Handle	Cast Iron	80850308	103
25 lb	F	No Certificate	Grip Handle	Cast Iron	80850309	130
30 lb	F	No Certificate	Grip Handle	Cast Iron	30391723	190
50 lb	F	No Certificate	Grip Handle	Cast Iron	80850310	148
250 lb	F	No Certificate	Grip Handle	Cast Iron	30391727	1597
100 lb	F	No Certificate	Grip Handle	Cast Iron	80850311	597
200 lb	F	No Certificate	Grip Handle	Cast Iron	30391726	1391
500 lb	F	No Certificate	Grip Handle	Cast Iron	30391728	1741
1,000 lb	F	No Certificate	Grip Handle	Cast Iron	30391729	2708
1,250 lb	F	No Certificate	Grip Handle	Cast Iron	30391730	5906
1,500 lb	F	No Certificate	Grip Handle	Cast Iron	30391731	6820
2,000 lb	F	No Certificate	Grip Handle	Cast Iron	30391732	7802
2,500 lb	F	No Certificate	Grip Handle	Cast Iron	30391733	8820
3,000 lb	F	No Certificate	Grip Handle	Cast Iron	30391734	9828
5,000 lb	F	No Certificate	Grip Handle	Cast Iron	30391735	15666
5 lb	F	Traceable	Grip Handle	Cast Iron	30391748	120
10 lb	F	Traceable	Grip Handle	Cast Iron	30391749	136
20 lb	F	Traceable	Grip Handle	Cast Iron	30391750	166
25 lb	F	Traceable	Grip Handle	Cast Iron	30391751	201
30 lb	F	Traceable	Grip Handle	Cast Iron	30391752	216
50 lb	F	Traceable	Grip Handle	Cast Iron	30391753	235
250 lb	F	Traceable	Grip Handle	Cast Iron	30391756	1957
100 lb	F	Traceable	Grip Handle	Cast Iron	30391754	886
200 lb	F	Traceable	Grip Handle	Cast Iron	30391755	1720
500 lb	F	Traceable	Grip Handle	Cast Iron	30391757	2328
1,000 lb	F	Traceable	Grip Handle	Cast Iron	30391758	3345
2,000 lb	F	Traceable	Grip Handle	Cast Iron	30391761	8269
2,500 lb	F	Traceable	Grip Handle	Cast Iron	30391762	9739
3,000 lb	F	Traceable	Grip Handle	Cast Iron	30391763	10553
1,250 lb	F	Traceable	Grip Handle	Cast Iron	30391759	6368
5,000 lb	F	Traceable	Grip Handle	Cast Iron	30391764	17913
1,500 lb	F	Traceable	Grip Handle	Cast Iron	30391760	7072
5 lb	F	NVLAP	Grip Handle	Cast Iron	30391765	154
10 lb	F	NVLAP	Grip Handle	Cast Iron	30391766	181
20 lb	F	NVLAP	Grip Handle	Cast Iron	30391767	205
25 lb	F	NVLAP	Grip Handle	Cast Iron	30391768	217
30 lb	F	NVLAP	Grip Handle	Cast Iron	30391769	279
50 lb	F	NVLAP	Grip Handle	Cast Iron	30391770	247
250 lb	F	NVLAP	Grip Handle	Cast Iron	30391773	1832
100 lb	F	NVLAP	Grip Handle	Cast Iron	30391771	719
200 lb	F	NVLAP	Grip Handle	Cast Iron	30391772	1628
500 lb	F	NVLAP	Grip Handle	Cast Iron	30391774	1979
1,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391775	3590
1,250 lb	F	NVLAP	Grip Handle	Cast Iron	30391776	6494
1,500 lb	F	NVLAP	Grip Handle	Cast Iron	30391777	7355
2,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391778	8390
2,500 lb	F	NVLAP	Grip Handle	Cast Iron	30391779	9896
3,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391780	11330
5,000 lb	F	NVLAP	Grip Handle	Cast Iron	30391781	18291

SF40A

OHAUS Value in a Full-Featured, Portable Printer.

Communication

RS233 (included)

Construction

ABS Housing

Design Features

Status indicator, 40 characters per line, perform zero and tare operations directly from the printer

Operation

AC adapter (included)



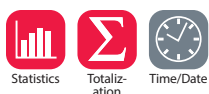
The statistics and totalization modes and real time clock complement OHAUS weighing instruments' application modes and offer functionality that assists the reporting processes.

SF40A helps support the efficiency of the weighing and recording processes. RS232 interface and PC configuration software make setting up and using the printer fast and simple.

With the ability to print in 13 different languages, SF40A can print in the language of the connected device to support universal operation.

Model	Printer Type	Print Speed	Item Number	List Price (USD)
SF40A	Impact Dot Matrix	1.2 lines per second	30064203	1070

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Paper Roll, 57.5mm, SF40A	12120799	20	Ink Ribbon SF40A	30529322	62
Axis, Paper Roll, SF40A	30063920	22	Cable RS9 M/F 1m	30529323	214



STP103

Economical Palm-Sized Thermal Printer.

Communication

RS232 (cable available as an accessory)

Construction

ABS Housing

Design Features

Status indicator, paper feeder, graphical printing capabilities

Operation

AC Adapter (Included)



This ultra-compact printer has a very small footprint and also features very low power consumption, requiring limited resources from your workspace.

The extremely fast STP103 offers 42 column printing at a speed of approximately 11.8 lines per second.

Loading paper into the printer is quick and easy and when the paper becomes low, the printer will suspend printing in order to prevent printing errors resulting from lack of paper.

Model	Printer Type	Interface Type	Print Speed	Paper Type	Item Number	List Price (USD)	
STP103	Direct Thermal	RS232 Serial	1.97 inches / sec	Thermal Paper, 57.5mm (W)	80251992	825	
Accessories		Item Number	List Price (USD)	Accessories		Item Number	List Price (USD)
Adapter, 25 Pin-9 Pin, STP103		80251930	41	Cable ST103-EX MB PA TxxP		80252581	209
Paper Roll, Thermal, STP103		80251931	24	Cable, ST103-TC TR		80252583	209
Cable, ST103-AR EP VP		80252580	209	Cable, ST103-CKW55 TxxXW		80252584	234



ZEBRA GK-420T

Economical Barcode Label Printer

Applications

Thermal Transfer Barcode Label Printing for Defender 5000 (TD52) and Ranger 7000.

Communication

RS232 (cable 80500525 required). Other communication not supported for OHAUS products.

Construction

ABS Housing

Design Features

Status indicator, paper feeder, graphical printing capabilities, AC adapter power (included).

Requires RS232 Kit 30037448 for connection to Ranger 7000.

Both Ranger 7000 and Defender 5000 (TD52) require RS232 Cable 80500525.



Datalogic QD2131
Barcode Scanner
Accessory

Fast label printing with full part information—supports EPL2 and ZPL II Zebra programming languages.

Quickly configured with Ranger 7000 and Defender 5000 (TD52 models) using ScaleMate and print templates available on OHAUS DMX for dealers.

Easy label loading—accepts wide range of labels

Model	Printer Type	Print Speed	Media Specifications	Operating Temperature	Item Number	List Price (USD)
GK420T	Thermal Transfer, 203 dpi/8 dots per mm	4" / 102 mm per second maximum	0.75" / 19 mm to 4.25" / 108 mm wide 0.38" / 9.7 mm to 39" / 990 mm long 0.003" / 0.08 mm to 0.0075" / 0.19 mm thick Max. roll size 5"/127 mm O.D.	40° F to 105° F / 4.4° C to 41° C 10% to 90% non-condensing relative humidity	30611855	780
Accessories			Item Number	List Price (USD)	Accessories	
Datalogic Barcode Scanner QD2131			30593703	207	Cable, RS232 for TD52 and Ranger 7000	
RS232 Kit, Ranger 7000			30037448	168	USB Host (required for QD2131 to TD52)	
					80500525	209
					30572923	146

NOTES

Laboratory Equipment



OHAUS is now offering equipment designed for every area of the laboratory, giving you the opportunity to Do More. From stirrers to shakers, lifts to clamps, our newly expanded portfolio is filled with products perfect for life sciences laboratories, giving you countless opportunities to fill every inch of your laboratory.



FRONTIER™ 5000 SERIES MICRO

Dependable Benchtop Micro Centrifuges, Ideal for High-speed Lab Applications

Display

LCD, Backlight, 2 lines

Construction

Brushless quiet motor, small footprint

Design Features

High sample throughput, multi-safety control, personal program function

Operation

AC Power (Included)



Excellent functionality when used with rotors compatible with 1.5/2.0 ml or 5 ml microtubes with high throughput & biocontainment options, spin columns, PCR strips, cryo tubes & hematocrit capillaries.

Designed for ease of operation, Frontier Micro centrifuges feature convenient controls on an intuitive interface, allowing responsive operation – even when wearing gloves.

Packaging all their functionality within a small footprint, Frontier Micro centrifuges save valuable space on the lab bench.

Model	Speed Range	Temp Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5513 120V	200 rpm - 13,500 rpm	-	17,317 g	24 x 1.5 / 2.0 ml	30393188	1956
FC5513 230V	200 rpm - 13,500 rpm	-	17,317 g	24 x 1.5 / 2.0 ml	30393187	1956
FC5513+R01 120V	200 rpm - 13,500 rpm	-	17,317 g	24 x 1.5 / 2.0 ml	30370692	2126
FC5513+R01 230V	200 rpm - 13,500 rpm	-	17,317 g	24 x 1.5 / 2.0 ml	30370691	2126
FC5515 120V	200 rpm - 15,200 rpm	-	21,953 g	44 x 1.5 / 2.0ml; 12 x 5 ml	30130867	2865
FC5515 230V	200 rpm - 15,200 rpm	-	21,953 g	44 x 1.5 / 2.0ml; 12 x 5 ml	30130866	2865
FC5515R 120V	200 rpm - 15,200 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	21,953 g	44 x 1.5 / 2.0ml; 12 x 5 ml	30130869	6181
FC5515R 230V	200 rpm - 15,200 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	21,953 g	44 x 1.5 / 2.0ml; 12 x 5 ml	30130868	6181

Accessories for FC5515 and FC5515R

Accessories	Item Number	List Price (USD)
Rotor, Angle, 30x1.5/2.0ml, Sealable	30130872	1409
Rotor, Angle, 12x5ml, Sealable	30130873	1573
Rotor, Angle, 4x8-Place PCR Stripes	30130874	1850
Rotor, Hematocrit, 24xCapillaries	30130881	680
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Rotor, Angle, 44x1.5/2.0ml, v2	30372717	1127
Rotor Angle 24x1.5/2.0ml BIOSEALS V2	30642371	990

Accessories for FC5513

Accessories	Item Number	List Price (USD)
Rotor Angle 24x1.5/2.0ml BIOSEALS V2	30472302	563
Rotor Hematocrit 24xCapillaries V2	30472304	654
Rotor, Angle 24 x 2.0 ml Spin Column	30210898	445

FRONTIER™ 5000 SERIES MULTI PRO

Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

Display

Backlit Liquid Crystal Display (LCD)

Construction

Corrosion-resistant stainless steel chamber with Polycarbonate/ABS plastic lid

Design Features

Ten acceleration & deceleration rates, selection of running time from 10s to 99h 59min or continuous, quick spin, CFC-free refrigeration system, sample temp. indication (refrigerated models), lid-locking system, over-speed protection, dual imbalance sensing

Operation

Designed to be used with a variety of rotors and accessories



Our multi-purpose centrifuges offer a high-speed centrifugation platform which can be customized to fit workflow needs using a wide variety of rotors and accessories.

The intuitive design of the centrifuges and accessories enables easy access to parameter settings and quick rotation between applications. Features include automatic rotor recognition and backlit LCD.

The performance of these centrifuges is propelled by German engineering and high quality components for reliable use. Constructed from chemical-resistant stainless steel to ensure durability in lab use.

Model	Speed Range	Temp Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5714 120V	200 rpm - 14,000 rpm	-	18,624 g	4 x 100 ml	30314811	3329
FC5714 230V	200 rpm - 14,000 rpm	-	18,624 g	4 x 100 ml	30314810	3329
FC5718 120V	200 rpm - 18,000 rpm	-	23,542 g	4 x 100 ml	30314813	4840
FC5718 230V	200 rpm - 18,000 rpm	-	23,542 g	4 x 100 ml	30314812	4840
FC5718R 120V	200 rpm - 18,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	23,542 g	4 x 100 ml	30314815	7228
FC5718R 230V	200 rpm - 18,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	23,542 g	4 x 100 ml	30314814	7228
FC5816 120V	200 rpm - 15,000 rpm	-	21,379 g	6 x 250 ml	30314817	5632
FC5816 230V	200 rpm - 15,000 rpm	-	21,379 g	6 x 250 ml	30314816	5632
FC5816R 120V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	24,325 g	6 x 250 ml	30314819	8554
FC5816R 230V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	24,325 g	6 x 250 ml	30314818	8554
FC5916 120V	200 rpm - 16,000 rpm	-	24,325 g	4 x 750 ml	30553037	7260
FC5916R 120V	200 rpm - 16,000 rpm	-4 °F ; 104 °F (-20 °C ; 40 °C)	26,331 g	4 x 750 ml	30553103	10509

FRONTIER™ 5000 SERIES MULTI

Reliable and Compact Multi-Function Centrifuges Ideal for General Lab Applications

Display

LCD, Backlight, 2 lines

Construction

Brushless quiet motor, small footprint

Design Features

Easy installation design

Operation

AC Power (Included)



Designed for ease of operation, Frontier™ Multi Centrifuges feature convenient control on an intuitive interface, which allows for responsive operation – even when wearing gloves.

Frontier™ Multi Centrifuges can accommodate standard 50 ml and 15 ml tubes, including common blood tubes. When used with accessories, rotors can be adapted for sizes as small as 1.5 ml.

Enclosing all its functionalities within a small footprint, Frontier™ Multi Centrifuges save valuable space on the lab bench.

Model	Speed Range	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5707+R05 100-230V	200 rpm - 6,800 rpm	4,445 g	8 x 15 ml	30393189	1654
FC5706 120V	200 rpm - 6,000 rpm	4,427 g	6 x 50 ml	30130876	2103
FC5706 230V	200 rpm - 6,000 rpm	4,427 g	6 x 50 ml	30130875	2103

Accessories for FC5706

Accessories	Item Number	List Price (USD)
Rotor Angle 12x15ml RB/FA	30130877	601
Rotor Angle 6x50ml RB/FA	30130878	1063
Rotor, Swing Out, 6x5ml RB	30130880	712
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 7ml Tubes x2	30130889	126
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D26mm, 30ml Tubes x2	30130891	262
Adapter, D18mm, 16ml Tubes x2	30130892	262
Adapter, D17mm, 15ml Tubes x2	30130893	262
Adapter D17mm 15ml RB/FA Tubes x2	30130894	183
Buckets, For 30130880 x2	30130895	110

Accessories for FC5707

Accessories	Item Number	List Price (USD)
Rotor Angle 8x15ml	30472305	433

FRONTIER™ 5000 SERIES MINI

Powerful and Convenient Mini Centrifuge for Simple and Quick Life Science Separation Applications!

Construction

Brushless quiet motor, auto shut-off safety switches

Design Features

One-touch operation

Operation

AC adapter (included)



With a low voltage power input, quiet brushless motor and a rubber base that absorbs vibrations, Frontier 5306 minimizes operational noise and reduces disruptions in the laboratory.

Frontier 5306 is designed with operator safety in mind, and includes a rotor imbalance sensor and two safety switches which immediately stop the rotors should the lid open during use.

Frontier 5306 takes simple one-step operation to a new level. Simply place your sample in the centrifuge, close the lid, and it will begin to rotate without the press of a button.

Model	Maximum Speed	Maximum Relative Centrifuge Force (x g)	Maximum Capacity (Rotor)	Item Number	List Price (USD)
FC5306	6,000 rpm	2,000 g	8 x 1.5 / 2.0 ml	30134157	211

Accessories	Item Number	List Price (USD)
Rotor, 1.5/2ml x8, FC5306	30129559	53
Rotor, 0.2ml PCR8 x4, FC5306	30129560	53

Accessories	Item Number	List Price (USD)
Adapter, 0.2ml Tube x8, FC5306	30129561	54
Adapter, 0.5ml Tube x8, FC5306	30129562	54

FRONTIER™ ROTORS

Offering Flexibility to Maximize Sample Preparation

Construction

Aluminum or polypropylene material

Design Features

Easy-installation



Choose from a range of rotors to be used with Frontier centrifuges to match capacities and flexibility required for your basic to high-performance sample preparation needs.

Designed with usability in mind, the Frontier rotors can be effortlessly installed or removed in a few quick and simple steps, and users have easy access to the samples.

The sturdy rotors are constructed of high-quality materials, built to last through demanding workflows from autoclave sterilization to sub-zero temperature.

Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24X2/15MS	45°	24 x 1.5 / 2.0 ml	21,953 g	15,200 rpm	FC5515; FC5515R	30642371	990
R-A8x2/6M	45°	8 x 1.5 / 2.0 ml	2,560 g	6,000 rpm	FC5306	30129559	53
R-A4xPCR/6	45°	4 x 0.2 ml PCR8	2,260 g	6,000 rpm	FC5306	30129560	53
R-A30x2/13MS	45°	30 x 1.5 / 2.0 ml	19,150 g	13,500 rpm	FC5515; FC5515R	30130872	1409
R-A12x5/14MS	45°	12 x 5 ml	19,978 g	14,500 rpm	FC5515; FC5515R	30130873	1573
R-A4xPCR/15	45°	4 x 0.2 ml PCR8	15,342 g	15,000 rpm	FC5515; FC5515R	30130874	1850
R-A12x15/6M	32°	12 x 15 ml	4,427 g	6,000 rpm	FC5706	30130877	601
R-A6x50/6M	40°	6 x 50 ml	4,427 g	6,000 rpm	FC5706	30130878	1063
R-S6x5/4	0-90°	6 x 5 ml	1,817 g	4,000 rpm	FC5706	30130880	712
R-A24xCAP/12	90°	24 x Capillaries	14,970 g	12,000 rpm	FC5515; FC5515R	30130881	680
R-S4x250/4MI	0-90°	4 x 250 ml	3,780 g	4,500 rpm	FC5816R; FC5816	30314820	1648
R-A6x250/8MI	28°	6 x 250 ml	10,016 g	8,000 rpm	FC5816R; FC5816; FC5916; FC5916R	30314821	4066
R-S4x100/4MI	0-90°	4 x 100 ml	3,350 g	4,500 rpm	FC5718R; FC5718; FC5714	30314822	1371
R-S4x100/5MIS	0-90°	4 x 100 ml	3,885 g	5,000 rpm	FC5718R; FC5718; FC5714	30314823	1153
R-S6xMTP/4MI	0-90°	2 x 3MTP	2,716 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30314824	1993
R-A6x85/14MI	25°	6 x 85 ml	20,984 g	13,500 rpm	FC5718R; FC5718	30314825	2270
R-A6x85/13MI	38°	6 x 85 ml	21,726 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314826	2296
R-A4x85/12MI	30°	4 x 85 ml	14,809 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314827	2344
R-S16x50/4MI	0-90°	16 x 50 ml	3,735 g	4,500 rpm	FC5816R; FC5816	30314828	2445
R-A10x50/10MI	38°	10 x 50 ml	16,022 g	10,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314829	2913
R-A6x50/6MI	40°	6 x 50 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314830	994
R-A6x50/13MI	26°	6 x 50 ml	15,869 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314831	1993
R-A30x15/4MI	35°	30 x 15 ml	2,830 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714	30314832	1552
R-A20x10/12MI	30°	20 x 10 ml	15,775 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314833	2052
R-A12x15/6MI	32°	12 x 15 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314834	1005
R-A30x2/14MIS	45°	30 x 1.5 / 2.0 ml	20,595 g	14,000 rpm	FC5718R; FC5718; FC5714; FC5916; FC5916R	30314836	1605
R-A24x2/16MI	45°	24 x 1.5 / 2.0 ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30314838	898
R-A12x2/18MI	40°	12 x 1.5 / 2.0 ml	23,542 g	18,000 rpm	FC5718R; FC5718	30314839	1440
R-A4xPCR/15I	45°	4 x 8 PCR Strip	15,343 g	15,000 rpm	FC5718R; FC5718	30314841	2073
R-A44x2/16Mb	32° / 55°	44 x 1.5 / 2.0ml	21,379 g	15,000 rpm	FC5515; FC5515R	30372717	1127
R-A44x2/16MIb	32° / 55°	44 x 1.5 / 2.0ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30372718	1265

Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24x2/13MSb	45°	24 x 1.5 / 2.0 ml	17,317 g	13,500 rpm	FC5513	30472302	563
R-A24xCAP/12b	90°	24 x Capillaries	16,058 g	13,000 rpm	FC5513	30472304	654
R-A8x15/7M	32°	8 x 15 ml	4,445 g	6,800 rpm	FC5707	30472305	433
R-S4X750/10MIS	0-90°	4 x 750 ml	4,346 g	4,500 rpm	FC5916, FC5916R	30553085	1871
R-S4X500/7MI	25°	4 x 500mL	10,367 g	8,000 rpm	FC5916; FC5916R	30553086	4512

FRONTIER™ ROTORS

Offering Flexibility to Maximize Sample Preparation

PCR

Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A4xPCR/6	45°	4 x 0.2 ml PCR8	2,260 g	6,000 rpm	FC5306	30129560	53



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A4xPCR/15	45°	4 x 0.2 ml PCR8	15,342 g	15,000 rpm	FC5515; FC5515R	30130874	1850



Swing out

Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S6x5/4	0-90°	6 x 5 ml	1,817 g	4,000 rpm	FC5706	30130880	712

Accessories	Item Number	List Price (USD)
Buckets, For 30130880 x2	30130895	110



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S4x250/4MI	0-90°	4 x 250 ml	3,780 g	4,500 rpm	FC5816R; FC5816	30314820	1648

Accessories	Item Number	List Price (USD)
Rack, 3x25ml D24.5mm Rim, 2/pk	30314911	327
Screw Cap, Rack of 250ml Rotor, 2/pk	30314901	139
Rack, 9x15ml D17mm RB, 2/pk	30314912	327
Rack, 5x25ml D24.5mm RB, 2/pk	30314910	327
Rack, 2x50ml D29mm Rim, 2/pk	30314908	327
Rack, 1x50ml D29mm Rim, 2/pk, V3	30314909	327
Rack, 3x50ml D29mm FA, 2/pk	30314906	327
Rack, 10x1.6-7ml D13mm Vac, 2/pk	30314917	327
Rack, 1x50ml D34mm RB, 2/pk, V3	30314907	327
Rack, 8x10ml D16mm RB, 2/pk	30314915	327
Rack, 1x100ml D41mm RB, 2/pk	30314904	327
Rack, 3x50ml D29mm RB, 2/pk	30314905	327
Rack, 14x5-7ml D13mm RB, 2/pk	30314916	327
O-ring, Rack of 250ml Rotor, 10/pk	30314902	71
Rack, 7x15ml D17mm FA, 2/pk	30314913	327
Rack, 8x4-10ml D16mm Vac, 2/pk	30304367	336
Adapter, 9x1.5/2.0ml D11mm, 2/pk	30304368	309
Rack, 7x15ml D17mm Rim, 2/pk	30314914	327
Rack, 1x250ml D62mm FB, 2/pk	30314903	327



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S4x100/4MI	0-90°	4 x 100 ml	3,350 g	4,500 rpm	FC5718R; FC5718; FC5714	30314822	1371

Accessories	Item Number	List Price (USD)
Rack, 10x1.5ml D11mm, 2/pk	30314854	285
Rack, 1x100ml D46mm RB, 2/pk	30314842	285
Rack, 1x15ml D17mm Rim, 2/pk	30314851	285
Rack, 1x25ml D25mm RB, 2/pk	30314849	285
Rack, 1x30ml D25mm Rim, 2/pk	30314848	285
Rack, 1x50ml D29mm FA, 2/pk	30314846	285
Rack, 1x50ml D29mm RB, 2/pk	30314845	285
Rack, 1x50ml D29mm Rim, 2/pk	30314847	285
Rack, 1x50ml D34mm RB, 2/pk	30314844	285
Rack, 1x85ml D38mm RB, 2/pk	30314843	285
Rack, 2x15ml D17mm FA, 2/pk	30314850	285
Rack, 5x4-10ml D16mm Sar, 2/pk	30314858	285
Rack, 7x15ml D17mm RB, 2/pk	30314852	285
Rack, 7x5-7ml D13mm RB, 2/pk	30314856	285
Rack, 7x5-7ml D13mm Vac, 2/pk	30314857	285
Rack, 9x4.5ml D12mm FB, 2/pk	30314855	285
Rack, 9x5-7ml D13mm RB, 2/pk	30314853	285



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S4x100/5MIS	0-90°	4 x 100 ml	3,885 g	5,000 rpm	FC5718R; FC5718; FC5714	30314823	1153

Accessories	Item Number	List Price (USD)
Bucket, 100ml w/ Cap, Sealable, 2/pk	30314861	417
Bucket, 100ml w/o Cap, 2/pk	30314860	347
Bucket, 2x50ml D29mm FA, w/ Rack, 2/pk	30314881	540
Bucket, 3x15ml D17mm FA, w/ Rack, 2/pk	30314882	550
O-ring, 100ml Bucket, Sealable, 10/pk	30314863	58
Rack, 1x100ml D40mm RB, 2/pk	30314864	255
Rack, 1x15ml D17mm FA, 2/pk	30314872	262
Rack, 1x25ml D25mm RB, 2/pk, v2	30314871	262
Rack, 1x30ml D25mm Rim, 2/pk, V2	30314870	255
Rack, 1x50ml D29mm FA, 2/pk, V2	30314868	255
Rack, 1x50ml D29mm RB, 2/pk, V2	30314867	255
Rack, 1x50ml D29mm Rim, 2/pk, V2	30314869	255
Rack, 1x50ml D34mm RB, 2/pk, V2	30314866	255
Rack, 1x85ml D38mm RB, 2/pk, V2	30314865	255
Rack, 2x15ml D17mm FA, 2/pk, V2	30314873	262
Rack, 2x15ml D17mm Rim, 2/pk	30314874	262
Rack, 3x10ml D17mm Sar, 2/pk	30314878	262
Rack, 4x10ml D17mm Vac, 2/pk	30314880	255
Rack, 4x15ml D17mm RB, 2/pk	30314875	262
Rack, 4x5-7ml D13mm RB, 2/pk	30314879	262
Rack, 5x1.5ml D11mm, 2/pk	30314877	262
Rack, 7x5-7ml D13mm RB, 2/pk, V2	30314876	262
Screw Cap, 100ml Bucket, Sealable, 2/pk	30314862	123



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S6xMTP/4MI	0-90°	2 x 3MTP	2,716 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30314824	1993

Accessories	Item Number	List Price (USD)
Adapter, 48x1.5/2.0ml D11mm, 2/pk	30314891	885
Bucket, 3xMTP, 2/pk	30314890	3330



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S16x50/4MI	0-90°	16 x 50 ml	3,735 g	4,500 rpm	FC5816R; FC5816	30314828	2445

Accessories	Item Number	List Price (USD)
Rack, 10x15ml D17mm FA, 2/pk	30314583	455
Rack, 14x5-7ml D13mm Vac/Sar, 2/pk	30314584	455
Rack, 12x4-10ml D16mm Vac/Sar, 2/pk	30314585	455
Rack, 4x50ml D29mm FA, 2/pk	30304375	455



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S4X750/10MIS	0-90°	4 x 750 ml	4,346 g	4,500 rpm	FC5916, FC5916R	30553085	1871

