



2020 Product Catalog



Products at Work

Balances & Scales

Moisture Analyzers

Laboratory Equipment

Water Analysis Instruments

Calibration Weights



Ingeniously Practical

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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.

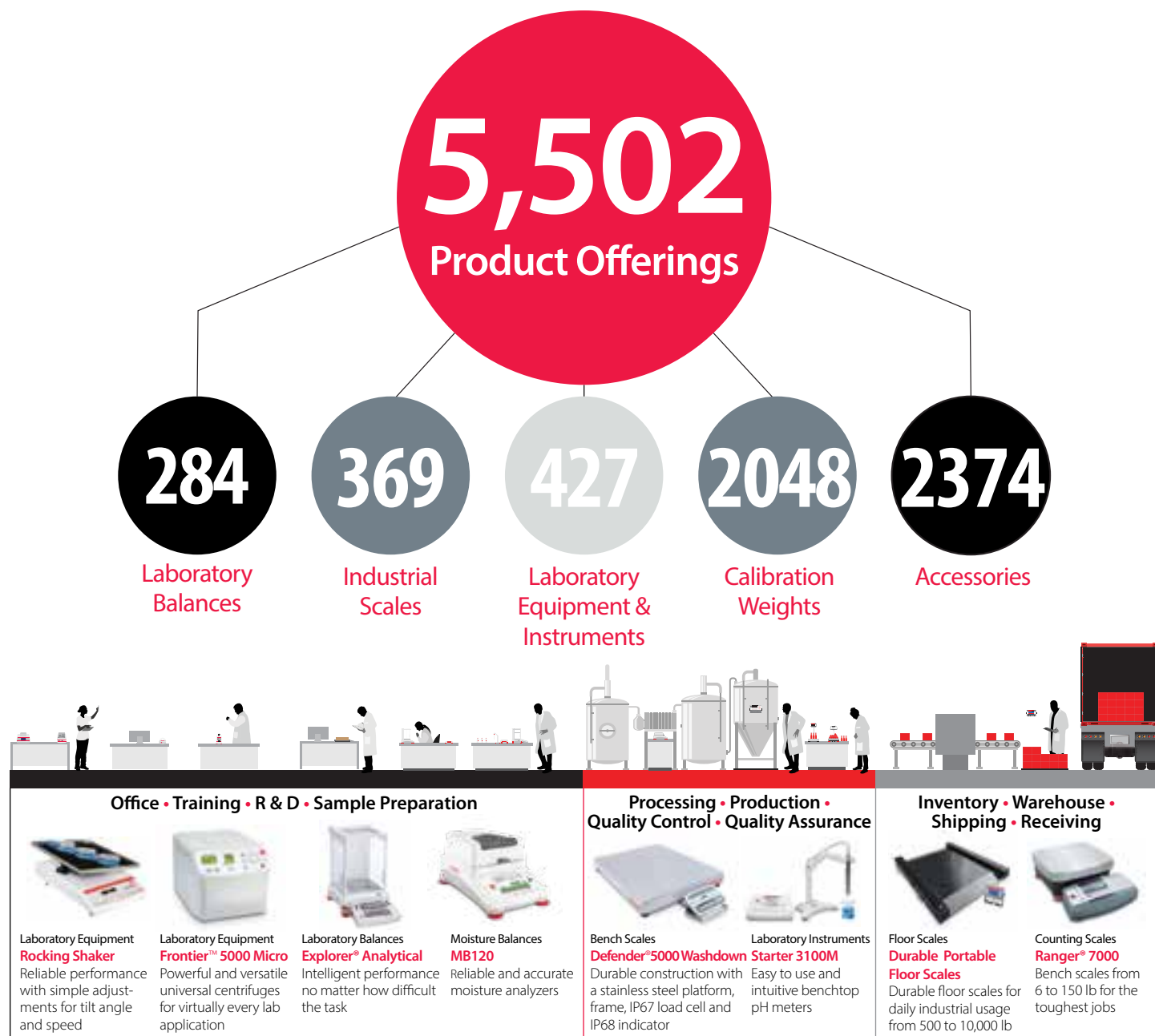
We believe this commitment means developing a relationship that benefits our customers for the long-term. Our responsive customer service and technical support representatives go the extra mile to provide value-added solutions in a timely manner. With offices in 20 countries, you can receive personalized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



Laboratory Balance Selector Guide

	Analytical Balances					Precision Balances				Portables		
	Explorer Semi-Micro	Pioneer Semi-Micro	Explorer	Adventurer	Pioneer	Explorer	Adventurer	Pioneer	PR Series	Navigator	Scout	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	220 g - 35000 g	220 g - 8200 g	160 g - 4200 g	320g - 5200g	220 g - 20 k g	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	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g	0.001 g - 0.1 g	0.01 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	●		●			●						
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			●*	●*		●*	●*			●*		
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○ Optional *on specific models

Explorer® Semi-Micro Balances

Advanced Functionality to Suit the Intelligent Research Lab

- 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 and automatic doors, and a frameless draftshield make Explorer balances easy and convenient to use.



Application

Weighing, Percent Weighing, Parts Counting, Checkweighing, Dynamic/Animal Weighing, Filling, Totalization, Formulation, Differential Weighing, Density Determination, Peak Hold, Pipette Adjustment, SQC

Display

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

Operation

AC Adapter (Included)

Communication

RS232, USB Host, USB Device, optional Ethernet (accessory sold separately) . GLP/GMP data output with real-time clock.