Accessories	Item Number	List Price (USD)
Adapter 15x1.5/2.0ml D11mm MTB x2	30559412	289
Adapter 1x175/225ml D61mm FA x2	30559414	289
Adapter 6x15ml D17mm FA x2	30559422	289
Rack 38x1.1/1.4ml D8mm Sar x2	30559377	387
Rack 5x50ml D29mm FAW/R x2	30553129	387
Bucket 1x750ml D99mm FB x2 V1	30602502	720
Rack 14x15ml D17mm FA x2	30553133	387
Rack 1x250ml D62mm FB x2 V1	30553125	387
Holder removing aid for Bucket 30553104	30553105	189
Lid Assembly for bucket 30553104 PC x2	30553117	273
O-Ring for bucket 30553104 SIL x2	30553118	133
Adapter 1x50ml D29.5mm FA x2	30559419	289
Lid Assembly for Bucket 30602502 PC 2x	30553122	216
Rack 17x15ml D17mm FA x2	30553134	387
Rack 1x175/225ml D61mm FA x2	30553126	387
Rack 32x7ml D13mm RB x2	30553138	387
Adapter 1x250ml D61.5mm FB x2	30564850	289
Rack 7x50ml D29mm FA x2	30553130	387
Adapter 3x50ml D29mm RB x2	30559420	289
Adapter 1x250ml D60.5mm FA x2	30559416	289
Bucket MTP x2 V2	30553119	780
O-Ring for bucket 30602502 NBR 10x	30553123	133
Rack 18x15ml D17mm RB x2	30553135	387
Rack 3x100ml D41mm RB x2	30553127	387
Rack 27x1.8/7ml D13mm Vac/Sar x2	30553139	387
Rack 7x50ml D29mm RB x2	30553131	387
Adapter 4x30ml D25.5mm RB x2	30559421	289
Adapter 1x175/225 ml D61.5mm FA x2	30559417	289
Rack 8x30ml D26mm RB x2	30553132	387
Rack 1x500ml D96mm FA x2	30553124	387
Rack 21x10ml D16mm RB x2	30553136	387
Bucket MTP x2 V1	30553104	1720
Rack 5x50ml D29mm FA x2	30553128	387
Rack 18x4/10ml D16mm Vac/Sar x2	30553140	387



Angle

Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24X2/15MS	45°	24 x 1.5 / 2.0 ml	21,953 g	15,200 rpm	FC5515; FC5515R	30642371	990

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A8x2/6M	45°	8 x 1.5 / 2.0 ml	2,560 g	6,000 rpm	FC5306	30129559	53

Accessories	Item Number	List Price (USD)
Adapter, 0.2ml Tube x8, FC5306	30129561	54
Adapter, 0.5ml Tube x8, FC5306	30129562	54



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A30x2/13MS	45°	30 x 1.5 / 2.0 ml	19,150 g	13,500 rpm	FC5515; FC5515R	30130872	1409

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A12x5/14MS	45°	12 x 5 ml	19,978 g	14,500 rpm	FC5515; FC5515R	30130873	1573

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D12.6mm, 1.8ml Cryo x6	30130888	330
Adapter, D12.6mm, 1.0ml Cryo x6	30130887	330



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A12x15/6M	32°	12 x 15 ml	4,427 g	6,000 rpm	FC5706	30130877	601

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x50/6M	40°	6 x 50 ml	4,427 g	6,000 rpm	FC5706	30130878	1063

Accessories	Item Number	List Price (USD)
Adapter D17mm 15ml RB/FA Tubes x2	30130894	183
Adapter, D17mm, 15ml Tubes x2	30130893	262
Adapter, D18mm, 16ml Tubes x2	30130892	262
Adapter, D26mm, 30ml Tubes x2	30130891	262



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24xCAP/12	90°	24 x Capillaries	14,970 g	12,000 rpm	FC5515; FC5515R	30130881	680



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x250/8MI	28°	6 x 250 ml	10,016 g	8,000 rpm	FC5816R; FC5816; FC5916; FC5916R	30314821	4066

Accessories	Item Number	List Price (USD)
Adapter, 1x50ml D29mm RB, 2/pk	30304373	289
Adapter, 1x50ml D30mm FA, 2/pk	30304374	289
Adapter, 2x30ml D26mm RB, 2/pk	30304372	289
Adapter, 4x15ml D17mm FA, 2/pk	30304371	289
Adapter, 5x10ml D16mm RB, 2/pk	30304370	289
Adapter, 8x1.5ml D11mm, 2/pk	30304369	289



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x85/14MI	25°	6 x 85 ml	20,984 g	13,500 rpm	FC5718R; FC5718	30314825	2270

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	199
Adapter, 1x15ml D17mm RB, 2/pk	30314893	199
Adapter, 1x16ml D18mm RB, 2/pk	30314899	199
Adapter, 1x30ml D25mm RB, 2/pk	30314894	199
Adapter, 1x50ml D29mm FA, 2/pk	30314896	199
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	199
Adapter, 2x15ml D17mm RB, 2/pk	30314898	199



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x85/13MI	38°	6 x 85 ml	21,726 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314826	2296

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	199
Adapter, 1x15ml D17mm RB, 2/pk	30314893	199
Adapter, 1x16ml D18mm RB, 2/pk	30314899	199
Adapter, 1x30ml D25mm RB, 2/pk	30314894	199
Adapter, 1x50ml D29mm FA, 2/pk	30314896	199
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	199
Adapter, 2x15ml D17mm RB, 2/pk	30314898	199



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A4x85/12MI	30°	4 x 85 ml	14,809 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314827	2344

Accessories	Item Number	List Price (USD)
Adapter, 1x15ml D17mm FA, 2/pk	30314897	199
Adapter, 1x15ml D17mm RB, 2/pk	30314893	199
Adapter, 1x16ml D18mm RB, 2/pk	30314899	199
Adapter, 1x30ml D25mm RB, 2/pk	30314894	199
Adapter, 1x50ml D29mm FA, 2/pk	30314896	199
Adapter, 1x50ml D29mm RB, 2/pk, V2	30314895	199
Adapter, 2x15ml D17mm RB, 2/pk	30314898	199



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A10x50/10MI	38°	10 x 50 ml	16,022 g	10,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314829	2913

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126
Adapter 1x15ml D17mm FA 2/pk V2	30472307	115
Adapter 1x15ml D17mm RB 2/pk V2	30472300	115



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x50/6MI	40°	6 x 50 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314830	994

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126
Adapter D17mm 15ml RB/FA Tubes x2	30130894	183
Adapter, D17mm, 15ml Tubes x2	30130893	262
Adapter, D18mm, 16ml Tubes x2	30130892	262
Adapter, D26mm, 30ml Tubes x2	30130891	262



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A6x50/13MI	26°	6 x 50 ml	15,869 g	13,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314831	1993

Accessories	Item Number	List Price (USD)
Adapter, D17mm, 15ml Tubes x2	30130893	262
Adapter, D18mm, 16ml Tubes x2	30130892	262
Adapter, D26mm, 30ml Tubes x2	30130891	262
Adapter, 1x15ml D17.5mm FA, 2/pk	30314892	224



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A30x15/4MI	35°	30 x 15 ml	2,830 g	4,500 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714	30314832	1552

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A20x10/12MI	30°	20 x 10 ml	15,775 g	12,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30314833	2052



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A12x15/6MI	32°	12 x 15 ml	4,427 g	6,000 rpm	FC5718R; FC5718; FC5714	30314834	1005

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A30x2/14MIS	45°	30 x 1.5 / 2.0 ml	20,595 g	14,000 rpm	FC5718R; FC5718; FC5714; FC5916; FC5916R	30314836	1605

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24x-2/16MI	45°	24 x 1.5 / 2.0 ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5714; FC5916; FC5916R	30314838	898

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A12x2/18MI	40°	12 x 1.5 / 2.0 ml	23,542 g	18,000 rpm	FC5718R; FC5718	30314839	1440

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106
Adapter, 1x1.5ml for over16000xg, 6/pk	30314900	108



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A4xPCR/15I	45°	4 x 8 PCR Strip	15,343 g	15,000 rpm	FC5718R; FC5718	30314841	2073



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A44x2/16Mb	32° / 55°	44 x 1.5 / 2.0ml	21,379 g	15,000 rpm	FC5515; FC5515R	30372717	1127

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A44x2/16MIb	32° / 55°	44 x 1.5 / 2.0ml	24,325 g	16,000 rpm	FC5816R; FC5718R; FC5816; FC5718; FC5916; FC5916R	30372718	1265

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24x2/13MSb	45°	24 x 1.5 / 2.0 ml	17,317 g	13,500 rpm	FC5513	30472302	563

Accessories	Item Number	List Price (USD)
Adapter, D8mm, 0.5ml Tubes x6	30130885	106
Adapter, D6mm, 0.2/0.4ml Tubes x6	30130884	106



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A24xCAP/12b	90°	24 x Capillaries	16,058 g	13,000 rpm	FC5513	30472304	654



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-A8x15/7M	32°	8 x 15 ml	4,445 g	6,800 rpm	FC5707	30472305	433

Accessories	Item Number	List Price (USD)
Adapter, D11mm, 1.5/2.0ml Tubes x6	30130886	208
Adapter, D13.5mm, 5ml Tubes x2	30130890	115
Adapter, D13.5mm, 7ml Tubes x2	30130889	126



Model	Angle	Capacity	Max g-force	Maximum Speed	Compatible Models	Item Number	List Price (USD)
R-S4X500/7MI	25°	4 x 500mL	10,367 g	8,000 rpm	FC5916; FC5916R	30553086	4512

Accessories	Item Number	List Price (USD)
Adapter 6x15ml D17mm FA x2	30559422	289
Adapter 1x50ml D29.5mm FA x2	30559419	289
Adapter 1x250ml D61.5mm FB x2	30564850	289
Adapter 3x50ml D29mm RB x2	30559420	289
Adapter 1x250ml D60.5mm FA x2	30559416	289
Adapter 4x30ml D25.5mm RB x2	30559421	289
Adapter 1x175/225 ml D61.5mm FA x2	30559417	289





	Light Duty Orbital Shaker	Light Duty Orbital Shaker	Light Duty Orbital Shaker	Light Duty Orbital Shaker
Model	SHLD0415AL	SHLD0403DG	SHLD0415DG	SHLDMP03DG
Speed Range	40 to 300 rpm	100 to 1200 rpm	40 to 300 rpm	100 to 1200 rpm
Timer	N/A	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital	Orbital
Orbit	15 mm	3 mm	15 mm	3 mm
Max Weight Capacity	8 lbs	8 lbs	8 lbs	4 microplates / 2 micro-tube racks
Audible Alarm	—	•	•	•
Load Sensor	—	—	—	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO ₂ Environment	•	•	•	•
Overload Protection	—	•	•	•
User Calibration (Speed)	—	—	—	—
RS232 Interface	—	—	—	—
Included Tray (L × W)	11.75 × 8.75"	11.75 × 8.75"	11.75 × 8.75"	11 × 7.75"
Tray / Platform Options (L × W)	N/A	Adjustable Platform	Adjustable Platform	N/A



	High Speed Microplate Shaker	Extreme Environment Shaker	Heavy Duty Shaker	Heavy Duty Shaker	Heavy Duty Shaker
Model	SHHSMPDG	SHEX1619DG	SHHD1619AL	SHHD1619DG	SHHD2325AL
Speed Range	600 rpm to 2500 rpm	15 to 500 rpm	25 to 500 rpm	15 to 500 rpm	25 to 500 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 to 120 minutes	1 second to 160 hours	1 to 120 minutes
Motion	Orbital	Orbital	Orbital	Orbital	Orbital
Orbit	3.6 mm	19 mm	19 mm	19 mm	25 mm
Max Weight Capacity	48 microplates	35 lbs	35 lbs	35 lbs	50 lbs
Audible Alarm	•	•	—	•	—
Load Sensor	•	•	—	•	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO ₂ Environment	•	•	•	•	•
Overload Protection	•	•	—	•	—
User Calibration (Speed)	•	•	—	•	—
RS232 Interface	•	•	—	•	—
Included Tray (L × W)	12.3 × 11"	11 × 13"	11 × 13"	11 × 13"	18 × 24"
Tray / Platform Options (L × W)	12.25 × 11" (31.1 × 27.9 cm)	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform

• Yes *Maximum speed/tilt angle may vary with heavy or unbalanced loads. **Centered on tray.



	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker
Model	SHHD2325DG	SHHD4525DG	SHHD4550DG	SHHD6825DG	SHHD6850DG
Speed Range	20 to 500 rpm	15 to 500 rpm	15 to 300 rpm	15 to 500 rpm	15 to 300 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital	Orbital	Orbital
Orbit	25 mm	25 mm	51 mm	25 mm	51 mm
Max Weight Capacity	50 lbs	100 lbs	100 lbs	150 lbs	150 lbs
Audible Alarm	•	•	•	•	•
Load Sensor	•	•	•	•	•
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO ₂ Environment	•	•	•	•	•
Overload Protection	•	•	•	•	•
User Calibration (Speed)	•	•	•	•	•
RS232 Interface	•	•	•	•	•
Included Tray (L × W)	18 × 24"	24 × 24"	24 × 24"	24 × 36"	24 × 36"
Tray / Platform Options (L × W)	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform



	Rocking Shaker	Rocking Shaker	Waving Shaker	Waving Shaker	Reciprocating Shaker
Model	SHRK04DG	SHRK07AL1	SHWV02DG	SHWV02AL	SHRC0719DG
Speed Range	1 to 50 rpm*	1 to 75 rpm*	1 to 30 rpm*	1 to 75 rpm*	20 to 300 rpm
Timer	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours
Motion	Rocking	Rocking	Waving	Waving	Reciprocating
Orbit	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 20° *	Tilt Angle: 0 to 16°	Stroke: 19 mm
Max Weight Capacity	10 lbs**	16 lbs**	5 lbs**	5 lbs**	15 lbs
Audible Alarm	•	—	•	—	•
Load Sensor	—	—	—	—	•
Motor Type	Stepper Motor	Stepper Motor	Stepper Motor	Stepper Motor	Brushless DC Motor
CO ₂ Environment	•	—	•	—	•
Overload Protection	•	—	•	—	•
User Calibration (Speed)	—	—	—	—	•
RS232 Interface	—	—	—	—	•
Included Tray (L × W)	12.75 × 10"	14 × 11"	11.75 × 8.75"	14 × 11"	11 × 13"
Tray / Platform Options (L × W)	Stacking Tray	Stacking Tray	Stacking Tray	—	11 × 13", 13 × 13", 18 × 18", 18 × 24" Separatory Funnel Platform

• Yes *Maximum speed/tilt angle may vary with heavy or unbalanced loads. **Centered on tray.

LIGHT DUTY ORBITAL SHAKERS

Choose the Perfect Light Duty Orbital Shaker You Can Trust for Reliable Everyday Shaking

Display

Easy-to-read, independent LED displays for speed/time allow the operator to view all settings simultaneously (digital models) and basic control knobs with dial markings for speed/time (analog models)

Construction

Cast aluminum

Design Features

Non-slip mat (11.75 x 8.75 inches or 29.9 x 22.2 cm) included with all models except the Microplate Shaker

Operation

Detachable 3-wire cord and plug (included)



Designed for flexibility with your applications – OHAUS Light Duty Shakers include the ready-to-use tray and mat, or remove the mat and customize the tray with over 20 easy-to-install accessories.

Well-performing economical choice for your everyday laboratory shaking needs. Non-digital model offers reliable shaking across the entire speed range with the robust triple eccentric drive design.

Microplate shaker is designed to securely hold up to four microplates or deepwell plates, or easily install two microtube racks. Units slowly increase speed to desired setpoint to avoid splashing.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHLD0403DG	Digital	100 rpm – 1200 rpm	±2% of set speed	1 second – 160 hours	0.1 in (3 mm)	3.6 kg	11.75 in x 8.75 in (29.9 cm x 22.2 cm)	30391898	1497
SHLD0415AL	Analog	40 rpm – 300 rpm	-	-	0.6 in (15 mm)	3.6 kg	11.75 in x 8.75 in (29.9 cm x 22.2 cm)	30391891	1132
SHLD0415DG	Digital	40 rpm – 300 rpm	±2 rpm, Above 100 rpm ±2% of set speed	1 second – 160 hours	0.6 in (15 mm)	3.6 kg	11.75 in x 8.75 in (29.9 cm x 22.2 cm)	30391912	1445
SHLDMP03DG	Digital	100 rpm – 1200 rpm	±2% of set speed	1 second – 160 hours	0.1 in (3 mm)	4 Microplates or 2 Micro-tube Racks	11 in x 7.75 in (27.9 cm x 19.7 cm)	30391905	1147

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Flask Clamp, 10 mL	30400084	42	Test Tube Rack 10-13 mm Diameter	30400115	202
Flask Clamp, 25 mL	30400085	42	Test Tube Rack 14-16 mm Diameter	30400116	202
Flask Clamp, 50 mL	30400086	44	Test Tube Rack 18-20 mm Diameter	30400117	202
Flask Clamp, 125 mL	30400087	44	Test Tube Rack 22-25 mm Diameter	30400118	202
Flask Clamp, 250 mL	30400088	44	Test Tube Rack For 15 mL Tubes	30400119	210
Flask Clamp, 500 mL	30400089	49	Test Tube Rack For 50 mL Tubes	30400120	210
500 mL Media Bottle Clamp	30400097	126	Adjustable Platform 22 X 30 cm, 2 Bars	30400121	580
Flask Clamp PVC 125mL	30400099	48	Roller Bar, 22 cm	30400122	53
Flask Clamp PVC 250mL	30400100	49	Universal Harness	30400123	48
Flask Clamp PVC 500mL	30400101	55	Dimpled Mat, 22 X 30 cm, for SHLD0403DG	30400124	61
Micro Tube Rack	30400114	184	Dilution Cup Tray	30400125	260



EXTREME ENVIRONMENT SHAKERS

High Performance Orbital Shaker Designed to Withstand Extreme Environments Up To 100% Humidity

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously

Communication

RS232 interface provides two-way communication for data logging and unit control (digital models)

Construction

Cold rolled steel (CRS) and stainless steel, external control module, thin ribbon cable (5.5 feet or 1.7 m) easily passes underneath an incubator door or via incubator's utility port

Design Features

Built-in tray (11x13 inch or 28x33 cm) with a non-slip rubber mat (included)

Operation

Detachable 3-wire cord and plug (included)



Defy the elements - rely on this orbital shaker's unique construction to deliver exceptional speed control, accuracy and durability under the most extreme environmental conditions.

Best in class load capacity to maximize efficiency in your incubator. Customize the Extreme Environment Shaker for your unique application with over 50 accessories.

For repeatable results, the exclusive Accu-Drive shaking system ensures speed accuracy. The triple eccentric drive provides smooth, stable shaking motion throughout the entire speed range.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Tray Dimensions	Item Number	List Price (USD)
SHEX1619DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.8 in (19 mm)	13 in x 13 in (33 cm x 33 cm)	30391809	3703

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Double Tier Braces, Set of 4	30400051	129	Separatory Funnel Platform 46 X 46 cm	30400083	685
Universal Platform, 28 X 33 cm, S/S	30400052	238	Flask Clamp, 10 mL	30400084	42
Universal Platform, 33 X 33 cm, S/S	30400053	339	Flask Clamp, 25 mL	30400085	42
Universal Platform, 46 X 46 cm, S/S	30400054	405	Flask Clamp, 50 mL	30400086	44
Universal Platform, 61 X 46 cm, S/S	30400056	456	Flask Clamp, 125 mL	30400087	44
Rubber Mat, 28 x 33 cm	30400060	68	Flask Clamp, 250 mL	30400088	44
Rubber Mat, 33 x 33 cm	30400061	82	Flask Clamp, 500 mL	30400089	49
Rubber Mat, 46 x 46 cm	30400062	118	1 Liter Erlenmeyer Flask Clamp	30400090	65
Rubber Mat, 46 X 61 cm	30400063	130	2 Liter Erlenmeyer Flask Clamp	30400091	102
Culture Platform with Mat, 46 X 46 cm	30400066	404	2.8 Liter Erlenmeyer Flask Clamp	30400092	135
Culture Platform with Mat, 46 X 61 cm	30400067	422	3 Liter Erlenmeyer Flask Clamp	30400093	183
Adjustable Platform, 46 X 46 cm	30400068	620	4 Liter Erlenmeyer Flask Clamp	30400094	168
Adjustment Bar, 46 cm	30400073	70	5 Liter Erlenmeyer Flask Clamp	30400095	204
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	640	6 Liter Erlenmeyer Flask Clamp	30400096	199
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	640	500 mL Media Bottle Clamp	30400097	126
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	640	1000 mL Media Bottle Clamp	30400098	137
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	640	Flask Clamp PVC 125mL	30400099	48
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	705	Flask Clamp PVC 250mL	30400100	49
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	705	Flask Clamp PVC 500mL	30400101	55
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	705	Flask Clamp PVC 1000mL	30400102	62
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	705	Flask Clamp PVC 2000mL	30400103	103

Accessories continued on next page



EXTREME ENVIRONMENT SHAKERS ACCESSORIES

Accessories	Item Number	List Price (USD)
Clamp Microplate Stainless Steel	30400104	69
Test Tube Rack 13 mm Pivoting	30400105	355
Test Tube Rack 16 mm Pivoting	30400106	355
Test Tube Rack 20 mm Pivoting	30400107	355
Test Tube Rack 25 mm Pivoting	30400108	355
Test Tube Rack 30 mm Pivoting	30400109	355
Test Tube Rack 10-14 mm Stationary	30400110	398
Test Tube Rack 16-20 mm Stationary	30400111	398
Test Tube Rack 21-25 mm Stationary	30400112	398

Accessories	Item Number	List Price (USD)
Test Tube Rack 50 mL Tubes Stationary	30400113	417
Micro Tube Rack	30400114	184
Test Tube Rack 10-13 mm Diameter	30400115	202
Test Tube Rack 14-16 mm Diameter	30400116	202
Test Tube Rack 18-20 mm Diameter	30400117	202
Test Tube Rack 22-25 mm Diameter	30400118	202
Test Tube Rack For 15 mL Tubes	30400119	210
Test Tube Rack For 50 mL Tubes	30400120	210

HEAVY DUTY ORBITAL SHAKERS

Eight Orbital Shakers Offering a Variety of Capacities and Flexibility to Maximize Sample Processing

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously and control knobs with dial markings (analog models)

Communication

RS232 interface provides two-way communication for data logging and unit control (digital models)

Construction

Cold rolled steel (CRS)

Design Features

Built-in tray (11 x 13 inch or 28 x 33 cm) with a non-slip rubber mat (included on 16kg models)

Operation

Detachable 3-wire cord and plug (included)



Ready for your lab - all models include a tray and rubber mat and can be customized with over 70 accessory options.

Rely on the digital shakers' exclusive Accu-Drive shaking system for exceptional speed control, accuracy and durability. All models feature a maintenance-free motor for long-term use.

Protect your samples. Optimal speed ramping feature slowly increases speed to setpoint to avoid splashing. The load sensor detects unbalanced conditions and automatically reduces to a safe speed.

Model	Control	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHHD1619AL	Analog	25 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 minute – 120 minutes	0.8 in (19 mm)	16 kg	11 in x 13 in (27.9 cm x 33 cm)	30391307	2253
SHHD1619DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.8 in (19 mm)	16 kg	11 in x 13 in (27.9 cm x 33 cm)	30391807	2686
SHHD2325AL	Analog	25 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 minute – 120 minutes	1 in (25 mm)	22.7 kg	18 in x 24 in (45.7 cm x 61 cm)	30391835	4965
SHHD2325DG	Digital	20 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	22.7 kg	18 in x 24 in (45.7 cm x 61 cm)	30391842	5262
SHHD4525DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	45.4 kg	24 in x 24 in (61 cm x 61 cm)	30391863	7484
SHHD4550DG	Digital	15 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	2 in (51 mm)	45.4 kg	24 in x 24 in (61 cm x 61 cm)	30391870	7729
SHHD6825DG	Digital	15 rpm – 500 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	1 in (25 mm)	68 kg	24 in x 36 in (61 cm x 91 cm)	30391877	8438
SHHD6850DG	Digital	15 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	2 in (51 mm)	68 kg	24 in x 36 in (61 cm x 91 cm)	30391884	9392

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Double Tier Braces, Set of 4	30400051	129	Rubber Mat, 28 x 33 cm	30400060	68
Universal Platform, 28 X 33 cm, S/S	30400052	238	Rubber Mat, 33 x 33 cm	30400061	82
Universal Platform, 33 X 33 cm, S/S	30400053	339	Rubber Mat, 46 x 46 cm	30400062	118
Universal Platform, 46 X 46 cm, S/S	30400054	405	Rubber Mat, 46 X 61 cm	30400063	130
Universal Platform, 61 X 46 cm, S/S	30400056	456	Rubber Mat, 61 X 61 cm	30400064	154
Universal Platform, 61 X 61 cm, S/S	30400057	1080	Rubber Mat, 61 X 91 cm	30400065	170
Universal Platform, 76 X 46 cm, S/S	30400058	1040	Culture Platform with Mat, 46 X 46 cm	30400066	404
Universal Platform, 91 X 61 cm, S/S	30400059	1385	Culture Platform with Mat, 46 X 61 cm	30400067	422

Accessories continued on next page



HEAVY DUTY ORBITAL SHAKERS

ACCESSORIES

Accessories	Item Number	List Price (USD)
Adjustable Platform, 46 X 46 cm	30400068	620
Adjustable Platform, 61 X 46 cm	30400069	885
Large Vessel Carrier, 76 X 46 cm	30400070	1470
Large Vessel Carrier, 61 X 61 cm	30400071	1540
Large Vessel Carrier, 91 X 61 cm	30400072	1975
Adjustment Bar, 46 cm	30400073	70
Adjustment Bar, 61 cm	30400074	88
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	640
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	640
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	640
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	640
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	705
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	705
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	705
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	705
Separatory Funnel Platform 46 X 46 cm	30400083	685
Flask Clamp, 10 mL	30400084	42
Flask Clamp, 25 mL	30400085	42
Flask Clamp, 50 mL	30400086	44
Flask Clamp, 125 mL	30400087	44
Flask Clamp, 250 mL	30400088	44
Flask Clamp, 500 mL	30400089	49
1 Liter Erlenmeyer Flask Clamp	30400090	65
2 Liter Erlenmeyer Flask Clamp	30400091	102
2.8 Liter Erlenmeyer Flask Clamp	30400092	135
3 Liter Erlenmeyer Flask Clamp	30400093	183
4 Liter Erlenmeyer Flask Clamp	30400094	168

Accessories	Item Number	List Price (USD)
5 Liter Erlenmeyer Flask Clamp	30400095	204
6 Liter Erlenmeyer Flask Clamp	30400096	199
500 mL Media Bottle Clamp	30400097	126
1000 mL Media Bottle Clamp	30400098	137
Flask Clamp PVC 125mL	30400099	48
Flask Clamp PVC 250mL	30400100	49
Flask Clamp PVC 500mL	30400101	55
Flask Clamp PVC 1000mL	30400102	62
Flask Clamp PVC 2000mL	30400103	103
Clamp Microplate Stainless Steel	30400104	69
Test Tube Rack 13 mm Pivoting	30400105	355
Test Tube Rack 16 mm Pivoting	30400106	355
Test Tube Rack 20 mm Pivoting	30400107	355
Test Tube Rack 25 mm Pivoting	30400108	355
Test Tube Rack 30 mm Pivoting	30400109	355
Test Tube Rack 10-14 mm Stationary	30400110	398
Test Tube Rack 16-20 mm Stationary	30400111	398
Test Tube Rack 21-25 mm Stationary	30400112	398
Test Tube Rack 50 mL Tubes Stationary	30400113	417
Micro Tube Rack	30400114	184
Test Tube Rack 10-13 mm Diameter	30400115	202
Test Tube Rack 14-16 mm Diameter	30400116	202
Test Tube Rack 18-20 mm Diameter	30400117	202
Test Tube Rack 22-25 mm Diameter	30400118	202
Test Tube Rack For 15 mL Tubes	30400119	210
Test Tube Rack For 50 mL Tubes	30400120	210

ROCKING & WAVING SHAKERS

Reliable Rocking and Waving Shakers with Simple Adjustments for Tilt Angle and Speed

Display

Easy-to-read, independent LED displays for speed, tilt angle and time allow the operator to view all settings simultaneously (digital models) and basic control knobs with dial markings for speed, tilt angle and time (analog models)

Construction

Cast aluminum housing, non-slip rubber mat (included), stacking tray option (with all models except the analog Waver model)

Design Features

Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models

Operation

Detachable 3-wire cord and plug (included)



Electronic control allows simple tilt angle and speed adjustments while the unit is still running to achieve optimal mixing

Achieve reproducible results you can trust with digital models. Precisely adjust the tilt angle in 1° increments with variable speed down to 1 rpm with intuitive touchpad controls.

Optimal speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with state-of-the-art motor and electronics.

Model	Speed Range	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHRK07AL1	1 rpm – 75 rpm	-	Rocking, 0 – 15°	1 minute – 120 minutes	7.3 kg	14 in x 11 in (35.6 cm x 27.9 cm)	30391959	1017
SHRK07AL2	1 rpm – 75 rpm	-	Rocking, 0 – 15°	1 minute – 120 minutes	7.3 kg	14 in x 11 in (35.6 cm x 27.9 cm)	30391966	1126
SHWV02DG	1 rpm – 30 rpm	±1 rpm	Waving, 0 – 20°	1 second – 160 hours	2.3 kg	11.75 in x 8.75 in (29.9 cm x 22.2 cm)	30391947	1836
SHWV02AL	1 rpm – 75 rpm	-	Waving, 0 – 16°	1 second – 160 hours	2.3 kg	14 in x 11 in (35.6 cm x 27.9 cm)	30391973	1455
SHRK04DG	1 rpm – 50 rpm	±1 rpm	Rocking, 0 – 15°	1 second – 160 hours	4.5 kg	12.75 in x 10 in (32.4 cm x 25.4 cm)	30391994	1236

Accessories	Item Number	List Price (USD)
Double Tier Platform Kit Rocker SHRK04DG	30400137	153
Double Tier Platform Kit Waver SHWV02DG	30400138	186
Double Tier Platform Kit Rocker SHRK07AL	30400139	135

Accessories	Item Number	List Price (USD)
Dimpled Mat For Rocker SHRK04DG	30400140	64
Dimpled Mat For Waver SHWV02DG	30400142	64
Dimpled Mat For Rocker SHRK07AL	30400144	74



RECIPROCATING SHAKERS

Providing Consistent, Repeatable Reciprocating Shaking Action for a Variety of Applications

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously

Construction

Cold rolled steel (CRS)

Design Features

Built-in tray (11x13 inch or 28x33 cm) with a non-slip rubber mat (included)

Operation

Detachable 3-wire cord and plug (included)



A flexible unit for the lab - our multi-purpose Reciprocating Shakers can be customized to fit your unique workflow needs using a wide variety of accessories.

Reciprocating motion is ideal for gentle-to-vigorous mixing of separatory funnels with the sturdy separatory funnel platform. Other optional platforms for flask clamps, media bottles and tube racks.

Designed for safety - speed ramping feature slowly increases speed to avoid splashing. Load sensor detects unbalanced conditions and automatically reduces to a safe speed to protect samples.

Model	Speed Range	Speed Accuracy	Timer	Stroke	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
SHRC0719DG	20 rpm – 300 rpm	±1 rpm, Above 100 rpm ±1% of set speed	1 second – 160 hours	0.75 (19)	6.8 kg	11 in x 13 in (27.9 cm x 33 cm)	30391828	2383

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Universal Platform, 28 X 33 cm, S/S	30400052	238	Flask Clamp, 10 mL	30400084	42
Universal Platform, 33 X 33 cm, S/S	30400053	339	Flask Clamp, 25 mL	30400085	42
Universal Platform, 46 X 46 cm, S/S	30400054	405	Flask Clamp, 50 mL	30400086	44
Universal Platform, 61 X 46 cm, S/S	30400056	456	Flask Clamp, 125 mL	30400087	44
Rubber Mat, 28 x 33 cm	30400060	68	Flask Clamp, 250 mL	30400088	44
Rubber Mat, 33 x 33 cm	30400061	82	Flask Clamp, 500 mL	30400089	49
Rubber Mat, 46 x 46 cm	30400062	118	1 Liter Erlenmeyer Flask Clamp	30400090	65
Rubber Mat, 46 X 61 cm	30400063	130	2 Liter Erlenmeyer Flask Clamp	30400091	102
Culture Platform with Mat, 46 X 46 cm	30400066	404	2.8 Liter Erlenmeyer Flask Clamp	30400092	135
Culture Platform with Mat, 46 X 61 cm	30400067	422	3 Liter Erlenmeyer Flask Clamp	30400093	183
Dedicated Platform, 33 X 33 cm, 125 mL	30400075	640	4 Liter Erlenmeyer Flask Clamp	30400094	168
Dedicated Platform, 33 X 33 cm, 250 mL	30400076	640	5 Liter Erlenmeyer Flask Clamp	30400095	204
Dedicated Platform, 33 X 33 cm, 500 mL	30400077	640	6 Liter Erlenmeyer Flask Clamp	30400096	199
Dedicated Platform, 33 X 33 cm, 1000 mL	30400078	640	500 mL Media Bottle Clamp	30400097	126
Dedicated Platform, 46 X 46 cm, 125 mL	30400079	705	1000 mL Media Bottle Clamp	30400098	137
Dedicated Platform, 46 X 46 cm, 250 mL	30400080	705	Flask Clamp PVC 125mL	30400099	48
Dedicated Platform, 46 X 46 cm, 500 mL	30400081	705	Flask Clamp PVC 250mL	30400100	49
Dedicated Platform, 46 X 46 cm, 1000 mL	30400082	705	Flask Clamp PVC 500mL	30400101	55
Separatory Funnel Platform 46 X 46 cm	30400083	685	Flask Clamp PVC 1000mL	30400102	62

Accessories continued on next page



HEAVY DUTY ORBITAL SHAKERS

ACCESSORIES

Accessories	Item Number	List Price (USD)
Flask Clamp PVC 2000mL	30400103	103
Clamp Microplate Stainless Steel	30400104	69
Test Tube Rack 13 mm Pivoting	30400105	355
Test Tube Rack 16 mm Pivoting	30400106	355
Test Tube Rack 20 mm Pivoting	30400107	355
Test Tube Rack 25 mm Pivoting	30400108	355
Test Tube Rack 30 mm Pivoting	30400109	355
Test Tube Rack 10-14 mm Stationary	30400110	398
Test Tube Rack 16-20 mm Stationary	30400111	398

Accessories	Item Number	List Price (USD)
Test Tube Rack 21-25 mm Stationary	30400112	398
Test Tube Rack 50 mL Tubes Stationary	30400113	417
Micro Tube Rack	30400114	184
Test Tube Rack 10-13 mm Diameter	30400115	202
Test Tube Rack 14-16 mm Diameter	30400116	202
Test Tube Rack 18-20 mm Diameter	30400117	202
Test Tube Rack 22-25 mm Diameter	30400118	202
Test Tube Rack For 15 mL Tubes	30400119	210
Test Tube Rack For 50 mL Tubes	30400120	210

HIGH SPEED MICROPLATE SHAKERS

High Speed Shaking for up to 48 Microplates

Display

Independent LED displays for speed and time

Communication

RS-232

Construction

Die Cast Aluminum

Design Features

Programmable pulse feature with adjustments for pulse ON and pulse OFF intervals of between 1 and 59 seconds. Program timer to count down from set time and turn off when timer reaches zero, or to run in continuous mode as timer counts accumulated time until user turns it off.



Sturdy, adjustable top plate secures up to 48 microplates, 6 deep well plates, or small tubes less than 5 in. (12.7 cm) tall and up to 7 lb. (3.2 kg).

For difficult to mix samples, or to prevent overheating samples while shaking, the Pulse Feature can be adjusted to Pulse ON and Pulse OFF for intervals of between 1 and 59 seconds.

Independent LEDs and Touchpad Control for Speed and Time allow you to accurately reproduce the exact settings every time.

Model	Motion	Speed Range	Capacity	Dimensions	Tray Dimensions	Timer	Item Number	List Price (USD)
SHHSMPDG	Orbital, 3.6 mm	600 rpm – 2,500 rpm	48 microplates	15.5 in x 12.8 in x 12 in (394 mm x 325 mm x 305 mm)	12.25 in x 11 in (311 mm x 279 mm)	1 second – 160 hours	30573784	5419





	Incubating Cooling Thermal Shakers	Incubating Light Duty Orbital Shaker	Incubating Light Duty Orbital Shakers
Model	ISTHBLCTS (Heat/Cool) ISTHBLHTS (Heat)	ISLD04HDG	ISLDMPHDG ISLDMPHDGL
Temperature Range	17 below ambient to 100°C / ambient +4 to 100°C	Ambient +5° to 65°C	Ambient +5° to 65°C
Speed Range	300 to 3000 rpm	100 to 1200 rpm	100 to 1200 rpm
Timer	1 minute to 99 hours, 59 min	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital
Orbit	3 mm	3 mm	3 mm
Max Weight Capacity	1 Block	8 lbs	4 Microplates / 2 Micro-Tube Racks
Audible Alarm	•	•	•
Load Sensor	•	—	—
Drive System	—	Triple Eccentric	Triple Eccentric
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
Set-Point Retention	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting
Restart/Power Out	•	•	•
Ramp to Speed	•	•	•
Temperature Overshoot Protection	•	—	—
Overload Protection	•	•	•
User Calibration (Temperature)	•	•	•
User Calibration (Speed)	•	—	—
Interface	USB	—	—
Overall Dimensions (L × W × H)	10.59 × 10.31 × 5.39"	17 × 11 × 10.5"	17 × 11 × 7.75"
Included Tray (L × W)	N/A	11 × 7.75"	11 × 7.75"
Platform Options (L × W)	N/A	N/A	N/A

- Yes ** Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.



	Incubating Cooling Light Duty Orbital Shaker	Incubating Rocking Shaker	Incubating Waving Shaker	Incubating Heavy Duty Orbital Shakers
Model	ISICMBCDG	ISRK04HDG	ISWV02HDG	ISHD16HDG, ISHD23HDG, ISHD23CDG
Temperature Range	10°C Below Ambient to 65°C	Ambient +5° to 65°C	Ambient +5° to 65°C	Ambient +5°C to 65°C, 15°C below ambient to 65°C (ISHD23CDG Models only)
Speed Range	100 to 1200 rpm	1 to 50 rpm	1 to 30 rpm	15 to 500 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Rocking	Waving	Orbital
Orbit	3 mm	Tilt Angle: 0 to 15° *	Tilt Angle: 0 to 20° *	19 mm
Max Weight Capacity	2 Microplates 2 Modular Blocks	10 lbs**	5 lbs**	ISHD16HDG 35 lb ISHD23HDG 50 lb ISHD23CDG 50 lb
Audible Alarm	•	•	—	•
Load Sensor	—	—	—	•
Drive System	Triple Eccentric	Cable	Cable	Triple Eccentric
Motor Type	Brushless DC Motor	Stepper Motor	Stepper Motor	Brushless DC Motor
Set-Point Retention	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting	• Displays Last Setting
Restart/Power Out	•	•	—	•
Ramp to Speed	•	•	—	•
Temperature Overshoot Protection	—	—	—	•
Overload Protection	•	•	—	•
User Calibration (Temperature)	—	—	—	•
User Calibration (Speed)	—	—	—	•
Interface	—	—	—	RS-232 Interface
Overall Dimensions (L x W x H)	16.49 x 10.11 x 10.98"	17 x 11 x 10.5"	17 x 11 x 10.5"	ISHD16HDG 16.0 x 25.5 x 14.0" ISHD23HDG 23.5 x 32.1 x 26.6" ISHD23CDG 23.5 x 41.1 x 26.6"
Included Tray (L x W)	N/A	10 x 7.5"	9.25 x 7.25"	ISHD16HDG 13 x 11" ISHD23HDG 18 x 18" ISHD23CDG 18 x 18"
Platform Options (L x W)	N/A	N/A	N/A	N/A

- Yes ** Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

INCUBATING COOLING THERMAL SHAKERS

Industry Leading Thermal Shaker with Exceptional Heating/Cooling Performance with High Speed Shaking

Display

4.3 inch (10.9 cm) color touchscreen Liquid Crystal Display (LCD) which can be programmed in six languages

Communication

USB port provides greater flexibility in data collection and transfer

Construction

Valox cool touch housing, removable plastic rack, cover and screwdriver for block removal (included)

Design Features

Hot top indicator, audible alarm, maximum temperature limiting function, temperature priority function, pulse/quick mix mode, temperature calibration mode, temperature ramp rate function

Operation

Detachable 3-wire cord and plug (included), unit requires a block - compatible with Eppendorf Thermomixer® R blocks



Best in class temperature performance. Enhanced electronics and software allow for fast and accurate temperature control you can trust. Cooling models reach temperatures down to 17°C below ambient.

Intuitive touchscreen for simple operation and programming. Set the functions and the comprehensive help screens in one of six languages to guide the user through the operation of the unit.

Easily create programs for repeat applications. Storage for five separate, 5-step programs. The USB port allows the transfer of test data to a flash drive for data logging and program storage.

Model	Blocks Included	Temp Range	Temperature accuracy (±)	Speed Range	Speed Accuracy	Timer	Cooling rate	Heating Rate (/ min)	Item Number	List Price (USD)
ISTHBLCTSN	Blocks sold separately	17°C below Ambient – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 minute – 99 hours, 59 minutes	Above ambient 2-3°C/ min	5°C/min	30573841	3047
ISTHBLHTSN	Blocks sold separately	Ambient +4°C – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 minute – 99 hours, 59 minutes		5°C/min	30573847	2359
ISTHBLCTS	24 X 1.5 mL tube block, rack and cover	17°C below Ambient – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 second – 99 hours, 59 minutes	Above ambient 2-3°C/ min	5°C/min	30391996	3386
ISTHBLHTS	24 X 1.5 mL tube block, rack and cover	Ambient +4°C – 100°C	+/- 0.5°C between 20°C and 45°C; +/-2°C below 20°C and 45°C	300 rpm – 3,000 rpm	±2%	1 second – 99 hours, 59 minutes		5°C/min	30392003	2545

Accessories	Item Number	List Price (USD)
Microplate Thermal Block	30400126	1210
384 Well PCR Plate Thermal Block	30400127	1210
0.2 mL PCR Plate/Tube Thermal Block	30400128	1210
Block For 30 X 0.5 mL Tubes	30400129	920
Block For 24 X 1.5 mL Tubes	30400130	920
Block For 24 X 2.0 mL Tubes	30400131	920
Block For 24 X 5-7 mL Tubes (12mm)	30400132	920

Accessories	Item Number	List Price (USD)
Block For 24 X 2.0 mL Cryotubes	30400133	920
Block For 9 X 5mL Eppendorf Tubes	30400134	920
Block For 9 X 15 mL Conical Tubes	30400135	920
Block For 4 X 50 mL Conical Tubes	30400136	920
Rack For 30 X 0.5 mL Tube Block	30400250	48
Rack For 24X1.5 / 24X2.0 mL Tube Blocks	30400251	48
Cover For 0.5mL/1.5mL/2.0mL Tube Blocks	30400252	32



INCUBATING LIGHT DUTY ORBITAL SHAKERS

Save Bench Space with Combined Incubating and Shaking Features

Display

Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously

Construction

Cast aluminum housing with polycarbonate lid, brushless DC motor

Design Features

Spill-resistant design, overload protection, caution hot indicator

Operation

Detachable 3-wire cord and plug (included)



Designed to provide flexibility in your applications, these shakers with a 4 kg capacity include the ready-to-use tray to customize with over 10 easy-to-install accessories.

When precision is required, achieve temperature accuracy with the user-controlled temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.

Microplate shaker is designed to hold up to 4 microplates or deepwell plates, or easily install 2 microtube racks. Two options - opaque lid for light sensitive samples and clear lid for viewing samples.

Model	Temp Range	Temp Uniformity	Speed Accuracy	Timer	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
ISLD04HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	3.6 kg	11 in x 7.75 in (27.9 cm x 19.7 cm)	30391924	3174
ISLDMPHDGL*	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	4 Microplates or 2 Micro-tube Racks	11 in x 7.75 in (27.9 cm x 19.7 cm)	30391931	2904
ISLDMPHDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±2%	1 second – 160 hours	4 Microplates or 2 Micro-tube Racks	11 in x 7.75 in (27.9 cm x 19.7 cm)	30391938	2904

*ISLDMPHDGL comes with an Opaque lid

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Flask Clamp, 10 mL	30400084	42	Flask Clamp PVC 250mL	30400100	49
Flask Clamp, 25 mL	30400085	42	Micro Tube Rack	30400114	184
Flask Clamp, 50 mL	30400086	44	Test Tube Rack 10-13 mm Diameter	30400115	202
Flask Clamp, 125 mL	30400087	44	Test Tube Rack 14-16 mm Diameter	30400116	202
Flask Clamp, 250 mL	30400088	44	Test Tube Rack For 15 mL Tubes	30400119	210
Flask Clamp PVC 125mL	30400099	48	Test Tube Rack For 50 mL Tubes	30400120	210

INCUBATING COOLING ORBITAL SHAKERS

Innovatively Designed Incubating Orbital Shaker to Heat, Cool and Shake Samples

Display

Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously

Construction

Cast aluminum housing with polycarbonate lid, brushless DC motor

Design Features

Spill-resistant design, overload protection, caution hot indicator

Operation

Detachable 3-wire cord and plug (included)



Designed to provide flexibility in your applications, these shakers are microplate ready - no accessories required, and can easily accommodate modular blocks with the included block adapter.

When precision is required, achieve temperature accuracy with the unique temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.

Innovative temperature system allows for fast, accurate and uniform temperatures you can trust. The unique Peltier design with direct plate-to-sample contact offers precise heating and cooling.

Model	Temp Range	Temp Uniformity	Speed Range - Microplates	Speed Range - Modular Blocks	Speed Accuracy	Timer	Maximum Weight Capacity	Item Number	List Price (USD)
ISICMBCDG	10°C below Ambient – 65°C	± 0.5°C at 37°C	100 to 1200 rpm	100 to 600 rpm	±2%	1 second – 160 hours	2 Microplates or 2 Modular Blocks	30391945	4830

Accessories			Accessories		
Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	159	Module Block For Vials 17 mm	30400184	159
Module Block 12/13 mm 20 Hole	30400152	159	Module Block For Vials 19 mm	30400185	159
Module Block Combination	30400156	159	Module Block For Vials 21 mm	30400186	159
Module Block 0.5 mL Microtaper	30400157	159	Module Block For Vials 23 mm	30400187	159
Module Block 6 mm Test Tube	30400158	159	Module Block For Vials 25 mm	30400188	159
Module Block 1.5 mL Microtaper	30400159	159	Module Block For Vials 28 mm	30400189	159
Module Block 50 mL Conical Centrifuge	30400168	159	Module Block For Vials 16 mm	30400190	159
Module Block 15 mL Conical Centrifuge	30400172	159	Module Block, 2.0 mL Tube	30400191	159
Module Block For Vials 12 mm	30400182	159	Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	159
Module Block For Vials 15 mm	30400183	159	Module Block Combo - Micro Tube	30400194	159

INCUBATING HEAVY DUTY ORBITAL SHAKERS

Save Incubator Space with Benchtop Incubating and Incubating Refrigerating Shakers

Display

Independent LED displays for temperature, speed and time

Communication

RS232

Construction

Aluminum and Cyclopy

Design Features

Temperature calibration feature, overload protection, overshoot protection (temperature), load sensor, PID temperature controller, Triple Eccentric Drive system



The exclusive Opti-Flow Forced Ventilation System utilizes twin induction or a single large fan. Air is deflected around & not directly on samples, creating a circular flow of air ensuring uniformity.

For repeatable results, the exclusive Accu-Drive shaking system ensures speed accuracy. The Triple Eccentric Drive provides consistent shaking motion throughout the entire speed range.

The chambers for the ISHD23HDG and ISHD23CDG units are large enough to hold 2 x 6 L Erlenmeyer flasks with optional clamps and platform.

Model	Capacity	Speed Range	Speed Accuracy	Temp Range	Temp Uniformity	Timer	Item Number	List Price (USD)
ISHD16HDG	35 lb (16kg) @ 75rpm, 5 lb (2.3kg) @ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm +/- 1 rpm	Ambient +5°C – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573769	3703
ISHD23HDG	50 lb (22.7kg) @ 125 rpm, 10 lb (4.53kg) @ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm +/- 1 rpm	Ambient +5°C – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573774	6877
ISHD23CDG	50 lb (22.7kg) @ 125 rpm, 10 lb (4.53kg) @ 500 rpm	15 rpm - 500 rpm	Above 100rpm +/- 1%, Below 100rpm +/- 1 rpm	15°C below Ambient – 65°C	± 0.5°C at 37°C	1 second – 160 hours	30573779	9416

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Universal Platform, 28 X 33 cm, S/S	30400052	238	Flask Clamp PVC 500mL	30400101	55
Universal Platform, 46 X 46 cm, S/S I-IR	30400055	398	Flask Clamp PVC 1000mL	30400102	62
Rubber Mat, 28 x 33 cm	30400060	68	Flask Clamp PVC 2000mL	30400103	103
Flask Clamp, 10 mL	30400084	42	Clamp Microplate Stainless Steel	30400104	69
Flask Clamp, 25 mL	30400085	42	Test Tube Rack 13 mm Pivoting	30400105	355
Flask Clamp, 50 mL	30400086	44	Test Tube Rack 16 mm Pivoting	30400106	355
Flask Clamp, 125 mL	30400087	44	Test Tube Rack 20 mm Pivoting	30400107	355
Flask Clamp, 250 mL	30400088	44	Test Tube Rack 25 mm Pivoting	30400108	355
Flask Clamp, 500 mL	30400089	49	Test Tube Rack 30 mm Pivoting	30400109	355
1 Liter Erlenmeyer Flask Clamp	30400090	65	Test Tube Rack 10-14 mm Stationary	30400110	398
2 Liter Erlenmeyer Flask Clamp	30400091	102	Test Tube Rack 16-20 mm Stationary	30400111	398
2.8 Liter Erlenmeyer Flask Clamp	30400092	135	Test Tube Rack 21-25 mm Stationary	30400112	398
3 Liter Erlenmeyer Flask Clamp	30400093	183	Test Tube Rack 50 mL Tubes Stationary	30400113	417
4 Liter Erlenmeyer Flask Clamp	30400094	168	Test Tube Rack 10-13 mm Diameter	30400115	202
5 Liter Erlenmeyer Flask Clamp	30400095	204	Test Tube Rack 14-16 mm Diameter	30400116	202
6 Liter Erlenmeyer Flask Clamp	30400096	199	Test Tube Rack 18-20 mm Diameter	30400117	202
500 mL Media Bottle Clamp	30400097	126	Test Tube Rack 22-25 mm Diameter	30400118	202
1000 mL Media Bottle Clamp	30400098	137	Test Tube Rack For 15 mL Tubes	30400119	210
Flask Clamp PVC 125mL	30400099	48	Test Tube Rack For 50 mL Tubes	30400120	210
Flask Clamp PVC 250mL	30400100	49			



INCUBATING ROCKING & WAVING SHAKERS

Save Incubator Space with Unique Benchtop Incubating Rocking and Waving Shakers

Display

Easy-to-read, independent LED displays for temperature, speed/tilt angle and time allow the operator to view all settings simultaneously

Construction

Cast aluminum housing with polycarbonate lid

Design Features

Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models, caution hot indicator

Operation

Detachable 3-wire cord and plug (included)



Electronic control allows simple tilt angle, speed and temperature adjustments while the unit is still running to achieve optimal mixing.

Achieve reproducible results you can trust. Precisely adjust the tilt angle in 1° increments, vary the speed by 1 rpm and set temperature in 1°C increments with intuitive touchpad controls.

Innovative speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with unique, state-of-the-art motor and electronics.

Model	Temp Range	Temp Uniformity	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Dimensions	Item Number	List Price (USD)
ISWV02HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±1 rpm	Waving, 0 – 20°	1 second – 160 hours	2.3 kg	9.25 in x 7.25 in (23.5 cm x 18.4 cm)	30391987	3259
ISRK04HDG	Ambient +5°C – 65°C	± 0.5°C at 37°C	±1 rpm	Rocking, 0 – 15°	1 second – 160 hours	4.5 kg	10 in x 7.75 in (25.4 cm x 19.7 cm)	30391980	3333

OPEN AIR, INCUBATING, INCUBATING COOLING SHAKERS ACCESSORIES

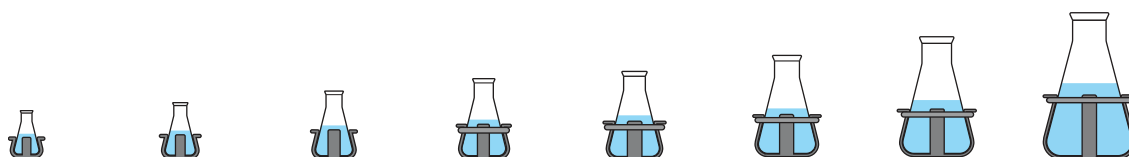
Stainless Steel Flask Clamps

Designed to hold Erlenmeyer flasks from 10 mL to 6 L. Constructed of type 302 and 304 stainless steel. Includes hardware for easy attachment to platforms. Flask clamps 50 mL and higher are supplied with a spring to hold the flask in place. The 2.8 L clamp is designed to hold a Fernbach flask. Media bottle clamps feature the same details as flask clamps.

Media Bottle Flask Clamps



Erlenmeyer Flask Clamps



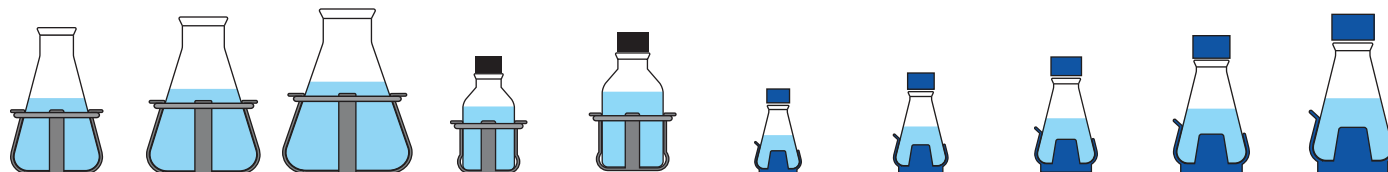
	10 mL Erlenmeyer Flask Clamp	25 mL Erlenmeyer Flask Clamp	50 mL Erlenmeyer Flask Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Item No.	30400084	30400085	30400086	30400087	30400088	30400089	30400090	30400091
List Price (USD)	38	38	40	40	40	43	58	91
Tray or Platform	Number of Flask Clamps per Tray or Platform							
11.75 × 8.75" (29.9 × 22.2 cm) Open Air Digital 4 kg Shakers	35	20	15	12	6	4	N/A	N/A
11 × 7.75" (27.9 × 19.7 cm) Incubating 4 kg Shakers	35	20	12	8	5	N/A	N/A	N/A
11 × 13" (27.9 × 33 cm) Analog/Digital 16 kg Shakers	60	25	13	10	9	7	4	N/A
Digital Reciprocating Shakers	60	25	13	10	9	7	4	N/A
13 × 13" (33 × 33 cm) Analog/Digital 16 kg Shakers	60	30	15	12	12	8	4	3
Digital Reciprocating Shakers	60	30	15	12	12	8	4	3
18 × 18" (45.7 × 45.7 cm) Analog/Digital 16 kg Shakers	113	64	32	20	20	13	8	5
Digital Reciprocating Shakers	113	64	32	20	20	13	8	5
18 × 24" (45.7 × 61 cm) Analog/Digital 16 kg Shakers	158	88	44	28	28	20	12	6
Digital Reciprocating Shakers	158	88	44	28	28	20	12	6
Analog/Digital 23 kg Shakers	158	88	44	28	28	20	12	6
18 × 30" (45.7 × 76.2 cm) Analog/Digital 23 kg Shakers	203	112	56	36	36	26	15	8
24 × 24" (61 × 61 cm) Digital 45 kg Shakers	221	121	61	41	41	25	16	9
24 × 36" (61 × 91.4 cm) Digital 63 kg Shakers	336	160	94	61	64	40	24	14

*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers

OPEN AIR, INCUBATING, INCUBATING COOLING SHAKERS ACCESSORIES

PVC Flask Clamps

Constructed of one piece, molded PVC. Autoclavable. Will not scratch or mark flask like other clamps. Includes hardware for easy attachment to universal platforms. The attachment and removal of flasks is quick and easy. Ideal for polycarbonate flasks.



2.8 L & 3 L Fernbach Flask Clamp	4 L Erlenmeyer Flask Clamp	5 L & 6 L Erlenmeyer Flask Clamp	500 mL Media Bottle Clamp	1 L Media Bottle Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	PVC	PVC	PVC	PVC	PVC
2.8L-30400092 3L-30400093	30400094	5 L-30400095 6 L-30400096	30400097	30400098	30400099	30400100	30400101	30400102	30400103
121 / 164	151	183 / 179	113	122	42	43	49	55	92
Number of Flask Clamps per Tray or Platform									
N/A	N/A	N/A	3	N/A	12	6	4	N/A	N/A
N/A	N/A	N/A	N/A	N/A	8	4	N/A	N/A	N/A
N/A	N/A	N/A	5	2	10	8	5	2	N/A
N/A	N/A	N/A	5	2	10	8	5	2	N/A
1	1	1	6	5	12	10	6	4	3
1	1	1	6	5	12	10	6	4	3
2	4	2	16	10	20	18	12	8	4
2	4	2	16	10	20	18	12	8	4
3	4	3	20	13	28	25	16	10	6
3	4	3	20	13	28	25	16	10	6
3	4	3	20	13	28	25	16	10	6
3	6	4	28	18	36	33	20	14	8
5	5	5	25	18	41	35	24	13	9
7	9	7	40	30	61	55	38	22	13

OPEN AIR, INCUBATING, INCUBATING COOLING SHAKERS ACCESSORIES

Test Tube Racks

Half Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions:

5 L x 7 W x 4" H (12.7 x 17.8 x 10.2 cm) / Micro-Tube Rack: 1.7" H (4.3 cm).

Test Tube Racks
Half-Size, Stationary



	1.5 to 2 mL Micro-Tube Rack Half Size, Stationary	10 to 13 mm Test Tube Rack Half Size, Stationary	14 to 16 mm Test Tube Rack Half Size, Stationary	18 to 20 mm Test Tube Rack Half Size, Stationary	22 to 25 mm Test Tube Rack Half Size, Stationary	15 mL Centrifuge Tube Rack Half Size, Stationary	50 mL Centrifuge Tube Rack Half Size, Stationary
Tube Capacity	70	63	48	35	24	35	12
Item No.	30400114	30400115	30400116	30400117	30400118	30400119	30400120
List Price (USD)	165	182	182	182	182	189	189
Tray or Platform	Number of Test Tube Racks per Tray or Platform						
11.75 x 8.75" (29.9 x 22.2 cm)							
Digital Open Air 4 kg Shakers	2	2	2	2	2	2	2
11 x 7.75" (27.9 x 19.7 cm)							
Incubating 4 kg Shakers	2	1	1	N/A	N/A	1	1
Digital Open Air 4 kg Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
Incubating Microplate Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
11 x 13" (27.9 x 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
13 x 13" (33 cm x 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
18 x 18" (45.7 x 45.7 cm)							
Analog/Digital 16 kg Shaker	4	4	4	4	4	4	4
Digital Reciprocating Shakers	4	4	4	4	4	4	4
18 x 24" (45.7 x 61 cm)							
Analog/Digital 16 kg Shakers	6	6	6	6	6	6	6
Digital Reciprocating Shakers	6	6	6	6	6	6	6
Analog/Digital 23 kg Shakers	6	6	6	6	6	6	6
18 x 30" (45.7 x 76.2 cm)							
Analog/Digital 23 kg Shakers	8	8	8	8	8	8	8
24 x 24" (61 x 61 cm)							
Digital 45 kg Shakers	8	8	8	8	8	8	8
24 x 36" (61 x 91.4 cm)							
Digital 63 kg Shakers	7	7	7	7	7	7	7

*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers

OPEN AIR, INCUBATING, INCUBATING COOLING SHAKERS ACCESSORIES

Test Tube Racks

Full Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms..

Dimensions:

3.75 L x 16.5 W x 4" H (9.5 x 41.9 x 10.2 cm)

Full Size, Pivoting

Has adjustable angle, custom tilt. Stainless steel holder includes removable plastic rack. Rack is easily removed to transport from work area to shaker.

Inside pivoting rack dimensions:

5.1 x 10.8 x 3.9" (12.9 x 27.4 x 9.9 cm)

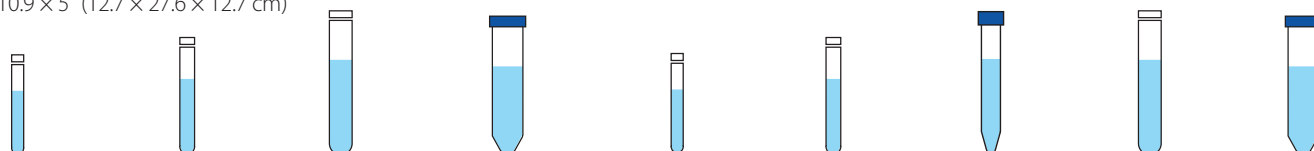
Outside stationary rack dimensions:

5.0 x 10.9 x 5" (12.7 x 27.6 x 12.7 cm)

Test Tube Racks
Full-Size, Stationary



Test Tube Racks
Full-Size, Pivoting



10 to 14 mm Test Tube Rack Full Size, Stationary	16 to 20 mm Test Tube Rack Full Size, Stationary	21 to 25 mm Test Tube Rack Full Size, Stationary	50 mL Centrifuge Tube Rack Full Size, Stationary	13 mm Test Tube Rack Full Size, Pivoting	16 mm Test Tube Rack Full Size, Pivoting	20 mm Test Tube Rack Full Size, Pivoting	25 mm Tube Rack Full Size, Pivoting	30 mm Tube Rack Full Size, Pivoting
48	33	21	17	90	60	40	24	21
30400110	30400111	30400112	30400113	30400105	30400106	30400107	30400108	30400109
359	359	359	376	320	320	320	320	320
Number of Test Tube Racks per Tray or Platform								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	1	1	1	1	1
N/A	N/A	N/A	N/A	1	1	1	1	1
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
N/A	N/A	N/A	N/A	2	2	2	2	2
5	5	5	5	3	3	3	3	3
5	5	5	5	3	3	3	3	3
5	5	5	5	3	3	3	3	3
6	6	6	6	4	4	4	4	4
7	7	7	7	4	4	4	4	4
5	5	5	5	6	6	6	6	6

MINI VORTEX MIXERS

Choose the Perfect Vortex Mixer From Four Durable Models for Everyday Mixing

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction

Cup head and 3-inch accessory platform for beakers, flasks, test tubes etc. (included with all models), stainless steel microtube holder for 12 tubes (pulsing models)

Design Features

Microprocessor-control to maintain set speed for consistent mixing action (digital models), 230V models have a maximum speed of 2500 rpm

Operation

Detachable 3-wire cord and plug (included)



Touch mode operation activates mixing when depressing the cup head or continuous mode for use with accessory attachments. Sturdy, rugged design ensures the unit stays in place while in use.

Robust digital and non-digital Vortex Mixers offer effective speed control from low RPM start-up for gentle shaking to high-speed mixing for vigorous vortexing of samples.

The Fixed Speed Vortex Mixer is an economical choice for vigorous mixing of samples at high speed. To ease repetitive sample processing, this unit provides simple, effective full-speed mixing.

Model	Type	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXMNAL	Analog	300 rpm – 3200 rpm	-	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392115	328
VXMNDG	Digital	500 rpm – 3000 rpm	1 second - 9999 minutes	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392122	421
VXMNFS	Fixed Speed	3200 rpm	-	0.2 in (4.9 mm)	0.5 kg	Intermittent	30392108	288
VXMNPS	Pulsing	500 rpm – 3000 rpm	1 second - 9999 minutes	0.1 in (2.5 mm)	0.5 kg	Intermittent	30392129	512

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
8 cm Head with Rubber Cover	30400196	64	Ampule Tube Holder - Large (10-17mm)	30400208	207
Tube Holder Kit with Retainer	30400197	233	Insert Retainer	30400227	154
Micro Tube and Well Plate Holder Kit	30400198	137	Vessel Harness, Pack of 2	30400228	13
Micro Well Plate Kit with Retainer	30400199	137	Holder For 9-13 mm Tubes, Pack of 2	30400229	38
Microtube Kit with Retainer	30400200	137	Holder For 14-19 mm Tubes, Pack of 2	30400230	38
Foam Insert Variety Pack	30400201	69	Holder For 20-25 mm Tubes, Pack of 2	30400231	38
Single Tube Holder	30400202	199	Micro-Tube Holder, Pack of 2	30400232	79
Single Tube Holder Adapter Vortex Genie	30400203	102	Micro-Well Plate Holder, Pack of 2	30400233	79
0.5 mL Micro-Tube Holder	30400204	86	Flat Foam Insert, Pack of 2	30400234	36
1.5-2.0 mL Micro-Tube Holder	30400205	86	Cup Head	30400235	47
1.5-2.0 mL Stainless Steel Tube Holder	30400206	316	7.6 cm Head (3")	30400236	47
Ampule Tube Holder - Small (15-17mm)	30400207	147	7.6 cm Rubber Head Cover (3")	30400237	47

HEAVY-DUTY VORTEX MIXERS

Increase Productivity with Continuous-Duty Vortexing of Multiple Samples

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction

Cycloxy, Touch/Standby/On rocker switch (both models)

Design Features

Universal holder, foam insert for (38) 1.5 to 2 ml microtubes, universal cover and cup head (included)

Operation

Detachable 3-wire cord and plug (included)



Safe to mix at high speeds - the unique locking design of the mixer accessories allows the mixer to safely operate throughout the entire speed range.

For the most demanding applications, these mixers utilize a high quality German-manufactured motor, allowing for continuous duty operation and increased load capacities up to 1.1 kg.

Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of difficult samples.

Model	Control	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXHDAL	Analog	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	Not Applicable	0.2 in (4.9 mm)	1.1 kg	Continuous	30392148	1079
VXHDDG	Digital	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	1 second - 9999 minutes	0.2 in (4.9 mm)	1.1 kg	Continuous	30392146	1254

Accessories	Item Number	List Price (USD)
Foam Insert Blank	30400209	48
Cup Head, VXHD and VXMP Vortex Mixers	30400210	47
Large Vessel Holder For 500 ml/1 L Flask	30400211	57
4 Place Stackable Microplate Holder	30400212	145
Double Microplate Holder	30400213	77
4 Place Microplate Holder	30400214	155
Single Microplate Holder	30400215	68
Foam Insert For (52) 0.5 mL Microtubes	30400216	48
Foam Insert (38) 1.5-2.0 mL Microtubes	30400217	48

Accessories	Item Number	List Price (USD)
Small Vessel Holder 125 & 250 mL Flasks	30400218	57
Foam Insert For (34) 12-13 mm Tubes	30400220	48
Foam Insert For (20) 15-18 mm Tubes	30400221	48
Foam Insert For (18) 19-21 mm Tubes	30400222	48
Foam Insert For (13) 22-25 mm Tubes	30400223	48
Foam Insert For (4) 26-29 mm Tubes	30400224	48
Cover For Universal Holder	30400225	25
Universal Holder	30400226	70



MICROPLATE VORTEX MIXERS

The Ideal Solution for Dependable Vortex Mixing of Microplates

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models)

Construction

Cyclody

Design Features

Microplate adapter and cup head (included)

Operation

Detachable 3-wire cord and plug (included)



Safe to mix at high speeds - the innovative locking design of the microplate accessories allows these mixers to safely operate throughout the entire speed range.

These mixers utilize a high quality German-manufactured motor allowing for reliable, continuous-duty operation at any speed.

Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of samples.

Model	Control	Speed Range	Timer	Orbit	Capacity	Duty Rating	Item Number	List Price (USD)
VXMPAL	Analog	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	-	0.1 in (3.5 mm)	2 Microplates	Continuous	30392162	508
VXMPDG	Digital	On Mode, 300 rpm – 2500 rpm; Touch Mode, 300 rpm – 3500 rpm	1 second - 9999 minutes	0.1 in (3.5 mm)	2 Microplates	Continuous	30392160	590

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cup Head, VXHD and VXMP Vortex Mixers	30400210	47	Single Microplate Holder	30400215	68
Double Microplate Holder	30400213	77			



MULTI-TUBE VORTEX MIXERS

Powerful Hands-Free Vortex Mixer for Efficient High-Throughput Mixing

Display

Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models)

Construction

Stainless steel foam rack for (50) 12 mm diameter tubes (included), interchangeable foam racks for vortexing tubes from 10 - 29 mm in diameter

Operation

Detachable 3-wire cord and plug (included)



Easily process up to 50 samples at one time - the Multi-Tube Vortex Mixer can be customized for your application with six different tube racks and a post- extension kit.

The Multi-Tube Vortex Mixers feature either an easy-to-clean one-piece stainless steel housing that is perfect for clean rooms, or a painted steel version for a more economical option.

For challenging samples, enhance vortex action & create a more vigorous mix with the programmable pulse mode on the digital models. Adjust the pulse-on/pulse-off time interval to customize operation.

Model	Speed Range	Timer	Orbit	Maximum Weight Capacity	Duty Rating	Tray Dimensions	Item Number	List Price (USD)
VXMTAL	1200 rpm – 2400 rpm	-	0.1 in (3.6 mm)	4.5 kg	Continuous	7.25 in x 12.25 in (18.4 cm x 31.1 cm)	30392164	3054
VXMTDG	500 rpm – 2500 rpm	1 second - 9999 minutes	0.1 in (3.6 mm)	4.5 kg	Continuous	7.25 in x 12.25 in (18.4 cm x 31.1 cm)	30392171	3580
VXMTALB	1200 rpm – 2400 rpm	-	0.1 in (3.6 mm)	4.5 kg	Continuous	7.25 in x 12.25 in (184 mm x 311 mm)	30573831	2596
VXMTDGB	500 rpm – 2500 rpm	1 second - 9999 minutes	0.1 in (3.6 mm)	4.5 kg	Continuous	7.25 in x 12.25 in (184 mm x 311 mm)	30573836	3043

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
10 mm Tube Rack (Gray)	30400238	42	50 mL Tube Rack (Red)	30400242	54
12 mm Tube Rack (Blue)	30400239	41	25 mm Tube Rack (White)	30400243	54
13 mm Tube Rack (Yellow)	30400240	41	Post Extension Kit	30400244	211
16 mm Tube Rack (Green)	30400241	54	Tray Pad Set - Top And Bottom	30400245	61

I BLOCK DRY BLOCK HEATERS

Versatile Block Heaters Designed for Everyday Use with Accessories for Every Application

Display

LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction

Painted steel housing, support rod holder with locking knob

Design Features

Touchpad control and audible alarm (digital models)

Operation

Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint



Designed for reliable everyday use in the lab. Digital and non-digital block heaters offer exceptional temperature uniformity with outstanding temperature stability.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB1AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 1°C	± 0.1°C at 37°C	Not Applicable	16 min	30392045	350
HB1DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	Not Applicable	16 min	30392059	467

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	159	Sand, 0.5 kg (1 Lb) Bag	30400177	97
Module Block 12/13 mm 20 Hole	30400152	159	Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	119
Module Block 15/16 mm 12 Hole	30400153	159	Cover Low-Temperature 2 Block	30400179	141
Module Block 20 mm Test Tube 8 Hole	30400154	159	Cover Low-Temperature 4 Block	30400180	137
Module Block 25 mm Test Tube 6 Hole	30400155	159	Cover Low-Temperature 6 Block	30400181	149
Module Block Combination	30400156	159	Module Block For Vials 12 mm	30400182	159
Module Block 0.5 mL Microtaper	30400157	159	Module Block For Vials 15 mm	30400183	159
Module Block 6 mm Test Tube	30400158	159	Module Block For Vials 17 mm	30400184	159
Module Block 1.5 mL Microtaper	30400159	159	Module Block For Vials 19 mm	30400185	159
Module Block Solid	30400160	159	Module Block For Vials 21 mm	30400186	159
Module Block Cuvette - 12 Cuvet	30400161	190	Module Block For Vials 23 mm	30400187	159
Module Block 11.5/1.5 mL Microcentrifuge	30400162	159	Module Block For Vials 25 mm	30400188	159
Module Block 250 Microliter/6 mm	30400163	159	Module Block For Vials 28 mm	30400189	159
Module Block 12/13 mm 16 Holes	30400165	159	Module Block For Vials 16 mm	30400190	159
Module Block 4 X 35 mm Test Tube	30400167	159	Module Block, 2.0 mL Tube	30400191	159
Module Block 50 mL Conical Centrifuge	30400168	159	Module Block, 2.0 mL Corning Tube	30400192	159
Module Block 0.2 mL Micro 80 Hole	30400169	176	Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	159
Module Block 0.2 mL Micro 64 Hole	30400170	176	Module Block Combo - Micro Tube	30400194	159
Module Block 15 mL Conical Centrifuge	30400172	159	Module Block 12 Holes 17-18 mm	30400195	159
Sand Bath, 1 Block Unit	30400173	341	Stainless Steel Probe Kit	30400246	362



2 BLOCK DRY BLOCK HEATERS

Versatile Block Heaters Designed for Everyday Use with Accessories for Every Application

Display

LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction

Painted steel housing, support rod holder with locking knob

Design Features

Touchpad control and audible alarm (digital models)

Operation

Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint



Three models to customize your application. All models offer exceptional temperature uniformity with outstanding temperature stability.

Avoid contamination to ensure repeatable, reliable results. The Heatblock with Heated Lid features a second heater in the lid to minimize condensation to maintain your sample integrity.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Model	Temp Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB2AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 1.5°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392052	453
HB2DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392080	565
HB2DGH [*]	Ambient + 5°C – 100°C	± 0.1°C	± 0.1°C at 37°C	± 0.1°C at 37°C	16 min	30392101	1198

^{*}HL version includes heated lid

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	159	Sand Bath, 2 Block Unit	30400174	355
Module Block 12/13 mm 20 Hole	30400152	159	Sand, 0.5 kg (1 Lb) Bag	30400177	97
Module Block 15/16 mm 12 Hole	30400153	159	Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	119
Module Block 20 mm Test Tube 8 Hole	30400154	159	Cover Low-Temperature 2 Block	30400179	141
Module Block 25 mm Test Tube 6 Hole	30400155	159	Cover Low-Temperature 4 Block	30400180	137
Module Block Combination	30400156	159	Cover Low-Temperature 6 Block	30400181	149
Module Block 0.5 mL Microtaper	30400157	159	Module Block For Vials 12 mm	30400182	159
Module Block 6 mm Test Tube	30400158	159	Module Block For Vials 15 mm	30400183	159
Module Block 1.5 mL Microtaper	30400159	159	Module Block For Vials 17 mm	30400184	159
Module Block Solid	30400160	159	Module Block For Vials 19 mm	30400185	159
Module Block Cuvette - 12 Cuvet	30400161	190	Module Block For Vials 21 mm	30400186	159
Module Block 11.5/1.5 mL Microcentrifuge	30400162	159	Module Block For Vials 23 mm	30400187	159
Module Block 250 Microliter/6 mm	30400163	159	Module Block For Vials 25 mm	30400188	159
Module Block Titer Plate	30400164	325	Module Block For Vials 28 mm	30400189	159
Module Block 12/13 mm 16 Holes	30400165	159	Module Block For Vials 16 mm	30400190	159
Module Block Solid Double	30400166	232	Module Block, 2.0 mL Tube	30400191	159
Module Block 4 X 35 mm Test Tube	30400167	159	Module Block, 2.0 mL Corning Tube	30400192	159
Module Block 50 mL Conical Centrifuge	30400168	159	Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	159
Module Block 0.2 mL Micro 80 Hole	30400169	176	Module Block Combo - Micro Tube	30400194	159
Module Block 0.2 mL Micro 64 Hole	30400170	176	Module Block 12 Holes 17-18 mm	30400195	159
Module Block 0.2 mL 96 Hole Double Block	30400171	356	Stainless Steel Probe Kit	30400246	362
Module Block 15 mL Conical Centrifuge	30400172	159			



4 BLOCK DRY BLOCK HEATERS

Versatile and Dependable Block Heaters Deliver Precise, Reliable Results

Display

LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction

Painted steel housing, support rod holder with locking knob

Design Features

Touchpad control and audible alarm (digital models)

Operation

Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint



Designed for flexibility with your applications. The four-block capacity allows you to process multiple samples simultaneously with one device.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB4AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 2°C	± 0.1°C at 37°C	± 0.2°C at 37°C	23 min	30392066	663
HB4DG	Ambient + 5°C – 120°C	± 0.1°C	± 0.1°C at 37°C	± 0.2°C at 37°C	23 min	30392087	730

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	159	Sand Bath, 4 Block Unit	30400175	380
Module Block 12/13 mm 20 Hole	30400152	159	Sand, 0.5 kg (1 Lb) Bag	30400177	97
Module Block 15/16 mm 12 Hole	30400153	159	Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	119
Module Block 20 mm Test Tube 8 Hole	30400154	159	Cover Low-Temperature 2 Block	30400179	141
Module Block 25 mm Test Tube 6 Hole	30400155	159	Cover Low-Temperature 4 Block	30400180	137
Module Block Combination	30400156	159	Cover Low-Temperature 6 Block	30400181	149
Module Block 0.5 mL Microtaper	30400157	159	Module Block For Vials 12 mm	30400182	159
Module Block 6 mm Test Tube	30400158	159	Module Block For Vials 15 mm	30400183	159
Module Block 1.5 mL Microtaper	30400159	159	Module Block For Vials 17 mm	30400184	159
Module Block Solid	30400160	159	Module Block For Vials 19 mm	30400185	159
Module Block Cuvette - 12 Cuvet	30400161	190	Module Block For Vials 21 mm	30400186	159
Module Block 11.5/1.5 mL Microcentrifuge	30400162	159	Module Block For Vials 23 mm	30400187	159
Module Block 250 Microliter/6 mm	30400163	159	Module Block For Vials 25 mm	30400188	159
Module Block Titer Plate	30400164	325	Module Block For Vials 28 mm	30400189	159
Module Block 12/13 mm 16 Holes	30400165	159	Module Block For Vials 16 mm	30400190	159
Module Block Solid Double	30400166	232	Module Block, 2.0 mL Tube	30400191	159
Module Block 4 X 35 mm Test Tube	30400167	159	Module Block, 2.0 mL Corning Tube	30400192	159
Module Block 50 mL Conical Centrifuge	30400168	159	Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	159
Module Block 0.2 mL Micro 80 Hole	30400169	176	Module Block Combo - Micro Tube	30400194	159
Module Block 0.2 mL Micro 64 Hole	30400170	176	Module Block 12 Holes 17-18 mm	30400195	159
Module Block 0.2 mL 96 Hole Double Block	30400171	356	Stainless Steel Probe Kit	30400246	362
Module Block 15 mL Conical Centrifuge	30400172	159			



6 BLOCK DRY BLOCK HEATERS

Process More Samples with Large Capacity Block Heaters that Deliver Precise, Reliable Results

Display

LED display (digital models) and dual-adjustment knobs with dial markings (analog models)

Construction

Painted steel housing, support rod holder with locking knob

Design Features

Touchpad control and audible alarm (digital models)

Operation

Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint



Unique design for high throughput applications. The six-block capacity allows you the most flexibility to process multiple samples simultaneously with one device.

Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.

Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.

Model	Temp Range	Temp Stability	Uniformity Within the Block	Uniformity Across Similar Blocks	Heat Up Time	Item Number	List Price (USD)
HB6AL	High 75°C – 150°C; Low Ambient + 5°C – 100°C	± 2°C	± 0.1°C at 37°C	± 0.3°C at 37°C	30 min	30392073	987
HB6DG	Ambient + 5°C – 120°C	± 2°C	± 0.1°C at 37°C	± 0.3°C at 37°C	30 min	30392094	1100

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Module Block 10 mm Test Tube	30400151	159	Sand Bath, 6 Block Unit	30400176	394
Module Block 12/13 mm 20 Hole	30400152	159	Sand, 0.5 kg (1 Lb) Bag	30400177	97
Module Block 15/16 mm 12 Hole	30400153	159	Stainless Steel Shot, 0.5 kg (1 Lb)	30400178	119
Module Block 20 mm Test Tube 8 Hole	30400154	159	Cover Low-Temperature 2 Block	30400179	141
Module Block 25 mm Test Tube 6 Hole	30400155	159	Cover Low-Temperature 4 Block	30400180	137
Module Block Combination	30400156	159	Cover Low-Temperature 6 Block	30400181	149
Module Block 0.5 mL Microtaper	30400157	159	Module Block For Vials 12 mm	30400182	159
Module Block 6 mm Test Tube	30400158	159	Module Block For Vials 15 mm	30400183	159
Module Block 1.5 mL Microtaper	30400159	159	Module Block For Vials 17 mm	30400184	159
Module Block Solid	30400160	159	Module Block For Vials 19 mm	30400185	159
Module Block Cuvette - 12 Cuvet	30400161	190	Module Block For Vials 21 mm	30400186	159
Module Block 11.5/1.5 mL Microcentrifuge	30400162	159	Module Block For Vials 23 mm	30400187	159
Module Block 250 Microliter/6 mm	30400163	159	Module Block For Vials 25 mm	30400188	159
Module Block Titer Plate	30400164	325	Module Block For Vials 28 mm	30400189	159
Module Block 12/13 mm 16 Holes	30400165	159	Module Block For Vials 16 mm	30400190	159
Module Block Solid Double	30400166	232	Module Block, 2.0 mL Tube	30400191	159
Module Block 4 X 35 mm Test Tube	30400167	159	Module Block, 2.0 mL Corning Tube	30400192	159
Module Block 50 mL Conical Centrifuge	30400168	159	Module Block Combo, 50 mL, 15 mL, 1.5 mL	30400193	159
Module Block 0.2 mL Micro 80 Hole	30400169	176	Module Block Combo - Micro Tube	30400194	159
Module Block 0.2 mL Micro 64 Hole	30400170	176	Module Block 12 Holes 17-18 mm	30400195	159
Module Block 0.2 mL 96 Hole Double Block	30400171	356	Stainless Steel Probe Kit	30400246	362
Module Block 15 mL Conical Centrifuge	30400172	159			



GUARDIAN 7000 HOTPLATE STIRRERS

Durable Hotplate Stirrers with Superior Safety Features and Intelligent Performance

Display

Backlit LCD Display for temperature, speed and time, green indicator lights when unit is heating and stirring, two prominent hot top indicator lights, icons for SmartRate™, SmartHeat™, SmartPresence™, SmartLink™, probe in use, Single Point Calibration

Communication

USB port provides flexibility for programming of repeat applications and enhancing safety with SmartLink™ technology; the long range user detection function operated with the OHAUS Bluetooth dongle accessory (sold separately)

Construction

Probe connection, SmartHousing™ stays cool to the touch and is chemical-resistant, IP21 Ingress Protection, hardened glass front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, easy-to-clean ceramic or aluminum tops

Design Features

Hot top indicator lights, audible alarm, SmartHeat™ temperature limiting function, SafetyHeat™ shuts off heater in the event of malfunction, temperature calibration feature for 5 probe & 5 plate setpoints, temperature priority function, SmartRate™ functions



Operation

Timer, Stirring from 60 to 1600 rpm, temperature range of ambient +5°C to 500°C (ceramic top) or 380°C (aluminum top), power cord (included), 8" (20.3 cm) stainless steel RTD temperature probe, 1.5" (3.8 cm) PTFE coated stir bar, in-use cover

Protect your lab with SmartPresence™ and SmartLink™ technologies. These exclusive features automatically shut off the heater if no one is detected after a user-defined "time out" period has elapsed.

An industry-leading early detection system that uses two independent safety controls to continuously monitor the electronics and shut off heating before an overtemperature condition occurs.

Precise stirring from 60 to 1600 rpm is made possible by the design of a powerful motor, strong magnet and software controlled ramp rate, ensuring secure magnetic coupling for viscous applications.

Model	Temp Range	Maximum Stirring Capacity (H ₂ O)	Top Plate Material	Plate Size	Item Number	List Price (USD)
e-G71HS07C	Ambient + 5°C – 500°C	15 L	Ceramic	7 in x 7 in (178 mm x 178 mm)	30500600	794
e-G71HS10C	Ambient + 5°C – 500°C	18 L	Ceramic	10 in x 10 in (254 mm x 254 mm)	30500610	1111
e-G71HSRDM	Ambient + 5°C – 380°C	20 L	Aluminum	5.3 in (135 mm)	30500620	714

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Clamp, Specialty, Rod, CLS-RODS	30392233	45	Sectional Block 16 mm Test Tubes	30500578	216
Clamp, Specialty, Column, CLS-COLMNSS	30392314	82	Sectional Block 20 mm Test Tubes	30500579	216
Clamp, Specialty, Column, CLS-COLMNSM	30392315	84	Sectional Block 25 mm Test Tubes	30500580	216
Clamp, Specialty, Column, CLS-COLMNSL	30392316	85	Uni Block 12 mm Vials	30500581	305
Clamp, Specialty, Column, CLS-COLMNSX	30392317	85	Uni Block 15 mm vials	30500582	305
Clamp, Specialty, Nester, CLS-NESTXS	30392318	110	Uni Block 17 mm Vials	30500583	305
Ultra Flex Support Kit	30400145	235	Uni Block 21 mm Vials	30500584	305
Support Rod And Clamp Kit	30400146	170	Uni Block 28 mm Vials	30500585	305
Spinbar 2.5 cm PTFE	30400147	14	Uni Block 12 mm Test Tubes	30500586	344
Spinbar 3.8 cm PTFE	30400148	15	Uni Block 16 mm Test Tubes	30500587	344
Spinbar 7 cm PTFE	30400149	51	Uni Block 20 mm Test Tubes	30500588	344
Spinbar 10 cm with Pivot Ring PTFE	30400150	95	Uni Block 25 mm Test Tubes	30500589	344
Wireless Dongle MTICWD-200	30412537	250	Temperature Probe 20 cm S/S	30500590	216
Base Plate 135 mm	30500570	278	Temperature Probe 20 cm PTFE	30500591	239
Handles for Base Plate	30500571	221	Temperature Probe 25 cm S/S	30500592	278
Sectional Block 12 mm Vials	30500572	106	Temperature Probe 25 cm PTFE	30500593	305
Sectional Block 15 mm vials	30500573	106	In Use Cover Guardian 7x7	30500594	51
Sectional Block 17 mm Vials	30500574	106	In Use Cover Guardian 10x10	30500595	51
Sectional Block 21 mm Vials	30500575	106	In Use Cover Guardian Round	30500596	51
Sectional Block 28 mm Vials	30500576	106	Vessel Clamp	30500597	215
Sectional Block 12 mm Test Tubes	30500577	216	Stir Bar Retriever	30500598	44



GUARDIAN 5000 HOTPLATES & STIRRERS

Reliable Hotplate Stirrers with Exceptional Safety Features for Everyday Use

Display

Backlit LCD Display for temperature and speed, green indicator lights when unit is heating and stirring, prominent hot top indicator light, probe in use icon, Single Point Calibration icon

Construction

Probe connection, SmartHousing™ stays cool to the touch and is chemical resistant, IP21 Ingress Protection, polycarbonate front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, easy to clean ceramic or aluminum tops

Design Features

Hot top indicator light, audible alarm, SafetyHeat™ protection shuts off the heater in the event of a malfunction, temperature calibration feature for 3 probe and 3 plate setpoints

Operation

Stirring from 60 to 1600 rpm, Temperature range of ambient +5°C to 500°C (ceramic top) or 380°C (aluminum top), power cord (included), stirring models include a 1.5" (3.8 cm) PTFE coated stir bar



An industry-leading early detection system that uses two independent safety controls to continuously monitor the electronics and shut off heating before an overtemperature condition occurs.

Precise stirring from 60 to 1600 rpm is made possible by the design of a powerful motor, strong magnet and software controlled ramp rate, ensuring secure magnetic coupling for viscous applications.

The bright LCD display includes large temperature and speed settings, intuitive icons and a prominent hot top indicator – all designed to quickly and easily monitor performance from across the lab.

Model	Temp Range	Maximum Stirring Capacity (H ₂ O)	Top Plate Material	Plate Size	Item Number	List Price (USD)
e-G51HP07C	Ambient + 5°C – 500°C	15 L	Ceramic	7 in x 7 in (178 mm x 178 mm)	30500530	317
e-G51ST07C	-	15 L	Ceramic	7 in x 7 in (178 mm x 178 mm)	30500540	317
e-G51HS07C	Ambient + 5°C – 500°C	15 L	Ceramic	7 in x 7 in (178 mm x 178 mm)	30500520	529
e-G51HS10C	Ambient + 5°C – 500°C	18 L	Ceramic	10 in x 10 in (254 mm x 254 mm)	30500550	688
e-G51HSRDM	Ambient + 5°C – 380°C	20 L	Aluminum	5.3 in (135 mm)	30500560	529

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Clamp, Specialty, Rod, CLS-RODS	30392233	45	Sectional Block 20 mm Test Tubes	30500579	216
Clamp, Specialty, Column, CLS-COLMNSS	30392314	82	Sectional Block 25 mm Test Tubes	30500580	216
Clamp, Specialty, Column, CLS-COLMNSM	30392315	84	Uni Block 12 mm Vials	30500581	305
Clamp, Specialty, Column, CLS-COLMNSL	30392316	85	Uni Block 15 mm vials	30500582	305
Clamp, Specialty, Column, CLS-COLMNSX	30392317	85	Uni Block 17 mm Vials	30500583	305
Clamp, Specialty, Nester, CLS-NESTXS	30392318	110	Uni Block 21 mm Vials	30500584	305
Ultra Flex Support Kit	30400145	235	Uni Block 28 mm Vials	30500585	305
Support Rod And Clamp Kit	30400146	170	Uni Block 12 mm Test Tubes	30500586	344
Spinbar 2.5 cm PTFE	30400147	14	Uni Block 16 mm Test Tubes	30500587	344
Spinbar 3.8 cm PTFE	30400148	15	Uni Block 20 mm Test Tubes	30500588	344
Spinbar 7 cm PTFE	30400149	51	Uni Block 25 mm Test Tubes	30500589	344
Spinbar 10 cm with Pivot Ring PTFE	30400150	95	Temperature Probe 20 cm S/S	30500590	216
Base Plate 135 mm	30500570	278	Temperature Probe 20 cm PTFE	30500591	239
Handles for Base Plate	30500571	221	Temperature Probe 25 cm S/S	30500592	278
Sectional Block 12 mm Vials	30500572	106	Temperature Probe 25 cm PTFE	30500593	305
Sectional Block 15 mm vials	30500573	106	In Use Cover Guardian 7x7	30500594	51
Sectional Block 17 mm Vials	30500574	106	In Use Cover Guardian 10x10	30500595	51
Sectional Block 21 mm Vials	30500575	106	In Use Cover Guardian Round	30500596	51
Sectional Block 28 mm Vials	30500576	106	Vessel Clamp	30500597	215
Sectional Block 12 mm Test Tubes	30500577	216	Stir Bar Retriever	30500598	44
Sectional Block 16 mm Test Tubes	30500578	216			



MINI HOTPLATES & STIRRERS

Compact, Reliable, Easy-to-Use Hotplates and Stirrers for Basic Heating and Stirring

Construction

Valox housing, basic control knobs, 1.5 inch (3.8 cm) stir bar (included with Stirring models), On/Off toggle switch (Fixed Temperature models), Ceramic top plate

Operation

Detachable 3-wire cord and plug (included)



Select the function you need for your everyday heating and stirring. Five models to choose from - Hotplate, Fixed Temperature Hotplate, Stirrer, Auto Stirrer and combination Hotplate-Stirrer.

Our mini hotplate stirrer is easy to clean up. All models feature a smooth, chemical-resistant ceramic top plate. This brilliant white reflective surface is optimal for viewing your samples.

Designed for safety - unique housing material is heat-resistant making it not only cool to the touch, but also chemical-resistant. Spill resistant design ensures long-term reliable use.

Model	Function	Temp Range	Speed Range	Max Capacity (H ₂ O)	Top Plate Dimensions (Dia.)	Item Number	List Price (USD)
HSMNHS4CAL	Heating and Stirring	Ambient – 500°C	100 rpm – 1200 rpm	1000 mL	4 in x 4 in (10.2 cm x 10.2 cm)	30392024	388
HSMNST4CAL	Stirring	-	100 rpm – 1200 rpm	1000 mL	4 in x 4 in (10.2 cm x 10.2 cm)	30392017	206
HSMNHP4CAL	Heating	Ambient – 500°C	-	1000 mL	4 in x 4 in (10.2 cm x 10.2 cm)	30392010	234
HSMNHP4CFT	Heating	500°C	-	1000 mL	4 in x 4 in (10.2 cm x 10.2 cm)	30392031	222
HSMNAS4CAL	Stirring, Auto Start/Stop	-	100 rpm – 1200 rpm	1000 mL	4 in x 4 in (10.2 cm x 10.2 cm)	30392038	256

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Ultra Flex Support Kit	30400145	235	Spinbar 3.8 cm PTFE	30400148	15
Support Rod And Clamp Kit	30400146	170	Spinbar 7 cm PTFE	30400149	51
Spinbar 2.5 cm PTFE	30400147	14	Spinbar 10 cm with Pivot Ring PTFE	30400150	95



MULTI-POSITION STIRRERS

Synchronized and Uniform Mixing

Display

Independent LED displays for speed and time (on digital models); Knob with 1-10 dial markings (on non-digital models)

Construction

Cast aluminum housing, glass filled nylon top plate. Includes stir bars to accommodate each stirring position

Design Features

Speed ramping feature slowly increases motor speed for enhanced coupling & improved stirring.

Microprocessor-controlled for precise speed regulation. Timer counts up or when programmed to a set time will turn off stirring & sound alarm when timer reaches zero.



The 318 x 279 mm top plate accommodates up to 9x250 mL or 4 x 1 L flasks. The glass-filled nylon surface has a reflective white color, is chemical-resistant & minimizes unintended heating of samples.

Speed ramping feature slowly increases the motor speed for improved safety and enhanced coupling. Avoids splashing, improves spin bar control and provides excellent low-end speed control.

Digital models have touchpad controls for input of speed & time. Non-digital models have an adjustment knob with dial markings from 1-10. The microprocessor regulates adjustments throughout the range.

Model	Speed Range	Capacity	Dimensions	Timer	Item Number	List Price (USD)
STMP4AL	60 rpm to 1400 rpm	4 x 1L	17 in x 4 in x 11 in (432 mm x 970 mm x 279 mm)	-	30573789	1321
STMP9AL	60 rpm to 1400 rpm	9 x 250mL	17 in x 4 in x 11 in (432 mm x 970 mm x 279 mm)	-	30573794	1888
STMP4DG	60 rpm to 1400 rpm	4 x 1L	17 in x 4 in x 11 in (432 mm x 970 mm x 279 mm)	1 second – 160 hours	30573799	1524
STMP9DG	60 rpm to 1400 rpm	9 x 250mL	17 in x 4 in x 11 in (432 mm x 970 mm x 279 mm)	1 second – 160 hours	30573804	2484

Accessories	Item Number	List Price (USD)
Spinbar 2.5 cm PTFE	30400147	14



LARGE VOLUME STIRRERS

Powerful Motor and Magnet Mixes Samples Up To 200 L

Display

Independent LED displays for speed, and time (on digital models); Knob with 1-10 dial markings (on non-digital models)

Construction

High Volume Stirrers feature a cast aluminum housing and glass filled nylon top plate. Large Capacity Stirrers feature both stainless steel housing and top plate. Models include either a 70 mm egg shaped stir bar or 102 mm stir bar with pivot ring.

Design Features

Speed ramping feature slowly increases motor speed for enhanced coupling & improved stirring. Microprocessor-controlled for precise speed regulation. Timer counts up or when programmed to a set time, will turn off stirring & sound alarm when timer reaches 0.



Large Capacity Stirrers with a 100 or 200 L capacity are made with a stainless steel base offering durability and stability, and feature a 54 x 53 cm stainless steel top plate.

Large 32 x 28 cm top plate is chemical-resistant with a white reflective surface that is easy to clean. Digital and non-digital models allow you to choose the right model for your application.

Speed ramping feature slowly increases the motor speed for improved safety and enhanced coupling. Avoids splashing, improves spin bar control and provides excellent low-end speed control.

Model	Control	Speed Range	Capacity	Dimensions	Plate Size	Timer	Item Number	List Price (USD)
STHVAL	Analog	60 rpm - 1400 rpm	25 L	17 in x 4 in x 11 in (432 mm x 97 mm x 279 mm)	12.5 in x 11 in (318 mm x 279 mm)	-	30573809	987
STHVDG	Digital	60 rpm - 1400 rpm	25 L	17 in x 4 in x 11 in (432 mm x 97 mm x 279 mm)	12.5 in x 11 in (318 mm x 279 mm)	1 second – 160 hours	30573814	1144
STLC1DG	Digital	100 rpm - 1800 rpm	100 L	28.5 in x 5.25 in x 26.75 in (724 mm x 133 mm x 680 mm)	21.25 in x 25 in (540 mm x 635 mm)	1 second – 160 hours	30573819	3162
STLC2DG	Digital	100 rpm - 1800 rpm	200 L	28.5 in x 5.25 in x 26.75 in (724 mm x 133 mm x 680 mm)	21.25 in x 25 in (540 mm x 635 mm)	1 second – 160 hours	30573825	4548
Accessories			Item Number	List Price (USD)		Accessories		
Spinbar 7 cm PTFE			30400149	51		Spinbar 10 cm with Pivot Ring PTFE		
						30400150		
						95		



TUV for STLC1DG and STLC2DG
UL for STHVAL and STHVDG

ACHIEVER™ 5000

Reliable Overhead Stirrers with Excellent Performance for Everyday Use

Display

Bright LED digital display for speed, real-time torque tendency LED indicator bar, and integrated timer

Construction

Sealed aluminum housing with IP54 ingress protection rating. Keyless Chuck for simple, one-hand operation, and brushless motor for quiet operation and main power switch

Design Features

Compact design for easy handling, simple knob control, lock button to prevent unintentional setting changes, and full protection for overload, overtemperature and overcurrent conditions

Operation

Stirring from 6 rpm to 2000 rpm with speed accuracy of 1 rpm and maximum torque from 20 Ncm to 200 Ncm, depending on model. Stable torque at any speed, and volume capacity ranging from 25 L to 100 L



Powerful mixing and constant speed is assured with the brushless motor and torque compensation technology – delivering accurate, controlled stirring of viscous liquids with quiet operation

Simplify setup with the Keyless Chuck – no tools required. Change shafts quickly and easily with one-handed operation. This unique design will save time and effort for everyone in the lab.

Designed for safety. The lock button prevents accidental speed changes, and the motor's overload sensing technology simply shuts off stirring before an overload condition occurs to protect the sample.

Model	Speed Range	Speed Accuracy	Stirring Volume (L)	Timer	Max Viscosity (mPas)	Torque @ Max Speed (Ncm)	Chuck Range (Diameter)	Shaft Pass-Through (Diameter)	Item Number	List Price (USD)
e-A51ST020	30 rpm – 2000 rpm	±1 rpm	25 L	1 minute – 99 hours, 59 minutes	maximum 10,000	20 Ncm	1-13 mm	up to 8.5 mm	30586763	1295
e-A51ST040	30 rpm – 2000 rpm	±1 rpm	25 L	1 minute – 99 hours, 59 minutes	maximum 25,000	40 Ncm	1-13 mm	up to 8.5 mm	30586764	1433
e-A51ST060	30 rpm – 2000 rpm	±1 rpm	40 L	1 minute – 99 hours, 59 minutes	maximum 50,000	60 Ncm	1-13 mm	up to 8.5 mm	30586765	1624
e-A51ST100	30 rpm – 1300 rpm	±1 rpm	100 L	1 minute – 99 hours, 59 minutes	maximum 70,000	100 Ncm	1-13 mm	up to 8.5 mm	30586766	2126
e-A51ST200	6 rpm – 400 rpm; 30 rpm – 2000 rpm	±1 rpm	100 L	1 minute – 99 hours, 59 minutes	maximum 100,000	200 Ncm	1-13 mm	up to 8.5 mm	30586767	2257

Accessories	Item Number	List Price (USD)
Support Stand Universal-H	30586771	357
Support Stand Telescopic-H	30586772	561
Clamp Double	30586773	77
Clamp Ribbon	30586774	112
Stirrer Shaft 40x0.7 cm Anchor Blade	30586775	122
Stirrer Shaft 40x0.7 cm Fixed Blade	30586776	122
Stirrer Shaft 40x0.7 cm Floating Blade	30586777	128

Accessories	Item Number	List Price (USD)
Stirrer Shaft 40x0.7 cm Folding Blade	30586778	128
Stirrer Shaft 51x0.7 cm Paddle 6 Holes	30586779	128
Stirrer Shaft 40x0.7 cm Propeller	30586780	128
Stirrer Shaft 40x0.7 cm Turbine	30586781	230
Stirrer Shaft 40x0.7 cm Turbo Propeller	30586782	230
Chuck Cover e-A51	30586842	97



HT LYSING HOMOGENIZER

Provides Simple and Powerful Solutions for Rapid High-Throughput Grinding

Display

Easy-to-read LED display allows the operator to view speed and time settings

Construction

Polyurethane Elastomer top housing, Cyclopol bottom housing, and Lexan lid

Design Features

Microprocessor-controlled unit includes sample clamp and hex key

Operation

Five pre-set program buttons and touchpad controls for speed and time



For high performance grinding, the HT Lysing Homogenizer is one of the most flexible models on the market. The built-in adjustable holder allows for easy processing of samples - no accessories needed.

This versatile Homogenizer allows high throughput grinding, and is ideal for processing multiple tubes, microplates, deep-well plates, or any sample container that fits in the 10.2x12.7x6.4 cm holder.

Take the guesswork out of sample preparation. Five preset programs optimized for speed and time to process the most common samples, including bacteria, fungi, plant, and animal tissue easily.

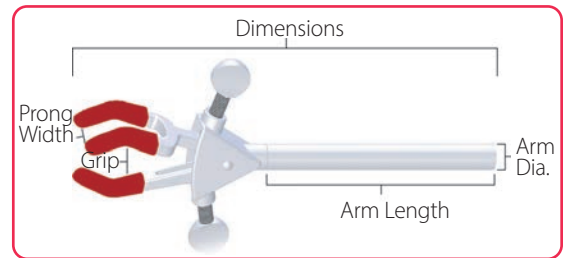
Model	Speed Range	Motion	Timer	Capacity	Max Capacity	Dimensions	Item Number	List Price (USD)
HOHTDG	300 rpm – 1600 rpm	Vertical, 31 mm	1 second – 10 minutes	1 Deep Well, 4 Microplates or any sample to 10.2 x 12.7 x 6.4 cm	0.7 lb (300 g)	17.5 in x 20.5 in x 11.5 in (443 mm x 518 mm x 288 mm)	30391393	8662

Accessories	Item Number	List Price (USD)
2mL Tube, White, Bacteria, 100/box	30391402	360
2mL Tube, Yellow, Yeast, 100/box	30391404	360
2mL Tube, Blue, Fungi, 100/box	30391405	360
2mL Tube, Orange, Soft Sample, 100/box	30391406	360
2mL Tube, Green, Plant, 100/box	30391408	360

Accessories	Item Number	List Price (USD)
2mL Tube, Red, Animal Tissue, 100/box	30391409	360
2mL Tube, Brown, Environmental, 100/box	30391410	368
Tube Rack, 25 x 2ml Tubes, 2 per pack	30391431	14
Sample Tube Kit, 14 Tubes	30391433	42

MULTI PURPOSE CLAMPS

A LabJaws Clamp for Every Application - Choose From Over 85 Options to Hold Everything In Your Lab



2-Prong Dual Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI2DZL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Nickel plated	30392207	45
CLM-MULTI2DZM	Medium	0 in ; 2.95 in (0 mm ; 75 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392209	42
CLM-MULTI2DSM	Medium	0 in ; 2.95 in (0 mm ; 75 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Stainless Steel	30392220	101
CLM-MULTI2DSL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Stainless Steel	30392223	120



2-Prong Single Adjust

Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI2SZL	Large	0 in ; 3.62 in (0 mm ; 92 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392206	45
CLM-MULTI2SZM	Medium	0 in ; 3.07 in (0 mm ; 78 mm)	0.91 in (23 mm)	5 in (127 mm)	0.43 in (11 mm)	8.5 in (216 mm)	Nickel plated	30392208	42
CLM-SWIVL2SZM	Medium	0 in ; 3 in (0 mm ; 76 mm)	0.91 in (23 mm)	-	-	6.42 in (163 mm)	Nickel plated	30392215	42
CLM-SWIVL2SZL	Large	0 in ; 3.74 in (0 mm ; 95 mm)	0.91 in (23 mm)	-	-	7.09 in (180 mm)	Nickel plated	30392216	44
CLM-FIXED2SZM	Medium	0 in ; 3.03 in (0 mm ; 77 mm)	0.91 in (23 mm)	-	-	5.24 in (133 mm)	Nickel plated	30392218	40
CLM-SWIVL2SSM	Medium	0 in ; 3 in (0 mm ; 76 mm)	0.91 in (23 mm)	-	-	6.42 in (163 mm)	Stainless Steel	30392226	117
CLM-FIXED2SSM	Medium	0 in ; 3.03 in (0 mm ; 77 mm)	0.91 in (23 mm)	-	-	5.24 in (133 mm)	Stainless Steel	30392230	116



Double 2-Prong Single Adjust

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-DBJAWZ	0 in ; 3 in (0 mm ; 76 mm)	8.74 in (222 mm)	Nickel plated	30392236	53

3-Prong Single Adjust



Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI3SZL	Large	0 in ; 4.25 in (0 mm ; 108 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	9.76 in (248 mm)	Nickel plated	30392200	57
CLM-MULTI3SZM	Medium	0 in ; 2.8 in (0 mm ; 71 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	8.58 in (218 mm)	Nickel plated	30392203	55
CLM-MULTI3SZS	Small	0 in ; 1.54 in (0 mm ; 39 mm)	0.43 in (11 mm)	4 in (102 mm)	0.32 in (8 mm)	6.3 in (160 mm)	Nickel plated	30392205	52
CLM-ULTRA3SZL	Large	0 in ; 2.83 in (0 mm ; 72 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.24 in (260 mm)	Nickel plated	30392250	66
CLM-ULTRA3SZM	Medium	0 in ; 1.97 in (0 mm ; 50 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392252	59
CLM-ULTRA3SZS	Small	0 in ; 0.91 in (0 mm ; 23 mm)	0.24 in (6 mm)	4 in (102 mm)	0.32 in (8 mm)	6.38 in (162 mm)	Nickel plated	30392254	58

3-Prong Dual Adjust



Model	Size	Grip Range	Prong Width	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLM-MULTI3DZL	Large	0 in ; 4.13 in (0 mm ; 105 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.75 in (273 mm)	Nickel plated	30392198	57
CLM-MLTEX3DZL	Large	0 in ; 4.13 in (0 mm ; 105 mm)	1.14 in (29 mm)	12 in (305 mm)	0.5 in (13 mm)	17.76 in (451 mm)	Nickel plated	30392199	71
CLM-MULTI3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	9.02 in (229 mm)	Nickel plated	30392201	55
CLM-MLTEX3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 in (19 mm)	12 in (305 mm)	0.5 in (13 mm)	16 in (406 mm)	Nickel plated	30392202	67
CLM-MULTI3DZS	Small	0 in ; 1.81 in (0 mm ; 46 mm)	0.43 in (11 mm)	4 in (102 mm)	0.32 in (8 mm)	6.61 in (168 mm)	Nickel plated	30392204	52
CLM-SWIVL3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)	-	-	7.01 in (178 mm)	Nickel plated	30392214	58
CLM-FIXED3DZM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)	-	-	5.75 in (146 mm)	Nickel plated	30392217	50
CLM-SWIVL3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)	-	-	7.01 in (178 mm)	Stainless Steel	30392225	157
CLM-FIXED3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.79 in (20 mm)	-	-	5.75 in (146 mm)	Stainless Steel	30392229	145
CLM-ULTRA3DZL	Large	0 in ; 4.06 in (0 mm ; 103 mm)	1.14 in (29 mm)	5 in (127 mm)	0.43 in (11 mm)	10.24 in (260 mm)	Nickel plated	30392249	66
CLM-ULTRA3DZM	Medium	0 in ; 2.76 in (0 mm ; 70 mm)	0.75 in (19 mm)	5 in (127 mm)	0.43 in (11 mm)	8.74 in (222 mm)	Nickel plated	30392251	59
CLM-ULTRA3DZS	Small	0 in ; 1.26 in (0 mm ; 32 mm)	0.24 in (6 mm)	4 in (102 mm)	0.32 in (8 mm)	5.98 in (152 mm)	Nickel plated	30392253	58
CLM-MULTI3DSL	Large	0 in ; 4 in (0 mm ; 102 mm)	1.14 in (29 mm)	5 in (127 mm)	0.51 in (13 mm)	10.75 in (273 mm)	Stainless Steel	30392352	122
CLM-MULTI3DSM	Medium	0 in ; 2.72 in (0 mm ; 69 mm)	0.75 in (19 mm)	5 in (127 mm)	0.51 in (13 mm)	9.02 in (229 mm)	Stainless Steel	30392353	110
CLM-MULTI3DSS	Small	0 in ; 1.9 in (0 mm ; 48 mm)	0.51 in (13 mm)	4 in (102 mm)	0.39 in (10 mm)	6.77 in (172 mm)	Stainless Steel	30392354	94



Buret Holder

Model	Size	Dimensions	Material	Item Number	List Price (USD)
CLS-BTDBLS	micro – 100 mL burets	6.8 in x 4.25 in (173 mm x 108 mm)	Stainless Steel	30392227	200
CLS-BTDBLZ	micro – 100 mL burets	4.25 in x 6.8 in (173 mm x 108 mm x 173 mm)	Nickel plated	30392234	74



Thermometer

Model	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-THMSWZ	0.24 in ; 0.32 in (6 mm ; 8 mm)			6.26 in (159 mm)	Nickel plated	30392238	50
CLS-THMEXZ	0.24 in ; 0.47 in (6 mm ; 12 mm)	5 in (127 mm)	0.43 in (11 mm)	8.27 in (210 mm)	Nickel plated	30392239	43



2-Prong Dual Adjust Water Bath

Model	Size	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WBATHZS	Small	0.2 in ; 0.39 in (5 mm ; 10 mm)	3.5 in (89 mm)	Nickel plated	30392240	37



3-Prong Dual Adjust Water Bath

Model	Size	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WBATHZL	Large	0 in ; 1.81 in (0 mm ; 46 mm)	4.61 in (117 mm)	Nickel plated	30392241	55



Kettle

Model	Size	Item Number	List Price (USD)
CLS-KTLCLS	500 mL, 1000 mL Flask	30392365	197
CLS-KTLCLM	2000 mL, 3000 mL, 4000 mL Flask	30392366	199



Electrode

Model	Dimensions	Material	Item Number	List Price (USD)
CLS-ELECTZ	7 in (178 mm)	Nickel plated	30392242	78



Suspension

Model	Dimensions	Material	Item Number	List Price (USD)
CLS-SUSPNB	5.39 in (137 mm)	Nickel plated	30392243	38



2-Prong Dual Adjust Wall Mount

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLS-WALLCZ	0.2 in ; 0.39 in (5 mm ; 10 mm)	3.15 in (80 mm)	Nickel plated	30392244	38



Hosecock - Adjustable Control

Model	Grip Range	Dimensions	Material	Item Number	List Price (USD)
CLF-HKRGZ	0 in ; 0.67 in (0 mm ; 17 mm)	2.44 in x 1.46 in (62 mm x 37 mm)	Nickel plated	30392210	30
CLF-HKRGZ	0 in ; 0.67 in (0 mm ; 17 mm)	2.44 in x 1.46 in (62 mm x 37 mm)	Stainless Steel	30392221	73



Airejector

Model	Dimensions	Material	Item Number	List Price (USD)
CLN-AIREJ	140 mm x 5.51 in	Nickel plated	30392367	129

Nester



Model	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-NESTXS	1.97 in ; 4 in (50 mm ; 102 mm)	5.98 in (152 mm)	0.39 in (10 mm)	10.32 in (262 mm)	Stainless Steel	30392318	110

Open Ring



Model	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-OPENRAS	2.28 in (58 mm)	0.35 in (9 mm)	5.2 in (132 mm)	Aluminum	30392343	37
CLS-OPENRAM	2.28 in (58 mm)	0.35 in (9 mm)	6.22 in (158 mm)	Aluminum	30392344	47
CLS-OPENRAL	2.4 in (61 mm)	0.43 in (11 mm)	7.2 in (183 mm)	Aluminum	30392345	65
CLS-OPENRPS	10 in (254 mm)	0.35 in (9 mm)	12.91 in (382 mm)	PVC	30392346	77
CLS-OPENRPM	12 in (305 mm)	0.35 in (9 mm)	15.91 in (404 mm)	PVC	30392347	86
CLS-OPENRPL	12 in (305 mm)	0.43 in (11 mm)	16.81 in (427 mm)	PVC	30392348	115



Column

Model	Size	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-COLMNSS	Small	2.56 in ; 3.5 in (65 mm ; 89 mm)	8.31 in (211 mm)	0.43 in (11 mm)	11.1 in (282 mm)	Stainless Steel	30392314	82
CLS-COLMNMS	Medium	3.58 in ; 4.49 in (91 mm ; 114 mm)	8.31 in (211 mm)	0.43 in (11 mm)	12.41 in (315 mm)	Stainless Steel	30392315	84
CLS-COLMNSL	Large	2.52 in ; 5.51 in (64 mm ; 140 mm)	8.31 in (211 mm)	0.43 in (11 mm)	13.31 in (338 mm)	Stainless Steel	30392316	85
CLS-COLMNSX	Extra Large	3.62 in ; 6.5 in (92 mm ; 165 mm)	8.31 in (211 mm)	0.43 in (11 mm)	14.49 in (368 mm)	Stainless Steel	30392317	85



Chain

Model	Size	Grip Range	Arm Length	Arm Diameter	Dimensions	Material	Item Number	List Price (USD)
CLS-CHAINSL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	5 in (127 mm)	0.51 in (13 mm)	8.11 in (206 mm)	Stainless Steel	30392224	251
CLS-CHAINZM	Small	1.38 in ; 6.69 in (35 mm ; 170 mm)	5 in (127 mm)	0.51 in (13 mm)	7.4 in (188 mm)	Nickel plated	30392235	71
CLS-CHAINZL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	5 in (127 mm)	0.51 in (13 mm)	8.11 in (206 mm)	Nickel plated	30392259	102
CLS-CHNEXZL	Large	1.38 in ; 11.02 in (35 mm ; 280 mm)	12 in (305 mm)	0.51 in (13 mm)	15.12 in (384 mm)	Nickel plated	30392260	109

RODS, FRAMES & SUPPORTS

LabJaws Ensures Secure Support for Holding Your Labware and Apparatus with Over 130 Options

Lab Frame Rod

Model	Material	Rod Length	Item Number	List Price (USD)
CLR-RODA004	Aluminum	1.61 in (41 mm)	30392271	9
CLR-RODA005	Aluminum	2 in (51 mm)	30392272	12
CLR-RODA015	Aluminum	6 in (152 mm)	30392273	14
CLR-RODA030	Aluminum	12 in (305 mm)	30392274	20
CLR-RODA046	Aluminum	18 in (457 mm)	30392275	21
CLR-RODA061	Aluminum	24 in (610 mm)	30392276	27
CLR-RODA091	Aluminum	36 in (914 mm)	30392277	29
CLR-RODA122	Aluminum	48 in (1,219 mm)	30392278	45
CLR-RODA152	Aluminum	60 in (1,524 mm)	30392279	51
CLR-RODA183	Aluminum	72 in (1,829 mm)	30392280	56
CLR-RODA244	Aluminum	96 in (2,438 mm)	30392281	71
CLR-RODS004	Stainless Steel	1.61 in (41 mm)	30392293	13
CLR-RODS005	Stainless Steel	2 in (51 mm)	30392294	13
CLR-RODS015	Stainless Steel	6 in (152 mm)	30392295	16
CLR-RODS030	Stainless Steel	12 in (305 mm)	30392296	27
CLR-RODS046	Stainless Steel	18 in (457 mm)	30392297	35
CLR-RODS061	Stainless Steel	24 in (610 mm)	30392298	43
CLR-RODS091	Stainless Steel	36 in (914 mm)	30392299	59
CLR-RODS122	Stainless Steel	48 in (1,219 mm)	30392300	75
CLR-RODS152	Stainless Steel	60 in (1,524 mm)	30392301	88
CLR-RODS183	Stainless Steel	72 in (1,829 mm)	30392302	105
CLR-RODS244	Stainless Steel	96 in (2,438 mm)	30392303	137



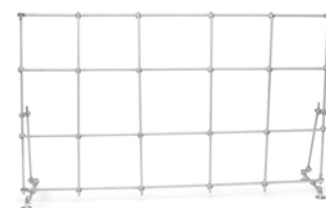
Rod with Channel Connector

Model	Material	Dimensions	Grip Range	Connection Angle	Rod Length	Adjustment Type	Maximum Capacity	Item Number	List Price (USD)
CLC-UNSMBA	Aluminum	-	0 in ; 0.78 in (0 mm ; 20 mm)	-	-	Thumbscrew	5 lb (2.27 kg)	30392265	13
CLC-HTZMBA05	Aluminum	-	-	-	2 in (51 mm)	Locking Nut	-	30392266	34
CLC-HTZMBA10	Aluminum	-	-	-	4 in (102 mm)	Locking Nut	-	30392267	37
CLC-HTZMBA15	Aluminum	-	-	-	6 in (152 mm)	Locking Nut	-	30392268	40
CLC-HTZMBA20	Aluminum	-	-	-	8 in (203 mm)	Locking Nut	-	30392269	43
CLC-SHGRPA	Aluminum	7.75 in (197 mm)	-	Fixed 90°	-	Thumbscrew	-	30392311	262



Buret Holder Kit

Model	Material	Dimensions	Rod Length	Size	Item Number	List Price (USD)
CLS-BTSETS	Stainless Steel	7 in x 1 in x 13 in (178 mm x 25 mm x 330 mm)	22.76 in (578 mm)	micro – 100 mL burets	30392231	412
CLS-BTSETA	Nickel plated	7 in x 1 in x 13 in (178 mm x 25 mm x 330 mm)	22.76 in (578 mm)	micro – 100 mL burets	30392313	289



Lab Frame Kit

Model	Material	Dimensions	Size	Item Number	List Price (USD)
CLR-FRAMEAS	Aluminum	18 in x 24 in x 24 in (457 mm x 610 mm x 610 mm)	Small	30392304	535
CLR-FRAMEAM	Aluminum	18 in x 24 in x 48 in (457 mm x 610 mm x 1,219 mm)	Medium	30392305	675
CLR-FRAMEAL	Aluminum	18 in x 48 in x 48 in (457 mm x 1,219 mm x 1,219 mm)	Large	30392306	1040
CLR-FRAMEAX	Aluminum	12 in x 48 in x 72 in (305 mm x 1,219 mm x 1,829 mm)	Extra Large	30392307	1435
CLR-FRAMEAH	Aluminum	21.7 in x 75 in x 72 in (551 mm x 1,905 mm x 1,829 mm)		30392309	2075
CLR-FRAMESS	Stainless Steel	18 in x 24 in x 24 in (457 mm x 610 mm x 610 mm)	Small	30392323	910
CLR-FRAMESM	Stainless Steel	18 in x 24 in x 48 in (457 mm x 610 mm x 1,219 mm)	Medium	30392324	1295
CLR-FRAMESL	Stainless Steel	18 in x 48 in x 48 in (457 mm x 1,219 mm x 1,219 mm)	Large	30392325	1815
CLR-FRAMESX	Stainless Steel	12 in x 48 in x 72 in (305 mm x 1,219 mm x 1,829 mm)	Extra Large	30392326	1995
CLR-FRAMESH	Stainless Steel	21.7 in x 75 in x 72 in (551 mm x 1,905 mm x 1,829 mm)	-	30392328	3875
CLR-FHOODSS	Stainless Steel	12 in x 36 in x 38 in (305 mm x 914 mm x 965 mm)	-	30392329	1165
CLR-FHOODSM	Stainless Steel	12 in x 36 in x 50 in (305 mm x 914 mm x 1,270 mm)	-	30392330	1265
CLR-FHOODSL	Stainless Steel	12 in x 36 in x 62 in (305 mm x 914 mm x 1,575 mm)	-	30392331	1360
CLR-FHOODSX	Stainless Steel	12 in x 36 in x 86 in (305 mm x 914 mm x 2,184 mm)	-	30392332	1560



Model	Item Number	List Price (USD)
CLR-CHROMA	30392308	252
CLR-RODAX	30392333	116



Support Plates

Model	Material	Adjustment Type	Platform Size	Size	Item Number	List Price (USD)
CLR-PLATEAR	Aluminum		6 in (152 mm)		30392342	89
CLR-PLATEAS	Aluminum	Thumbscrew	9.5 in x 6.5 in (241 mm x 165 mm)	Small	30392349	162
CLR-PLATEAL	Aluminum	Thumbscrew	12.75 in x 9 in (324 mm x 229 mm)	Medium	30392350	260
CLR-PLATEAX	Aluminum	Thumbscrew	15.75 in x 12 in (400 mm x 305 mm)	Large	30392351	324



Lab Frame Foot

Model	Material	Dimensions	Grip Range	Adjustment Type	Item Number	List Price (USD)
CLR-LFOOTZ	Nickel plated	1.25 in x 2.3 in (32 mm x 58.4 mm)	0 in ; 0.51 in (0 mm ; 13 mm)	Set Screw	30392263	30
CLR-LFOOTS	Stainless Steel	1.25 in x 2.3 in x 2.3 in (58.4 mm x 32 mm x 58.4 mm)	0 in ; 0.51 in (0 mm ; 13 mm)	Set Screw	30392356	58



Connector

Model	Material	Grip Range	Connection Angle	Adjustment Type	Item Number	List Price (USD)
CLC-RDENDS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392222	43
CLC-LTTCEA	Aluminum	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392255	243
CLC-RDENDZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392256	19
CLC-SCONNZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392257	26
CLC-HOOKCZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew	30392258	16
CLC-CHANLZ	Nickel plated	-	-	Set Screw	30392261	27
CLC-MTRODZ	Nickel plated	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew & Set Screw	30392262	43
CLC-EN2ENA	Aluminum	0 in ; 0.51 in (0 mm ; 13 mm)	End to End	Set Screw	30392264	28
CLC-SCONNS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Set Screw	30392355	40
CLC-HOOKCS	Stainless Steel	0 in ; 0.51 in (0 mm ; 13 mm)	Fixed 90°	Thumbscrew	30392358	38



Support Stand Base

Model	Material	Dimensions	Item Number	List Price (USD)
CLR-RBASECS	Cast Iron	4 in x 6 in (102 mm x 152 mm)	30392359	49
CLR-RBASECM	Cast Iron	5 in x 8 in (127 mm x 203 mm)	30392360	77
CLR-RBASECL	Cast Iron	6 in x 9 in (152 mm x 229 mm)	30392361	101
CLR-RBASECX	Cast Iron	8 in x 10 in (203 mm x 254 mm)	30392362	147
CLR-TBASEC	Cast Iron	14.75 in (375 mm)	30392363	93
CLR-UBASEC	Cast Iron	7 in x 7 in (178 mm x 178 mm)	30392364	49



Lab Lift

Model	Material	Height Range	Maximum Capacity	Platform Size	Item Number	List Price (USD)
CLR-LBLFTS008	Stainless Steel	64 mm ; 127	100 lb (45.36 kg)	3 in x 3 in (76 mm x 76 mm)	30400000	214
CLR-LBLFTS010	Stainless Steel	64 mm ; 127	100 lb (45.36 kg)	4 in x 4 in (102 mm x 102 mm)	30400001	261
CLR-LBLFTS015	Stainless Steel	76 mm ; 248	133 lb (60.33 kg)	6 in x 6 in (152 mm x 152 mm)	30400002	268
CLR-LBLFTS020	Stainless Steel	76 mm ; 248	227 lb (102.97 kg)	8 in x 8 in (203 mm x 203 mm)	30400003	360
CLR-LBLFTS025	Stainless Steel	89 mm ; 330	247 lb (112.04 kg)	10 in x 10 in (254 mm x 254 mm)	30400004	391
CLR-LBLFTS030	Stainless Steel	102 mm ; 495	100 lb (45.36 kg)	12 in x 12 in (305 mm x 305 mm)	30400005	1035
CLR-LBLFTS041	Stainless Steel	102 mm ; 495	100 lb (45.36 kg)	16 in x 16 in (406 mm x 406 mm)	30400006	1830
CLR-LBLFTA010	Aluminum	64 mm ; 127	66 lb (29.94 kg)	4 in x 4 in (102 mm x 102 mm)	30400007	199
CLR-LBLFTA015	Aluminum	76 mm ; 248	132 lb (59.87 kg)	6 in x 6 in (152 mm x 152 mm)	30400008	245
CLR-LBLFTA020	Aluminum	76 mm ; 248	176 lb (79.83 kg)	8 in x 8 in (203 mm x 203 mm)	30400009	294
CLR-LBLFTA025	Aluminum	89 mm ; 330	186 lb (84.37 kg)	10 in x 10 in (254 mm x 254 mm)	30400010	386



Flex System

Model	Material	Dimensions	Grip Range	Arm Diameter	Arm Length	Item Number	List Price (USD)
CLS-FLEXSM	Nickel plated	5 in x 0.5 in x 5 in (127 mm x 13 mm x 127 mm)	-	0.51 in (13 mm)	12 in (305 mm)	30400011	327
CLS-FLEXBM	Nickel plated	-	0 mm ; 43 mm	0.51 in (13 mm)	12 in (305 mm)	30400012	290
CLS-FLEXLM	Nickel plated	-	0 mm ; 19 mm	0.51 in (13 mm)	12 in (305 mm)	30400013	252
CLS-FLEXSL	Nickel plated	5 in x 0.5 in x 5 in (127 mm x 13 mm x 127 mm)	-	0.51 in (13 mm)	18 in (457 mm)	30400014	393
CLS-FLEXBL	Nickel plated	-	0 mm ; 43 mm	0.51 in (13 mm)	18 in (457 mm)	30400015	345
CLS-FLEXLL	Nickel plated	-	0 mm ; 19 mm	0.51 in (13 mm)	18 in (457 mm)	30400016	301



Gas Cylinder Supports

Model	Material	Dimensions	Cylinder Diameter	Support Type	Item Number	List Price (USD)
CLR-703	Cast Aluminum	6 in x 18.25 in (152 mm x 464 mm)	8 in ; 9 (203 mm ; 229)	Floor Stand	30400018	417
CLR-704	Cast Aluminum	7.5 in x 18.5 in (191 mm x 470 mm)	6 in ; 9.25 (152 mm ; 235)	Floor Stand	30400019	484
CLR-711	Cast Aluminum	3.25 in x 6.25 in x 5.25 in (83 mm x 159 mm x 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400020	79
CLR-711M	Cast Aluminum	3.25 in x 6.5 in x 5.25 in (83 mm x 165 mm x 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400021	93
CLR-712	Cast Aluminum	3.25 in x 4.5 in x 6 in (83 mm x 152 mm x 152 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400022	83
CLR-713	Cast Aluminum	3 in x 15.5 in (76 mm x 394 mm)	7 in ; 9.25 (178 mm ; 235)	Floor Stand	30400023	472
CLR-715	Cast Aluminum	1.88 in x 4.63 in x 8.1 in (48 mm x 118 mm x 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400024	71
CLR-715M	Cast Aluminum	1.88 in x 4.63 in x 8.1 in (48 mm x 118 mm x 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400025	86
CLR-716	Cast Aluminum	3.25 in x 6.5 in x 5.25 in (83 mm x 165 mm x 133 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400026	86
CLR-716M	Cast Aluminum	3.25 in x 6.5 in x 5.25 in (83 mm x 165 mm x 165 mm)	4 in ; 14 (102 mm ; 356)	Bench	30400027	103
CLR-717	Cast Aluminum	1.88 in x 4.63 in x 8.1 in (48 mm x 118 mm x 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400028	79
CLR-717M	Cast Aluminum	1.88 in x 4.63 in x 8.1 in (48 mm x 118 mm x 206 mm)	4 in ; 14 (102 mm ; 356)	Wall	30400029	97



Support Stand with Rod

Model	Material	Dimensions	Rod Length	Item Number	List Price (USD)
CLS-STRODS	Stainless Steel	7 in x 1 in x 13 in (178 mm x 25 mm x 330 mm)	22.76 in (578 mm)	30392232	226
CLS-STRODA	Aluminum	7 in x 1 in x 13 in (178 mm x 25 mm x 330 mm)	22.76 in (578 mm)	30392312	208
CLR-STRODC046	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	18 in (475 mm)	30392334	349
CLR-STRODC058	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	23 in (584 mm)	30392335	390
CLR-STRODC071	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	28 in (711 mm)	30392336	411
CLR-STRODC091	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	36 in (914 mm)	30392337	469
CLR-STRODC102	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	40 in (1,016 mm)	30392338	498
CLR-STRODC122	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	48 in (1,219 mm)	30392339	525
CLR-STRODC152	Stainless Steel	12 in x 16.5 in (305 mm x 419 mm)	60 in (1,524 mm)	30392340	585
CLR-STRODS058	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	23 in (58.4 cm)	30400030	341
CLR-STRODS071	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	28 in (71.1 cm)	30400031	358
CLR-STRODS091	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	36 in (91.4 cm)	30400032	411
CLR-STRODS102	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	40 in (101.6 cm)	30400033	434
CLR-STRODS122	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	48 in (121.9 cm)	30400034	457
CLR-STRODS152	Stainless Steel	10.5 in x 17.75 in (267 mm x 451 mm)	60 in (152.4 cm)	30400035	506



Holder

Model	Material	Dimensions	Grip Range	Connection Angle	Adjustment Type	Size	Item Number	List Price (USD)
CLC-CLMPHA	Aluminum	2.75 in (70 mm)	0 in ; 0.66 in (0 mm ; 17 mm)	Fixed 90°	Thumbscrew	-	30392195	25
CLC-JUMBOA	Aluminum	2.25 in (57.2 mm)	0 in ; 0.83 in (0 mm ; 21 mm)	Fixed 90°	Thumbscrew	Jumbo	30392196	40
CLC-REGLRZ	Nickel plated	1.9 in (48.3 mm)	0 in ; 0.71 in (0 mm ; 18 mm)	Fixed 90°	Thumbscrew	Regular	30392197	27
CLC-SWIVLZ	Nickel plated	-	0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew	-	30392213	37
CLC-REGLRS	Stainless Steel	1.9 in (48.3 mm)	0 in ; 0.71 in (0 mm ; 18 mm)	Fixed 90°	Thumbscrew	-	30392219	66
CLC-SWIVLS	Stainless Steel	-	0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew	-	30392228	105
CLC-ALLPSZ	Nickel plated	-	0 in ; 0.75 in (0 mm ; 19 mm)	Variable	Thumbscrew	-	30392248	72
CLC-JUMBOS	Stainless Steel	2.25 in (57.2 mm)	0 in ; 0.83 in (0 mm ; 21 mm)	Fixed 90°	Thumbscrew	-	30392357	66
CLR-HOLDRS	Stainless Steel	-	-	Fixed 90°	Oversized Knob	-	30400043	83
CLC-ULTRAA	Aluminum	4 in x 4 in (102 mm x 102 mm)	0.24 in ; 0.95 in (6 mm ; 24 mm)	Fixed 90°	Oversized Knob	Heavy Duty	30400045	108



Innoculating Turntable

Model	Material	Dimensions	Platform Size	Size	Item Number	List Price (USD)
CLN-INOTTS	Cast Iron	3 in x 4.49 in (76 mm x 114 mm)	4.49 in (114 mm)	Petri Dish size, 100 mm	30400046	191
CLN-INOTTL	Cast Iron	1.26 in x 5.91 in (32 mm x 150 mm)	5.91 in (150 mm)	Petri Dish size, 100 mm, 150 mm	30400047	227



Slide Staining Rack

Model	Material	Dimensions	Item Number	List Price (USD)
CLN-STNRK	Stainless Steel	23.7 in x 3.5 in (603 mm x 89 mm)	30400048	80

NOTES

Laboratory Instruments



Streamline your water quality analysis applications using the intuitive OHAUS Starter and AquaSearcher™ Series. With the ability to handle applications from pH to Dissolved Oxygen—and everything in between—OHAUS provides powerful performance that goes where you go.



	Bench Meters								Portable Meters						Pen Meters							
	Starter 5000	AquaSearcher AB41	AquaSearcher AB33M1	AquaSearcher AB33PH	AquaSearcher AB33EC	AquaSearcher AB23PH	AquaSearcher AB23EC	Starter 2200	Starter 300	Starter 300C	Starter 300D	Starter ST400	Starter ST400M	Starter ST400D	pH meters	ORP meters	Conductivity meters	DO meters	Salinity meters	TDS meters	Multi meters	
Measurement Range	-2,000 to 20,000 pH; -30°C to 130°C	-2,000 – 20,000 pH; -2000.00 – +2000.00 mV; -10.0 °C – 125.0 °C	-2,00 – 20,000 pH; -2000.00 – +2000.00 mV; -5 °C – 110 °C	-2,00 – 16,000 pH; -2000.00 – +2000.00 mV; -1.5 °C – 110 °C	0.001 µS/cm – 1000 mS/cm; -5.0 to 110.0 °C	0.00 – 1400 pH; -1999 – 1999 mV/0 – 100 °C	00.0 µS/cm – 199.9 mS/cm; 0.0 to 100.0 °C	-2,00 to 16,00 pH, 0 °C to 100 °C	0.00 to 14.00 pH 0 °C to 100 °C	0.0 µS/cm to 199.9 mS/cm 0 °C to 100 °C	0.0 to 199.9%; 200 to 400% 0 °C to 50 °C	-2.00 – 16.00 pH -1999 – 1999 mV -5 °C – 110 °C	pH 2 ... 16.00 pH ORP -1999 ... 1999 mV Conductivity 0.0 µS/cm ... 199.9 mS/cm TDS 0.1 mg/l ... 199.9 g/l Salinity 0.0 ... 99.9 psu Resistivity 0 ... 20 MΩ-cm Temperature -5 °C ... 110 °C	0.0 to 200.0% 0 °C to 50 °C	0.00 to 14.00 pH*	-1000mV to 1000mV	0.0 to 199.9 µS/cm*	0.01 to 19.9 mg/L	0.0 to 80.0 ppt*	0 to 1000 mg/L*	0.00 to 14.00 pH, 0-1999 µS/cm, 0-19.99 mS/cm, 0-1000 mg/L, 0.0-10.0 ppt	
Input	BNC	BNC	BNC	BNC	Mini-Din	BNC	Mini-Din	BNC	BNC	Mini-Din	BNC	BNC	BNC	Mini-DIN								
Automatic Temp. Compensation	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●*	●*	●*	●*	●*	●*	●	
Manual Temp. Compensation	●	●	●	●	●	●	●	●	●		●	●	●									
Battery Power									●	●	●	●		●	●	●	●	●	●	●	●	
1 Pt. Calibration	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●*	●*	●*	●*	●*	●*	●	
2 Pt. Calibration	●	●	●	●	●	●	●	●	●		●	●	●	●	●*							
≥3 Pt. Calibration	●	●	●	●	●	●	●	●	●			●	●		●*						●	
Memory	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
Backlit LCD	●	●	●	●	●	●	●	●				●	●	●								
LCD		●	●	●	●	●	●	●	●	●	●				●	●	●	●	●	●	●	
Touchscreen	●	●	●	●	●																	
Mechanical Keys						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
USB	●	●	●	●	●							●	●									
RS232	●	●	●	●	●																	
USB Host	●															●						
GLP / Time / Date	●	●	●	●	●				●													
Multi Languages	●	●	●	●	●							●	●									
IP Protection	IP54	IP54	IP54	IP54	IP54	IP54	IP54		IP54	IP54	IP54	IP67	IP67	IP54	IP67	IP67	IP67	IP67	IP67	IP67	IP67	
Stand-alone Electrode Holder	●	●	●	●	●	●	●															
Quick Reference Operation Guide	●	●	●	●	●	●	●	●														
In-Use Cover	●	●	●	●	●	●	●															
Hold Function								●	●	●	●	●	●	●	●*	●	●	●	●	●	●	
Auto Shut Off		●	●	●	●	●	●					●	●		●	●	●	●	●	●	●	
Page No.	221	240	236	238	239	234	235	222	223	224	225	226	227	229	230	230	230	230	230	230	230	

* on specific models

	Bench Meters								Portable Meters						Pen Meters												
	ST5000	AB41PH	AB33M1	AB33PH	AB33EC	AB23PH	AB23EC	ST2200	ST400	ST400M	ST400D	ST300	ST300C	ST300D	ST10	ST20	ST20M-B	ST20M-C	ST10C	ST20C	ST10T	ST20T	ST10S	ST20S	ST10R	ST20R	ST20D
pH	●	●	●	●		●		●	●			●			●	●	●	●		●							
Cond.			●		●		●			●			●					●	●								
TDS			●		●		●						●					●		●		●					
ORP	●	●	●	●		●		●	●	●		●													●	●	
Salinity			●		●		●			●								●					●	●			
Resistivity			●		●					●																	
DO											●																●
Temp.	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●		●		●	●

STARTER 5000 PH BENCH

High Performance Benchtop pH Meter Ideal for Accurate Everyday Measurements in the Laboratory

Display

Backlit liquid crystal display (LCD), touchscreen

Communication

RS232 and USB (included). GLP/GMP data output with real-time clock.

Construction

ABS housing, standalone electrode holder, replaceable in-use cover

Design Features

3 endpoint modes, continuous measurement mode, up to 9 point calibration, 1,000 measurement memory

Operation

AC adapter (included)



A 1000-item library allows for easy recall from data storage. Flexible pH analysis from 10 sensors for calibration storage, 1 self-defined and 8 pre-defined buffer groups, 3 endpoint modes & GLP mode.

A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large touch-screen, backlit LCD display.

Featuring a USB port, IP54 housing and in-use cover, this flexible and smooth-operating bench meter is built to last.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST5000-B	-	-2.00 – 20.00 pH; -2000.00 – +2000.00 mV; -30 – 130°C	0.001 pH; 0.01 mV; 0.1 °C	30129895	1406
ST5000-F	ST350 (Included)	-2.00 – 20.00 pH; -2000.00 – +2000.00 mV; -30 – 130°C	0.001 pH; 0.01 mV; 0.1 °C	30129896	1495

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265
ORP electrode STORP1	30038555	100
Holder, Stand Alone, Electrode	30058733	95
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
Adapter Cable 9 Pin-9 Pin PC-SF40A	30059316	42
Printer, Impact, SF40A, AM	30064203	1070
pH sensor protect bottle(10 in bag)	30064800	51
pH Electrode STMICRO5	30087566	269
pH Electrode STMICRO8	30087569	288
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20
Buffer pH12.45 250ml	30100440	24
pH Electrode, ST350, EN	30129354	188

Accessories	Item Number	List Price (USD)
pH Electrode, ST260, EN	30129357	176
pH Electrode, STSURF, EN	30129470	171
In-Use-Cover, ST5000	30129897	30
pH Electrode, ST270	30240974	313
Cable, 4m, BNC, STARTER electrodes	30282603	94
pH electrode ST272	30393265	183
pH Electrode ST410	30656037	189
pH Electrode ST322	30681113	136
pH Electrode ST280	30681114	252
pH Electrode ST420	30681115	295
pH Electrode ST310	83033965	151
pH Electrode ST320	83033967	151
pH Electrode ST230	83033968	132
pH Electrode STPURE	83033969	147
Temperature Electrode STTEMP30	83033970	86
Buffer Powder pH4.01,7.00,10.01	83033971	26



STARTER 2200 PH BENCH METER

Affordable Benchtop pH Meter for Basic Laboratory Applications

Display

3.5 inch segment LCD with backlight

Construction

ABS housing, mechanical keys, built-in electrode holder

Design Features

Auto buffer recognition, two point calibration, electrode condition icon

Operation

AC adapter (included)



ST2200 is a user-friendly bench meter that clearly displays critical information - with five distinctly marked keys which allow users to operate the instrument with minimal training.

Auto buffer recognition and auto-endpoint mode make calibration and measurement simple and ideal for routine pH measurement.

The built-in electrode holder provides straightforward and convenient all-in-one operation, while the attached quick guide clearly explains the operating steps.

Model	Electrode	Measurement Range	Measurement Resolution	Temperature compensation	Item Number	List Price (USD)
ST2200-B	-	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH; 1 mV; 0.1 °C	Yes	30656033	337
ST2200-F	ST320 (Included)	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH; 1 mV; 0.1 °C	Yes	30655944	383

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265
ORP electrode STORP1	30038555	100
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
pH sensor protect bottle(10 in bag)	30064800	51
pH Electrode STMICRO5	30087566	269
pH Electrode STMICRO8	30087569	288
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20
Buffer pH12.45 250ml	30100440	24
pH Electrode, ST350, EN	30129354	188
pH Electrode, ST260, EN	30129357	176

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	171
pH Electrode, ST270	30240974	313
pH electrode ST272	30393265	183
pH Electrode ST410	30656037	189
Electrode holder AB23	30661424	80
Stirrer Compact AS20	30661425	150
pH Electrode ST322	30681113	136
pH Electrode ST280	30681114	252
pH Electrode ST420	30681115	295
pH Electrode ST310	83033965	151
pH Electrode ST320	83033967	151
pH Electrode ST230	83033968	132
pH Electrode STPURE	83033969	147
Temperature Electrode STTEMP30	83033970	86
Buffer Powder pH4.01,7.00,10.01	83033971	26



STARTER 300 PH PORTABLE

Convenient Portable pH Meter for Wherever Your Work Takes You

Display

Liquid crystal display (LCD)

Construction

ABS housing, wrist strap

Design Features

Automatic and manual temperature compensation, auto buffer recognition, calibration icon

Operation

4 AAA batteries (included)



Auto buffer recognition with four different buffer groups makes it easy to avoid errors during the calibration process.

Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results. Ideal for secure field use with a meter stand, wrist strap and durable IP54 housing.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300-B	-	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH; 1 mV; 0.1 °C	83033962	338
ST300	ST320 (Included)	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH; 1 mV; 0.1 °C	83033961	448
ST300-G*	ST320 (Included)	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH; 1 mV; 0.1 °C	30219114	468

*Includes field portable bag

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	pH Electrode, STSURF, EN	30129470	171
ORP electrode STORP2	30038553	265	pH Electrode, ST270	30240974	313
ORP electrode STORP1	30038555	100	Cable, 4m, BNC, STARTER electrodes	30282603	94
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37	pH electrode ST272	30393265	183
pH electrode protection solution(3M KCl)	30059256	29	pH Electrode ST410	30656037	189
pH sensor protect bottle(10 in bag)	30064800	51	pH Electrode ST322	30681113	136
pH Electrode STMICRO5	30087566	269	pH Electrode ST280	30681114	252
pH Electrode STMICRO8	30087569	288	pH Electrode ST420	30681115	295
Buffer pH4.01 250ml	30100425	20	Seal kit, STARTER portables	83032962	51
Buffer pH6.86 250ml	30100426	20	pH Electrode ST310	83033965	151
Buffer pH7.00 250ml	30100427	20	pH Electrode ST320	83033967	151
Buffer pH9.18 250ml	30100428	20	pH Electrode ST230	83033968	132
Buffer pH10.01 250ml	30100429	20	pH Electrode STPURE	83033969	147
Buffer pH12.45 250ml	30100440	24	Temperature Electrode STTEMP30	83033970	86
pH Electrode, ST350, EN	30129354	188	Buffer Powder pH4.01,7.00,10.01	83033971	26
pH Electrode, ST260, EN	30129357	176			



STARTER 300C CONDUCTIVITY PORTABLE

Convenient Portable Conductivity Meter for Wherever Your Work Takes You

Display

Liquid crystal display (LCD)

Construction

ABS housing, wrist strap

Design Features

Automatic temperature compensation, adjustable temperature coefficient

Operation

4 AAA batteries (included)



Four-pole linear electrode with temperature sensor safeguards the unit from polarization and pollution effects to ensure accurate readings.

Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300C-B	-	00.0 μ S/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0 – 100°C	0.01 μ S/cm; 0.1 mg/L; 0.1 °C	30092000	413
ST300C	STCON3 (Included)	00.0 μ S/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0 – 100°C	0.01 μ S/cm; 0.1 mg/L; 0.1 °C	83033964	512
ST300C-G*	STCON3 (Included)	00.0 μ S/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0 – 100°C	0.01 μ S/cm; 0.1 mg/L; 0.1 °C	30219115	548

*Includes field portable bag

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	Conductivity Electrode STCON5	30681116	182
Cond Electrode STCON7	30080693	576	Conductivity Electrode STCON8	30681117	249
Standard Conduct 10 μ S/cm 250ml	30100441	24	Cond Electrode STCON8 w Flow chamber	30681235	399
Standard Conduct 84 μ S/cm 250ml	30100442	24	Seal kit, STARTER portables	83032962	51
Standard Conduct 1413 μ S/cm 250ml	30100443	24	Conductivity Electrode, STCON3	83033972	321
Standard Conduct 12.88mS/cm 250ml	30100444	24			



STARTER 300D DO PORTABLE

Convenient Portable Dissolved Oxygen (DO) Meter for Wherever Your Work Takes You

Display

Liquid crystal display (LCD)

Construction

ABS housing, wrist strap

Design Features

30 measurement memory

Operation

4 AAA batteries (included)



The galvanic electrode can be used immediately after being powered on without the typical wait time associated with dissolved oxygen meters.

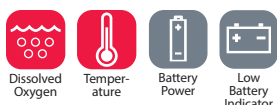
Easy-to-use and accurate with a simple calibration process, automatic temperature compensation and fast results.

The 30-measurement library stores data for future reference and allows the user to easily recall the last calibration data with one quick touch.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST300D-B	-	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 ppm; 1 ppm; 0.1 mg/L; 0.1 °C;	30031656	399
ST300D	STTEMP30 (Included); STDO11 (Included)	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 ppm; 1 ppm; 0.1 mg/L; 0.1 °C;	30031655	706
ST300D-G*	STTEMP30 (Included); STDO11 (Included)	20.0 – 45.0 mg/L; 0.00 – 19.99; 200 – 400%; 0 – 50°C	0.1%; 1%; 1 mg/L; 0.1 ppm; 1 ppm; 0.1 mg/L; 0.1 °C;	30219116	758

*Includes field portable bag

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	Seal kit, STARTER portables	83032962	51
DO Electrode, STDO11	30031639	390	Temperature Electrode STTEMP30	83033970	86
Zero Oxygen Chemicals, STARTER	30059257	25			



STARTER 400 PH PORTABLE

Durable, Waterproof Battery-Operated pH Meters Ideal for Field Testing!

Display

Backlit Liquid Crystal Display (LCD)

Communication

Built-in micro-USB port

Construction

IP67 waterproof housing, IP67 probes, rubber cover

Design Features

Data storage of up to 1000 items

Operation

Rechargeable lithium battery



Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400 is ideal for prolonged use in any field environment.

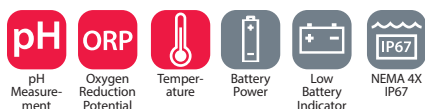
Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.

The ST400 features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400-B	-	-2.00 – 16.00 pH; -1999 – 1999 mV; -5 °C – 110 °C	0.01 pH; 1 mV; 0.1 °C	30468964	502
ST400-F	ST320 IP67 3m (Included)	-2.00 – 16.00 pH; -1999 – 1999 mV; -5 °C – 110 °C	0.01 pH; 1 mV; 0.1 °C	30468965	584
ST400-G*	ST320 IP67 3m (Included)	-2.00 – 16.00 pH; -1999 – 1999 mV; -5 °C – 110 °C	0.01 pH; 1 mV; 0.1 °C	30468966	616

*Includes field portable bag

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	pH Electrode, ST260, EN	30129357	176
ORP electrode STORP2	30038553	265	pH Electrode, STSURF, EN	30129470	171
ORP electrode STORP1	30038555	100	pH Electrode, ST270	30240974	313
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37	pH electrode ST272	30393265	183
pH electrode protection solution(3M KCl)	30059256	29	pH Electrode ST320 IP67 3m	30468960	194
pH sensor protect bottle(10 in bag)	30064800	51	pH Electrode ST410	30656037	189
pH Electrode STMICRO5	30087566	269	pH Electrode ST322	30681113	136
pH Electrode STMICRO8	30087569	288	pH Electrode ST280	30681114	252
Buffer pH4.01 250ml	30100425	20	pH Electrode ST420	30681115	295
Buffer pH6.86 250ml	30100426	20	pH Electrode ST310	83033965	151
Buffer pH7.00 250ml	30100427	20	pH Electrode ST320	83033967	151
Buffer pH9.18 250ml	30100428	20	pH Electrode ST230	83033968	132
Buffer pH10.01 250ml	30100429	20	pH Electrode STPURE	83033969	147
Buffer pH12.45 250ml	30100440	24	Temperature Electrode STTEMP30	83033970	86
pH Electrode, ST350, EN	30129354	188	Buffer Powder pH4.01,7.00,10.01	83033971	26



STARTER 400M PH & CONDUCTIVITY PORTABLE

Durable, Waterproof Battery-Operated Multi-Parameter Meters Ideal for Field Testing!

Display

Backlit Liquid Crystal Display (LCD)

Communication

Built-in micro-USB port

Construction

IP67 waterproof housing, IP67 probes, rubber cover

Design Features

Data storage of up to 1000 items

Operation

Rechargeable lithium battery



Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400 is ideal for prolonged use in any field environment.

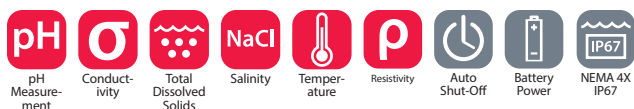
Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.

The ST400M features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400M-B	-	-2.00 – 16.00 pH; -1999 – 1999 mV; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0-99.9 psu 0-20 MΩ·cm; -5 °C – 110 °C	0.01 pH; 1 mV 0.1 µS/cm; 0.01 mg/L; 0.01 psu; 0.01 Ω·cm; 0.1 °C	30468990	779
ST400M-F	ST320 IP67 3m; STCON3 IP67 3m (Both Included)	-2.00 – 16.00 pH; -1999 – 1999 mV; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0-99.9 psu 0-20 MΩ·cm; -5 °C – 110 °C	0.01 pH; 1 mV 0.1 µS/cm; 0.01 mg/L; 0.01 psu; 0.01 Ω·cm; 0.1 °C	30468991	969
ST400M-G*	ST320 IP67 3m; STCON3 IP67 3m (Both Included)	-2.00 – 16.00 pH; -1999 – 1999 mV; 00.0 µS/cm – 199.9 mS/cm; 0.1 mg/L – 199.9 g/L (TDS); 0-99.9 psu 0-20 MΩ·cm; -5 °C – 110 °C	0.01 pH; 1 mV 0.1 µS/cm; 0.01 mg/L; 0.01 psu; 0.01 Ω·cm; 0.1 °C	30468992	1000

*Includes field portable bag

Accessories on next page



STARTER 400M PH & CONDUCTIVITY PORTABLE ACCESSORIES

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	pH Electrode, STSURF, EN	30129470	171
ORP electrode STORP2	30038553	265	pH Electrode, ST270	30240974	313
ORP electrode STORP1	30038555	100	pH electrode ST272	30393265	183
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37	Cond standard 500µs/cm, 250ml	30393269	24
pH electrode protection solution(3M KCl)	30059256	29	pH Electrode ST320 IP67 3m	30468960	194
pH sensor protect bottle(10 in bag)	30064800	51	Conductivity Electrode STCON3 IP67	30468962	424
Cond Electrode STCON7	30080693	576	pH Electrode ST410	30656037	189
pH Electrode STMICRO5	30087566	269	pH Electrode ST322	30681113	136
pH Electrode STMICRO8	30087569	288	pH Electrode ST280	30681114	252
Buffer pH4.01 250ml	30100425	20	pH Electrode ST420	30681115	295
Buffer pH6.86 250ml	30100426	20	Conductivity Electrode STCON5	30681116	182
Buffer pH7.00 250ml	30100427	20	Conductivity Electrode STCON8	30681117	249
Buffer pH9.18 250ml	30100428	20	Cond Electrode STCON8 w Flow chamber	30681235	399
Buffer pH10.01 250ml	30100429	20	pH Electrode ST310	83033965	151
Buffer pH12.45 250ml	30100440	24	pH Electrode ST320	83033967	151
Standard Conduct 10µs/cm 250ml	30100441	24	pH Electrode ST230	83033968	132
Standard Conduct 84µs/cm 250ml	30100442	24	pH Electrode STPURE	83033969	147
Standard Conduct 1413µs/cm 250ml	30100443	24	Temperature Electrode STTEMP30	83033970	86
Standard Conduct 12.88mS/cm 250ml	30100444	24	Buffer Powder pH4.01,7.00,10.01	83033971	26
pH Electrode, ST350, EN	30129354	188	Conductivity Electrode, STCON3	83033972	321
pH Electrode, ST260, EN	30129357	176			

STARTER 400D DO PORTABLE

High-Performance, Low-Maintenance Dissolved Oxygen (DO) Meter with Optical Technology for Accurate Measurements

Display

Backlit Color Liquid Crystal Display (LCD)

Construction

ABS Housing

Design Features

99 measurement memory, last calibration data recall, auto barometric pressure measurement, auto temperature compensation with manual salinity compensation

Operation

4 AAA batteries (included)



Optical DO probe requires minimal maintenance and offers immediate measurement readings. No warm up or sample preparation needed.

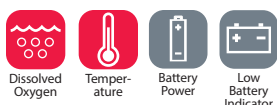
Large backlit LCD screen provides easy to read results - even in low light environments. Ideal for secure field use with a meter stand, wrist strap and durable IP54 housing.

The 99-measurement library stores data for future reference and allows for easy one-touch recall of the last calibration data.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
ST400D-B	-	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378541	616
ST400D	STDO21 (Included)	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378543	1453
ST400D-G*	STDO21 (Included)	0.00 – 20.0 mg/L(ppm); 0 – 50°C	0.01 mg/L; 0.1%; 0.1 °C	30378542	1490

*Includes field portable bag

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Portable Bag STARTER	30031635	66	DO Electrode, STDO21, 1m Cable	30378544	1190
Zero Oxygen Chemicals, STARTER	30059257	25	DO Electrode, STDO21, 5m Cable	30378545	1216
DO Probe Cap, STDO21	30253566	205	Temperature Electrode STTEMP30	83033970	86



STARTER PEN METERS

Compact Design for Fast, Convenient Electrochemistry Measurement
At Your Fingertips

Display

Liquid crystal display (LCD) display with secondary information line (on select models)

Construction

ABS Housing

Design Features

Easily replaceable electrodes, automatic shut off feature

Operation

4 1.5V batteries (included)



Small, economical pen meters offer simple, fast, and straightforward operation.

With durable IP67 waterproof ABS housing, protective sensor cap, and an automatic shutdown feature that preserves battery life, OHAUS pen meters can endure consistent use in rough, wet environments.

Equipped with a wrist strap to prevent accidental drop and damage.

Model	Meter Type	Measurement Range	Measurement Resolution	Temperature Display	Item Number	List Price (USD)
ST10	pH	0.00 – 14 pH	0.1 pH	Not Applicable	30073970	64
ST20	pH	0.0 – 99.0 °C; 0.00 – 14 pH	0.01 pH	Yes	30073971	109
ST20M-B	TDS; Conductivity; pH	0.0 – 1000 mg/L; 0.0 – 99.0 °C; 0.00 – 14 pH; 0 – 1999 µs/cm	1 µs/cm; 0.01 pH	Yes	30393199	135
ST20M-C	Conductivity; pH; Salinity	0.0 – 10.0 ppt; 0.0 – 99.0 °C; 0.00 – 14 pH; 0.00 – 19.99 ms/cm	0.1 °C; 0.1 ppt; 0.01 pH; 0.01 ms/cm	Yes	30393200	135
ST10C-A	Conductivity	0.00 – 199.9 µs/cm	0.1 µs/cm	Not Applicable	30073972	85
ST10C-B	Conductivity	0 – 1999 µs/cm	1 µs/cm	Not Applicable	30073973	85
ST10C-C	Conductivity	0.00 – 19.99 ms/cm	10 µs/cm	Not Applicable	30073974	85
ST20C-A	Conductivity	0.00 – 199.9 µs/cm; 0.0 – 99.0 °C	0.1 µs/cm	Yes	30073975	125
ST20C-B	Conductivity	0.0 – 99.0 °C; 0 – 1999 µs/cm	1 µs/cm	Yes	30073976	125
ST20C-C	Conductivity	0.0 – 99.0 °C; 0.00 – 19.99 ms/cm	10 µs/cm	Yes	30073977	125
ST10T-A	TDS	0.0 – 100.0 mg/L	0.1 mg/L	Not Applicable	30073978	96
ST10T-B	TDS	0.0 – 1000 mg/L	1 mg/L	Not Applicable	30073979	96
ST20T-A	TDS	0.0 – 100.0 mg/L; 0.0 – 99.0 °C	0.1 mg/L	Yes	30073980	125
ST20T-B	TDS	0.0 – 1000 mg/L; 0.0 – 99.0 °C	1 mg/L	Yes	30073981	125
ST10S	Salinity	0.0 – 10.0 ppt	0.1 ppt	Not Applicable	30073982	85
ST20S	Salinity	0.0 – 80.0 ppt; 0.0 – 99.0 °C	0.1 ppt	Yes	30073983	125
ST10R	ORP	-1000 – 1000 mV	1 mV	Not Applicable	30073984	139
ST20R	ORP	-1000 – 1000 mV; 0.0 – 99.0 °C	1 mV	Yes	30073985	187
ST20D	Dissolved Oxygen	0.0 – 19.9 mg/L	0.1 mg/L	Yes	30073986	435

Accessories on next page



STARTER PEN METER ACCESSORIES

Accessories	Item Number	List Price (USD)
pH electrode protection solution(3M KCl)	30059256	29
Pen Electrode, ST10	30087992	42
Pen Electrode, ST20	30087993	75
Pen Electrode, ST10C-A ST10T-A	30087994	61
Pen Electrode, ST10C-B ST10T-B	30087995	61
Pen Electrode, ST10C-C ST10S	30087996	61
Pen Electrode, ST20C-A ST20T-A	30087997	61
Pen Electrode, ST20C-B ST20T-B	30087998	61
Pen Electrode, ST20C-C ST20S	30087999	61
Pen Electrode, ST10R	30088020	91
Pen Electrode, ST20R	30088021	119

Accessories	Item Number	List Price (USD)
Buffer pH4.01 250ml	30100425	20
Buffer pH7.00 250ml	30100427	20
Buffer pH10.01 250ml	30100429	20
Standard Conduct 84 μ S/cm 250ml	30100442	24
Standard Conduct 1413 μ S/cm 250ml	30100443	24
Standard Conduct 12.88mS/cm 250ml	30100444	24
Pen Electrode, ST20D	30222083	255
Membrane Kit Replaceable, ST20D	30222084	114
Pen Electrode, ST20M-B	30393203	68
Pen Electrode, ST20M-C	30393204	68

STARTER ELECTRODES

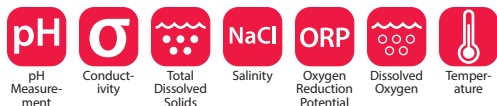
OHAUS Precision Powers the Starter Electrodes

Construction

Metal, glass, or plastic shaft

Design Features

Suitable for Various Applications



All sturdy and durable electrodes are constructed of either plastic or glass shafts and built to withstand daily use.

Most electrodes include a temperature sensor, which powers automatic temperature compensation and ensures accurate measurements.

All electrodes fit perfectly in the electrode holders on OHAUS bench meters and electrode clips on all OHAUS portable meters.

Model	Electrode Type	Shaft Material	Item Number	List Price (USD)
ST210	pH	Plastic	83033966	70
ST230	pH	Glass	83033968	132
ST260	pH	Glass	30129357	176
ST270	pH	Glass	30240974	313
ST272	pH	Plastic	30393265	183
ST280	pH	Glass	30681114	252
ST310	pH	Plastic	83033965	151
ST320	pH	Plastic	83033967	151
ST320 IP67 3m	pH	Plastic	30468960	194
ST322	pH	Plastic	30681113	136
ST350	pH	Glass	30129354	188
ST410	pH	Glass	30656037	189
ST420	pH	Glass	30681115	295
STMICRO5	pH	Glass	30087566	269
STMICRO8	pH	Glass	30087569	288
STPURE	pH	Glass	83033969	147
STCON3	Conductivity	Plastic	83033972	321
STCON3 IP67 3m	Conductivity	Plastic	30468962	424
STCON5	Conductivity	Glass	30681116	182
STCON7	Conductivity	Plastic	30080693	576
STCON8	Conductivity	Glass	30681117	249
STCON8C	Conductivity	Glass	30681235	399
STDO11	DO	Plastic	30031639	390
STDO21-1	DO	Plastic	30378544	1190
STDO21-5	DO	Plastic	30378545	1216
STORP1	ORP	Plastic	30038555	100
STORP2	ORP	Glass	30038553	265
STSURF	pH	Plastic	30129470	171
STTEMP30	Temperature	Stainless Steel	83033970	86
STREF1	Reference	Glass	30059253	156

Accessories on next page

STARTER ELECTRODE ACCESSORIES

Accessories	Item Number	List Price (USD)
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
Zero Oxygen Chemicals, STARTER	30059257	25
pH sensor protect bottle(10 in bag)	30064800	51
Buffer pH1.68 250ml	30100424	24
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20

Accessories	Item Number	List Price (USD)
Buffer pH12.45 250ml	30100440	24
Standard Conduct 10 μ S/cm 250ml	30100441	24
Standard Conduct 84 μ S/cm 250ml	30100442	24
Standard Conduct 1413 μ S/cm 250ml	30100443	24
Standard Conduct 12.88mS/cm 250ml	30100444	24
DO Probe Cap, STDO21	30253566	205
Cable, 4m, BNC, STARTER electrodes	30282603	94
Cond standard 500 μ S/cm, 250ml	30393269	24
Buffer Powder pH4.01,7.00,10.01	83033971	26

AQUASEARCHER™ AB23PH BENCH METER

Simple to Use Benchtop Meter for Easily Measuring pH and ORP

Display

5 inch segment LCD with backlight

Construction

ABS housing, mechanical keys, standalone electrode holder

Design Features

Auto buffer recognition, two point calibration, electrode condition icon

Operation

AC adapter (included)



With an intuitive design and auto buffer recognition, AB23PH is an easy and straightforward meter for pH measurement.

Large bright LCD display with complete measurement information simplifies operation and allows you to monitor the results from a distance.

Featuring a compact stand-alone electrode holder, AB23PH increases the flexibility of experiments and fits ideally in any lab.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB23PH-B	-	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH 1 mV; 0.1 °C;	30589820	392
AB23PH-F	ST320 (Included)	0.00 – 14.00 pH; -1999 – 1999 mV; 0 – 100°C	0.01 pH 1 mV; 0.1 °C;	30589821	446

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265
ORP electrode STORP1	30038555	100
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
pH sensor protect bottle(10 in bag)	30064800	51
pH Electrode STMICRO5	30087566	269
pH Electrode STMICRO8	30087569	288
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20
Buffer pH12.45 250ml	30100440	24
pH Electrode, ST350, EN	30129354	188
pH Electrode, ST260, EN	30129357	176

Accessories	Item Number	List Price (USD)
pH Electrode, STSURF, EN	30129470	171
pH Electrode, ST270	30240974	313
pH electrode ST272	30393265	183
pH Electrode ST410	30656037	189
Electrode holder AB23	30661424	80
Stirrer Compact AS20	30661425	150
pH Electrode ST322	30681113	136
pH Electrode ST280	30681114	252
pH Electrode ST420	30681115	295
pH Electrode ST310	83033965	151
pH Electrode ST320	83033967	151
pH Electrode ST230	83033968	132
pH Electrode STPURE	83033969	147
Temperature Electrode STTEMP30	83033970	86
Buffer Powder pH4.01,7.00,10.01	83033971	26



AQUASEARCHER™ AB23EC BENCH METER

Simple-to-Use Benchtop Meter Designed to Easily Measure Conductivity, TDS and Salinity

Display

5 inch segment LCD with backlight

Construction

ABS housing, mechanical keys, standalone electrode holder

Design Features

99 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation

Operation

AC adapter (included)



With six instructional menu buttons and auto temperature compensation, the AB23EC is an easy and straightforward meter for measurement.

A large 5-inch backlit LCD display with complete measurement information simplifies operation and allows you to monitor the results from a distance.

Featuring a compact stand-alone electrode holder, the AB23EC increases the flexibility of the experiment and fits ideally in any lab.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB23EC-B	-	00.0 $\mu\text{S}/\text{cm}$ – 199.9 mS/cm	0.01 $\mu\text{S}/\text{cm}$	30589822	410
AB23EC-F	STCON3 (Included)	00.0 $\mu\text{S}/\text{cm}$ – 199.9 mS/cm	0.01 $\mu\text{S}/\text{cm}$	30589823	513

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
Cond Electrode STCON7	30080693	576	Stirrer Compact AS20	30661425	150
Standard Conduct 10 $\mu\text{S}/\text{cm}$ 250ml	30100441	24	Conductivity Electrode STCON5	30681116	182
Standard Conduct 84 $\mu\text{S}/\text{cm}$ 250ml	30100442	24	Conductivity Electrode STCON8	30681117	249
Standard Conduct 1413 $\mu\text{S}/\text{cm}$ 250ml	30100443	24	Cond Electrode STCON8 w Flow chamber	30681235	399
Standard Conduct 12.88 mS/cm 250ml	30100444	24	Conductivity Electrode, STCON3	83033972	321
Electrode holder AB23	30661424	80			



AQUASEARCHER™ AB33M1 BENCH METER

Easy-to-Use and Accurate Multi-Parameter Benchtop Meter

Display

6.5" Segment & Dot matrix LCD with backlight

Communication

RS232, USB Device (included)

Construction

AC adapter (included)

Design Features

i-Steward, Two Independent Channels, Calibration due alarm, 1,000 measurement memory

Operation

Capacitive touch, ABS top housing, standalone electrode holder



Capable of measuring up to 7 parameters including pH, ORP, conductivity, TDS, salinity, resistivity and temperature, the AB33M1 utilizes 2 independent measuring channels which can work simultaneously.

With multifunctional touch keypads, AB33M1 makes measurement simple and fast. The intelligent i-Steward monitors the condition of electrodes, ensuring the accuracy of the results.

A 1000-item memory for measurement and calibration allows for efficient data documentation. Records are kept with date/time for traceability. RS232 and USB enable connection to external devices.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB33M1-B	-	pH = -2.00 to 20.00 pH ORP = ± 2000.0 mV Conductivity = 0.01 $\mu\text{S/cm}$ to 19.99 $\mu\text{S/cm}$ 20 $\mu\text{S/cm}$ to 199.9 $\mu\text{S/cm}$ 200 $\mu\text{S/cm}$ to 1999 $\mu\text{S/cm}$ 2.00 mS/cm to 19.99 mS/cm 20.0 mS/cm to 500.0 mS/cm TDS = 0.1mg/L to 199.9 g/L Resistivity = 2 to 100 M Ω -cm Salinity = 0 to 100 psu Temperature = -5.0 to 110.0°C	pH = 0.1/0.01 pH ORP = 0.1mV Conductivity = 0.01 $\mu\text{S/cm}$ minimum; auto-range TDS = 0.01 mg/L minimum, auto-range Resistivity = 0.01 Ω -cm auto-range Salinity = 0.01 psu minimum, auto-range Temperature = 0.1 °C	30589824	786
AB33M1-F	ST310 (Included); STCON3 (Included)	pH = -2.00 to 20.00 pH ORP = ± 2000.0 mV Conductivity = 0.01 $\mu\text{S/cm}$ to 19.99 $\mu\text{S/cm}$ 20 $\mu\text{S/cm}$ to 199.9 $\mu\text{S/cm}$ 200 $\mu\text{S/cm}$ to 1999 $\mu\text{S/cm}$ 2.00 mS/cm to 19.99 mS/cm 20.0 mS/cm to 500.0 mS/cm TDS = 0.1mg/L to 199.9 g/L Resistivity = 2 to 100 M Ω -cm Salinity = 0 to 100 psu Temperature = -5.0 to 110.0°C	pH = 0.1/0.01 pH ORP = 0.1mV Conductivity = 0.01 $\mu\text{S/cm}$ minimum; auto-range TDS = 0.01 mg/L minimum, auto-range Resistivity = 0.01 Ω -cm auto-range Salinity = 0.01 psu minimum, auto-range Temperature = 0.1 °C	30589825	925

Accessories on next page



AQUASEARCHER™ AB33MI BENCH METER ACCESSORIES

Accessories	Item Number	List Price (USD)	Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265	pH Electrode, ST270	30240974	313
ORP electrode STORP1	30038555	100	pH electrode ST272	30393265	183
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37	Conductivity Electrode STCON3 IP67	30468962	424
pH electrode protection solution(3M KCl)	30059256	29	pH Electrode ST410	30656037	189
pH sensor protect bottle(10 in bag)	30064800	51	ECS Special accessories	30658042	80
Cond Electrode STCON7	30080693	576	Electrode holder AB33/AB41	30661423	97
pH Electrode STMICRO5	30087566	269	Stirrer Compact AS20	30661425	150
pH Electrode STMICRO8	30087569	288	pH Electrode ST322	30681113	136
Buffer pH4.01 250ml	30100425	20	pH Electrode ST280	30681114	252
Buffer pH6.86 250ml	30100426	20	pH Electrode ST420	30681115	295
Buffer pH7.00 250ml	30100427	20	Conductivity Electrode STCON5	30681116	182
Buffer pH9.18 250ml	30100428	20	Conductivity Electrode STCON8	30681117	249
Buffer pH10.01 250ml	30100429	20	Cond Electrode STCON8 w Flow chamber	30681235	399
Buffer pH12.45 250ml	30100440	24	pH Electrode ST310	83033965	151
Standard Conduct 10µs/cm 250ml	30100441	24	pH Electrode ST320	83033967	151
Standard Conduct 84µs/cm 250ml	30100442	24	pH Electrode ST230	83033968	132
Standard Conduct 1413µs/cm 250ml	30100443	24	pH Electrode STPURE	83033969	147
Standard Conduct 12.88mS/cm 250ml	30100444	24	Temperature Electrode STTEMP30	83033970	86
pH Electrode, ST350, EN	30129354	188	Buffer Powder pH4.01,7.00,10.01	83033971	26
pH Electrode, ST260, EN	30129357	176	Conductivity Electrode, STCON3	83033972	321
pH Electrode, STSURF, EN	30129470	171			

AQUASEARCHER™ AB33PH BENCH METER

Highly Reliable and User-Friendly pH Benchtop Meter for Standard Laboratory Applications

Display

6.5" Segment & Dot matrix LCD with backlight

Communication

RS232, USB Device (included)

Construction

AC adapter (included)

Design Features

i-Steward, Calibration due alarm, 1,000 measurement memory

Operation

Capacitive touch, ABS top housing, standalone electrode holder



With multifunctional touch keypads, AB33PH makes measurement simple and fast within 3 steps. The intelligent i-Steward monitors the condition of electrodes, ensuring the accuracy of the results.

Auto endpoint mode and auto buffer recognition makes calibration easy. A 1000-item memory for pH measurements and calibration trail makes for efficient data documentation.

A user-friendly bench meter with an innovative design, including 6.5 in. large LCD display & adjustable stand-alone electrode holder. Multiple connectivity capabilities include RS232 & USB interface.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB33PH-B	-	-2.00 – 16.00 pH; -2000.00 – +2000.00 mV; -5 °C – 110 °C	0.01 pH; 1 mV; 0.1 °C	30589826	550
AB33PH-F	ST310 (Included)	-2.00 – 16.00 pH; -2000.00 – +2000.00 mV; -5 °C – 110 °C	0.01 pH; 1 mV; 0.1 °C	30589827	625

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265
ORP electrode STORP1	30038555	100
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
pH sensor protect bottle(10 in bag)	30064800	51
pH Electrode STMICRO5	30087566	269
pH Electrode STMICRO8	30087569	288
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20
Buffer pH12.45 250ml	30100440	24
pH Electrode, ST350, EN	30129354	188
pH Electrode, ST260, EN	30129357	176
pH Electrode, STSURF, EN	30129470	171

Accessories	Item Number	List Price (USD)
pH Electrode, ST270	30240974	313
pH electrode ST272	30393265	183
pH Electrode ST410	30656037	189
ECS Special accessories	30658042	80
Electrode holder AB33/AB41	30661423	97
Stirrer Compact AS20	30661425	150
pH Electrode ST322	30681113	136
pH Electrode ST280	30681114	252
pH Electrode ST420	30681115	295
pH Electrode ST310	83033965	151
pH Electrode ST320	83033967	151
pH Electrode ST230	83033968	132
pH Electrode STPURE	83033969	147
Temperature Electrode STTEMP30	83033970	86
Buffer Powder pH4.01,7.00,10.01	83033971	26



AQUASEARCHER™ AB33EC BENCH METER

Highly Reliable Conductivity/TDS/Salinity/Resistivity Benchtop Meter for Standard Laboratory Applications

Display

6.5" Segment & Dot matrix LCD with backlight

Communication

RS232, USB Device (included)

Construction

AC adapter (included)

Design Features

i-Steward, Calibration due alarm, 1,000 measurement memory

Operation

Capacitive touch, ABS top housing, standalone electrode holder



Selectable reading reference temperatures of 20 or 25 °C with linear curve options and automatic temperature compensation ensures accurate results.

Features such as auto-stop, auto temperature compensation, adjustable TDS factor, 2- or 4-cell conductivity probe compatibility make AB33EC well suited for universal laboratory applications.

A 1000-item memory for conductivity measurements and calibration trail allows for efficient data documentation. Standard RS232 and USB interface allows connection to external devices.

Model	Electrode	Measurement Range	Conductivity accuracy (±)	Item Number	List Price (USD)
AB33EC-B	-	0.001 μS/cm – 1000 mS/cm	0.5 %	30589828	502
AB33EC-F	STCON7(Included)	0.001 μS/cm – 1000 mS/cm	0.5 %	30589829	627

Accessories	Item Number	List Price (USD)
Cond Electrode STCON7	30080693	576
Standard Conduct 10μS/cm 250ml	30100441	24
Standard Conduct 84μS/cm 250ml	30100442	24
Standard Conduct 1413μS/cm 250ml	30100443	24
Standard Conduct 12.88mS/cm 250ml	30100444	24
Cond standard 500μS/cm, 250ml	30393269	24
ECS Special accessories	30658042	80

Accessories	Item Number	List Price (USD)
Electrode holder AB33/AB41	30661423	97
Stirrer Compact AS20	30661425	150
Conductivity Electrode STCON5	30681116	182
Conductivity Electrode STCON8	30681117	249
Cond Electrode STCON8 w Flow chamber	30681235	399
Conductivity Electrode, STCON3	83033972	321



AQUASEARCHER™ AB41PH BENCH METER

An Advanced, Research-Grade Benchtop pH Meter Offering Accurate, Repeatable Results

Display

6.5" Segment & Dot matrix LCD with backlight

Communication

RS232, USB Device (included), GLP/GMP data output with real-time clock

Construction

AC adapter (included)

Design Features

i-Steward, 3 endpoint modes, calibration due alarm, 1,000 measurement memory, ten most recent calibrations, password management

Operation

Capacitive touch, ABS top housing, standalone electrode holder



With selectable resolution from 0.1 to 0.001 and an intelligent i-Steward system, AB41PH is an excellent pH bench meter with high resolution and consistent accuracy.

Equipped with a 6.5-inch large LCD display and a touch keypad, AB41PH offers a simple and precise control experience.

The AB41PH features a 1000-item memory and password management for GLP documentation. Provides connectivity and data output capabilities with RS232 and USB interface.

Model	Electrode	Measurement Range	Measurement Resolution	Item Number	List Price (USD)
AB41PH-B	-	-2.000 – 20.000 pH; -2000.00 – +2000.00 mV -10.0 °C – 125.0 °C	0.001 pH; 0.1 mV; 0.1 °C;	30589830	946
AB41PH-F	ST410 pH Electrode and STTEMP Probe included	-2.000 – 20.000 pH; -2000.00 – +2000.00 mV; -10.0 °C – 125.0 °C	0.001 pH; 0.1 mV; 0.1 °C;	30589831	1075

Accessories	Item Number	List Price (USD)
ORP electrode STORP2	30038553	265
ORP electrode STORP1	30038555	100
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	37
pH electrode protection solution(3M KCl)	30059256	29
pH sensor protect bottle(10 in bag)	30064800	51
pH Electrode STMICRO5	30087566	269
pH Electrode STMICRO8	30087569	288
Buffer pH4.01 250ml	30100425	20
Buffer pH6.86 250ml	30100426	20
Buffer pH7.00 250ml	30100427	20
Buffer pH9.18 250ml	30100428	20
Buffer pH10.01 250ml	30100429	20
Buffer pH12.45 250ml	30100440	24
pH Electrode, ST350, EN	30129354	188
pH Electrode, ST260, EN	30129357	176
pH Electrode, STSURF, EN	30129470	171

Accessories	Item Number	List Price (USD)
pH Electrode, ST270	30240974	313
pH electrode ST272	30393265	183
pH Electrode ST410	30656037	189
ECS Special accessories	30658042	80
Electrode holder AB33/AB41	30661423	97
Stirrer Compact AS20	30661425	150
pH Electrode ST322	30681113	136
pH Electrode ST280	30681114	252
pH Electrode ST420	30681115	295
pH Electrode ST310	83033965	151
pH Electrode ST320	83033967	151
pH Electrode ST230	83033968	132
pH Electrode STPURE	83033969	147
Temperature Electrode STTEMP30	83033970	86
Buffer Powder pH4.01,7.00,10.01	83033971	26



TERMS AND CONDITIONS OF SALE

U.S. and Canada

Terms are net 30 days, FOB Worthington, Ohio USA, a service charge of 1.5% will be applied on invoice amounts past due 30 days • All orders for immediate release • No cancellations within 48 hours of acknowledged ship date • Prices, terms & specifications subject to change without prior notice • Drop shipments not available in Canada • OHAUS Corporation's products are warranted against defects in materials & workmanship from date of delivery through duration of the warranty period. During the warranty period OHAUS will repair, or, at its option, replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to OHAUS Corporation. All other approved returns require issuance of a Return Order number from Parsippany, NJ, USA and may be subject to a 20% restocking fee. This warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than the OHAUS Corporation or an authorized OHAUS Regional Service Center. This warranty only covers products shipped within the United States and to Canada by OHAUS Corporation to the dealer within the United States and in Canada. The warranty period for OHAUS products shall begin at the date of shipment to the end-user, or 3 months from the date of shipment to the dealer by OHAUS Corporation, whichever occurs first. A properly completed Warranty Registration Form must be received by OHAUS Corporation or product may be registered at www.ohaus.com within 30 days from the date of purchase to initiate coverage under the warranty. No other expressed or implied warranty is given by OHAUS Corporation. OHAUS Corporation shall not be liable for any consequential damages.

Outside U.S. and Canada

Payment terms: As per agreement • All prices Ex-Factory, Worthington, Ohio USA • Service charge of 1.5% will be applied on invoice amounts past due • All approved returns require issuance of a Return Order number from Parsippany, NJ, USA • Restocking fee 20% of dealer net • Minimum order: \$50.00 • All orders for immediate release • No cancellations within 48 hours of acknowledged ship date • Prices, terms & specifications subject to change without prior notice.

Business Partner Code of Conduct

OHAUS is committed to conducting its business ethically, legally and in a socially responsible manner. We expect our business partners and Dealers to share this commitment and we have therefore developed this Business Partner Code of Conduct. It covers Ethical Conduct, Fair Competition, Environment, Health and Safety, as well as Labor Practices. This code applies to all your activities in your business relationship with us. It defines the minimum standards of business conduct we expect you to comply with in your business relationship with OHAUS. You must also comply with all applicable laws, regulations, and codes of the countries in which you operate. We encourage you to work with your own business partners to ensure they also strive to meet the principles of this code, or equivalent principles. For more information and to view the whole code, please visit ohaus.com/business-partner.

6 Month Warranty			3 Year Warranty
AquaSearcher & Starter Series Electrodes			Harvard Junior® Balances
1 Year Warranty			TJ611 Balance
Accessories	Frontier Mini Centrifuge	Scale Bases, all models	5 Year Warranty
Aviator® Scales	Hand Held Scales	SD & Catapult Scales	All Other Mechanical Balances
CKW Scales	Indicators, all models	Spring Scales	10 Year Warranty
CX & CR Scales	JE Emerald & JR Ruby Scales	AquaSearcher & Starter Series Meters	Triple Beam Pro® Balances
D500 Beam Scales	MB23 with MB27		
Defender® Scales	Navigator® Scales	TAJ Scales	
Drum & VN/VX Floor Scales	Primer® Balance	Valor® Scales	
ES Scales	PS Scales	Weights & Weight Sets	
FD Scales	Ranger® Scales	Y Series Scales	
2 Year Warranty			
Adventurer® Balances	Homogenizers	Pioneer® Balances	
Dry Block Heaters	Incubating & Incubating Cooling Shakers	PR Series Balances	
Explorer® Balances	Labjaws Clamps & Supports	Scout® STX, SPX & SJX Balances	
Frontier Micro & Multi Centrifuges	MB90 & MB120	Specialty Stirrers	
Guardian™ Hotplates & Stirrers	Open Air Shakers	Vortex Mixers	
Heavy Duty Incubating/Cooling Shakers	Achiever™ Overhead Stirrers		

The following product names, features and services are trademarks owned by OHAUS® Corporation, and are protected by international copyright laws. Those trademarks followed by (®) are registered trademarks of OHAUS Corp.; all others are trademarks of OHAUS Corp. The appropriate (®) or (™) mark should appear with its appropriate name as governed by law. Registered Trademarks: Adventurer®, Aviator®, Catapult®, Cent-O-Gram®, Defender®, Dial-O-Gram®, Explorer®, Guardian™, Navigator®, OHAUS®, Pioneer®, Primer®, Ranger®, Scout®, Triple Pro®, Trooper®, Valor®, Voyager®. Trademarks: AutoCal™, Caltest™, Champ™, FillGuide™, Harvard Junior™, InCal™, Maxi-Scoop™, Modular Concept™, Moveable FineRange™, ProgramLink™, QuadraStance™, ScientificStoreroom™, SmarText™, Traveler™, Weigh the Benefits™. Permission is required to reproduce the OHAUS Logo or OHAUS trademarks for use in printed materials or for electronic transmission. Please contact OHAUS Marketing Communications for permission.

OHAUS MINIMUM ADVERTISED PRICE (MAP) POLICY

Section 1. Purpose and Applicability:

- OHAUS Corporation ("OHAUS") has adopted this Minimum Advertised Price (MAP) policy to protect the reputation of its brand name, better serve our customers, and to properly position the OHAUS brand in the marketplace. OHAUS products which are subject to this MAP policy are defined in the Appendix.
- This Policy has been unilaterally adopted and will be enforced strictly and uniformly.
- The minimum advertised prices (MAPs) effective December 1, 2021 are set forth in the schedule below, exclusive of all state and local taxes.

Section 2. Geographic Scope and Modification:

- OHAUS has unilaterally established this Minimum Advertised Price ("MAP") Policy and it is applicable to its United States and Canadian based resellers. It may be modified at any time by OHAUS, and the minimum advertised price may be affected by promotional periods designated by OHAUS.
- No dealer's consent or agreement to this Policy is sought and no such consent or agreement will be accepted by OHAUS. OHAUS is providing this Policy to dealers strictly as notice.

Section 3. Minimum Advertised Pricing Rules and Violations:

- Resellers shall not post OHAUS products for sale in any online or other marketplace if such a posting will result in the advertisement, by the Reseller or by the marketplace, of prices below the MAPs set by OHAUS.
- Resellers are free to establish their own resale prices; however, they should not advertise OHAUS products below the minimum advertised prices (MAP) set by OHAUS.
- Advertising includes any form of providing information about pricing that is not associated with the act of purchasing or negotiating the purchase of a product. Examples of advertising include, but are not limited to, signage, catalogs, displays, mailings, flyers, internet advertisements, internet price lists, and internet "click here" links or pop-ups and similar web-based techniques. For purposes of this policy, advertising does not include responses to email inquiries, verbal communications, or prices displayed in internet "shopping carts" or "baskets."
- It is a violation of this MAP policy for any reseller to state or suggest in advertising or on a web site that a price lower than the MAP for an OHAUS product may be available during an online checkout or purchase process, including but not limited to the following: "click here for lower price," "add to cart for discounted price," "price too low to advertise," or a line through the price which indicates a lower price is available. If the customer moves a product to the online shopping cart and establishes the intent to purchase, then those further negotiations are outside this MAP Policy.
- It is not a violation of this MAP Policy to advertise that a customer may "call for price" or "email for price," "Request a Quote", specifically with respect to MAP Products, so long as no price is listed below MAP level.
- OHAUS will monitor the resale market to ensure dealers are in compliance with the MAPs set by OHAUS.
- This Policy does not apply to refurbished or discontinued OHAUS products.

Section 4. Penalties and Administration:

- Upon verification that a dealer has advertised any of OHAUS Corporation's products at a price less than the minimum advertised price established and announced by OHAUS Corporation, OHAUS will, without assuming any liability, take unilateral action including but not limited to: (1) sending warning letters to notify dealers of violations; (2) revoking buying privileges for products in violation of this policy for 30 days, 90 days and up to one year based on number of warnings (3) and indefinitely refusing to accept any new orders from any reseller. OHAUS may take any of these actions in any order.
- If a reseller with multiple websites or store locations violates this MAP Policy at any one website or store location, OHAUS will consider this to be a violation by the reseller.
- OHAUS has established an internal MAP manager. All communication regarding MAP Policy should be directed to ohausbrandprotection@ohaus.com and not to any other representative of OHAUS. The Manager is responsible for monitoring pricing and for MAP enforcement. OHAUS will not respond to any communication reporting a violation of this policy.
- In addition to other methods, OHAUS may use a third party to monitor pricing on the internet. Any third party who monitors OHAUS pricing has no authority to make any decisions about enforcement or application of this Policy or any other OHAUS business

Appendix

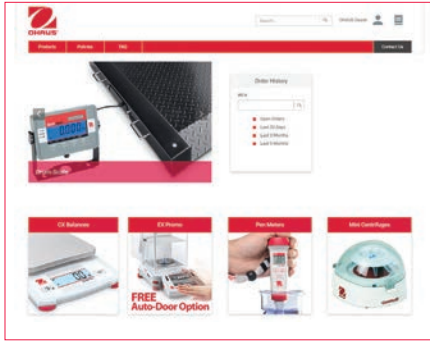
- The minimum advertised prices (MAPs) effective December 1, 2021 are set forth below, exclusive of all state and local taxes.

Product Series	MAP Price % off List Price
Valor® 7000	15%
Ranger® 7000	20%
Defender® 6000	10%
Defender® 5000 (D52 Models)	10%
Defender® 3000 (DFD Models)	30%
Explorer®	15%
Adventurer®	15%
Pioneer™	15%
PR Series	15%
Moisture Analyzers (MB Series)	15%
Scout® (SKX Series Only)	30%

Download the complete MAP Product Listing

www.OHAUS.com/MAP-Policy

DEALER RESOURCES



OHAUS Partner Shop

The OHAUS Partner Shop is purposefully aimed at delivering a better shopping experience. We've added some great new features, making it easier to use and quicker to navigate. With advanced search capabilities, a convenient comparison function, and an order template designed to help you anticipate and quickly execute all of your ordering needs, the OHAUS Partner Shop was designed with you and your customers in mind.

Why Use OHAUS Partner Shop?

- Online Ordering
- View Product Availability and Pricing
- View Order Status
- Track Shipments
- View Invoices

Contact your OHAUS representative today to experience our Partner Shop!

Contact Us

Ordering

We welcome your orders however you choose to place them!

- Email your order to sales@ohaus.com or
- Order online through the [OHAUS Partner Shop](#)

Dealer Support

We are here to support your sales! Our Customer Service Team is happy to help with any of your questions.

- Email your inquiries to cs@ohaus.com or
- Call us at **1-800-672-7722** and press 1 to reach a Customer Service Representative

Technical Support

Having technical trouble or questions on how to operate your OHAUS equipment?

Contact one of our Technical Support Specialists to assist you with your technical needs.

- Call us at **1-800-672-7722** and press 3 for Technical Support, or
- Email your question to TechSupport@OHAUS.com

DEALER SUPPORT

Dealer Zone

OHAUS.com's Dealer Zone is your one-stop resource center for marketing, sales, and service support designed to help you grow your business. Featuring a comprehensive collection of e-launch kits, product information and photos, service and support assistance, promotions, events, and much more, the OHAUS Dealer Zone is a fully-loaded, constantly updated website that allows access to every kind of marketing support. From customizable marketing email templates to product pricing and specifications, the OHAUS Dealer Zone takes the guesswork out of your sales and marketing experience, and gives you the tools you need to keep your own OHAUS materials as up-to-date and effective as possible.

Why Use OHAUS Dealer Zone?

Update your website and catalog with simple access to

- Product photos in a variety of formats (jpg, tif, 360° spins)
- Web banners for products and promotions
- Product videos for both overview tutorials as well as popular applications
- The OHAUS Magic Spreadsheet for in-depth product specifications

Downloadable content for marketing assistance, such as

- Promotional flyers
- Customizable email templates to send your customers
- Product-related infographics for a wide range of industries and applications
- Up-to-date OHAUS catalogs and brochures

One-click access to essential documents, including

- Service and instruction manuals
- Up-to-date documents and software for OHAUS products
- Service and support FAQ
- Comprehensive adapter lists and cable guides for OHAUS products

OHAUS Service Training Seminars

Several times a year, OHAUS offers its authorized dealers a Service Training Seminar, held at our facility in Parsippany, NJ. The seminar lasts three days and covers a mix of troubleshooting, load cell repair / replacement, solutions to common problems and access to available service resources. The emphasis will be placed on the practical side of equipment repair.

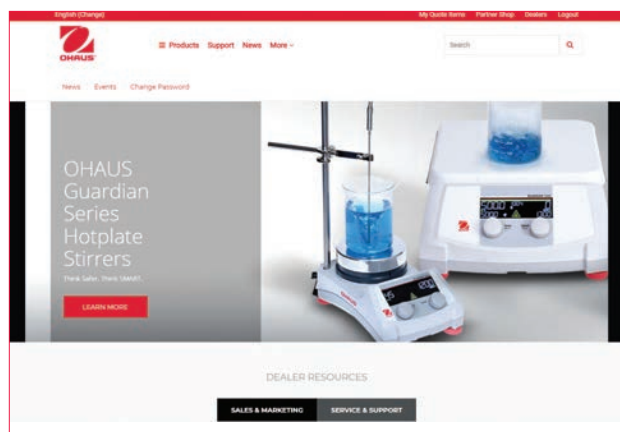
As our weighing and non-weighing portfolio continues to expand, this is also a refresher for those who have attended past seminars, or latest training for any new service personnel.

If you are interested in finding out more about these training seminars, please contact us at TechService@ohaus.com

OHAUS Webinar Series

The OHAUS Webinar Series features a variety of brief webinars designed to cover a broad range of products and topics. Courses are added continuously, and offer real-time expertise with OHAUS professionals across a variety of features, industries, and applications.

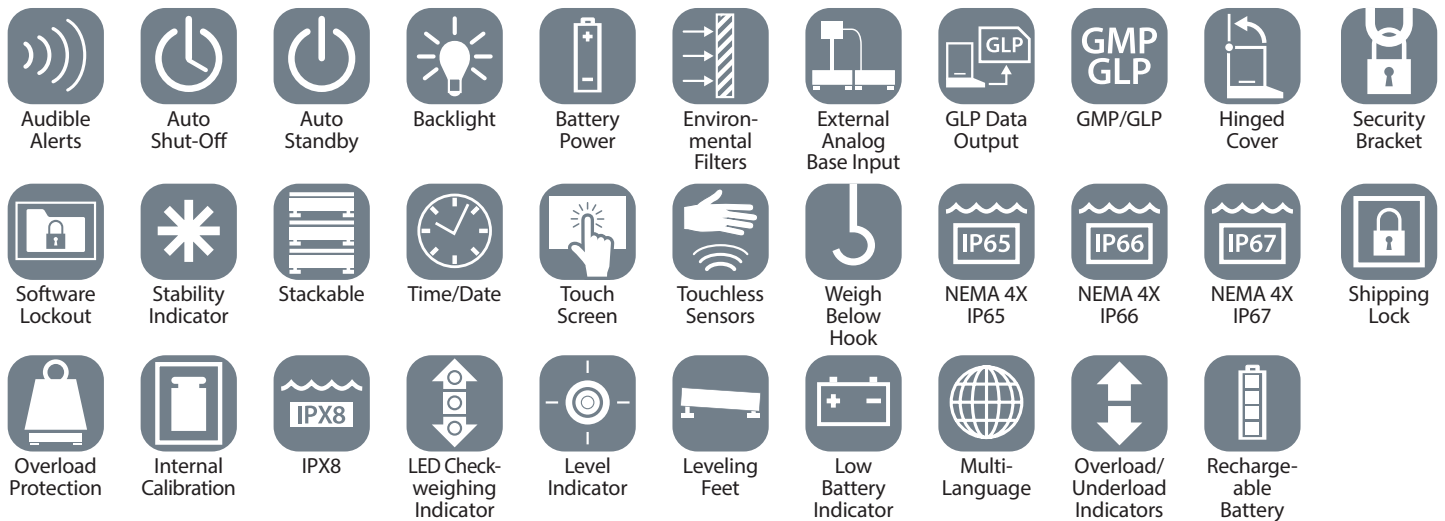
If you are interested in finding out more about our Webinar Series, please contact your regional OHAUS representative.



Applications



Features



Approvals





Laboratory Weighing



Laboratory Equipment



Laboratory Instruments



Industrial Weighing



Portable Balances



Calibration Weights

From sophisticated, semi-micro balances all the way to large capacity industrial floor scales, the OHAUS portfolio has weighing solutions to fit every workplace, as well as a wide variety of essential laboratory equipment including centrifuges, clamps and supports, and more, as well as OIML and ASTM certified weights and weight sets. Whether your applications include sample preparation, advanced formulation, or bulk packaging and checkweighing, OHAUS does it all!

OHAUS CORPORATION
7 Campus Drive
Suite 310
Parsippany, NJ 07054 USA

Tel: 800.672.7722
973.377.9000
Fax: 973.944.7177
www.ohaus.com

ISO 9001:2015
Registered Quality
Management System



Ingeniously Practical