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 included on all models, fast stabilization time, four touchless sensors, built-in ionizer with automatic door models, 14 operating languages, 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.



Model	Auto Door	Capacity	Readability	Pan Size	Item No.	List Price (USD)
EX125D		51 g; 120 g	0.01 mg; 0.1 mg	Ø 3.14 in / Ø 80 mm	30139510	5562
EX125		120 g	0.01 mg		30139511	6941
EX225D		120 g; 220 g	0.01 mg; 0.1 mg		30139512	7099
EX225D/AD	•				30139513	8799
EX225/AD	•	220 g	0.01 mg		30139514	9622

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Static Ionizer, ION-100A, AM	30130302	1698
Pipette Adjustment Kit, EX Semi-Micro	30252145	1413
Dust Cover, Balance with Draft Shield	30093334	49
Auxiliary Display, AD7-RS	30472064	70
Paper Roll, (1), CBM910	80251932	19
Ink Ribbon, CBM910	80251933	54
Cable, RS232,CBM910-AV DV EX MB PA TxxP	80252571	188
Density Kit, Solids	80253384	757

Accessories	Item No.	List Price (USD)
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Anti-Theft Device, MB AX EX	80850043	226
Ethernet Kit, EX EX-HiCap	83021082	188
Cable, RS422, Extension, EX EX-HiCap	83021083	105
Cable, USB, Type A-B	83021085	188



Explorer® Analytical Balances

Advanced Functionality to Suit the Intelligent Research Lab

- 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, optional built-in ionizer and automatic doors, and a frameless draftshield make Explorer balances easy and convenient to use.



Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Filling, Totalization/Statistics, Formulation, Differential Weighing, Density Determination, Peak Hold, Ingredient Costing, Pipette Adjustment, SQC
Display	5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness
Operation	AC adapter (included)
Communication	RS232, USB Host, USB Device, optional Ethernet (accessory sold separately) . GLP/GMP data output with real-time clock.
Construction	Modular design, metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors and flip/sliding top door, illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, four 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, 14 operating languages



Model	Auto Door	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
EX124		120 g	0.1 mg	—	Ø 3.5 in / Ø 90 mm	83021331	4151
EX124/AD	•					30061976	5830
EX224		220 g				83021332	4613
EX224/AD	•					30061977	6360
EX324		320 g				83021335	5421
EX324/AD	•					30061978	7052

Approved Model	Auto Door	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
EX224N		220 g	0.1 mg	1 mg	Ø 3.5 in / Ø 90 mm	83021334	5074
EX224N/AD	•					30061998	6890
EX324N		320 g				83021337	5939
EX324N/AD	•					30061999	7524

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Cable, RS422, 9m, EX EX-HiCap	30078078	149
Dust Cover, Balance with Draft Shield	30093334	49
Auxiliary Display, AD7-RS	30472064	70
Printer, Thermal, STP-103, US	80251992	737
Cable, RS232, CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188

Accessories	Item No.	List Price (USD)
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Anti-Theft Device, MB AX EX	80850043	226
Software, Winwedge	80850080	515
Ethernet Kit, EX EX-HiCap	83021082	188
Cable, RS422, Extension, EX EX-HiCap	83021083	105
Cable, USB, Type A-B	83021085	188
Foot Switch Kit, EX EX-HiCap	83021086	180
In-Use-Cover, Terminal, EX	83033633	82



Explorer® Precision Balances

Advanced Functionality to Suit the Intelligent Research Lab

- 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, optional built-in ionizer and automatic doors, and a frameless draftshield make Explorer balances easy and convenient to use.

Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Filling, Totalization/Statistics, Formulation, Differential Weighing, Density Determination, Peak Hold, Ingredient Costing, Pipette Adjustment, SQC, Statistics
Display	5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness
Operation	AC adapter (included)
Communication	RS232, USB Host, USB Device, optional Ethernet (accessory sold separately) . GLP/ GMP data output with real-time clock.
Construction	Modular design, metal base, ABS top housing, stainless steel pan, glass draftshield with top mounted side doors and flip/sliding top door (1 mg models only), illuminated up-front level indicator, integral weigh below hook, security bracket, calibration lock, four 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, 14 operating languages



1 mg Model

Model	AutoCal™	Draft Shield	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
EX223/E		•	220 g	1 mg	—	Ø 5.1 in / Ø 130 mm	30061979	2335
EX223	•						83021341	2718
EX423/E			420 g				30061980	2829
EX423	•						83021342	3180
EX623	•		620 g				83021348	3889
EX1103	•		1100 g				83021350	4565
EX2202/E		•	2200 g	0.01 g		7.5 in × 8 in / 190 mm × 200 mm	30061981	2546
EX2202	•						83021356	2945
EX4202/E			4200 g				30061982	2970
EX4202	•						83021357	3385
EX6202/E			6200 g				30061983	3405
EX6202	•		0.1 g				83021360	3841
EX6201/E							30061984	2729
EX6201	•						83021361	3190
EX10202	•		10200 g	0.01 g			83021362	4560
EX10201	•			0.1 g			83021365	3500



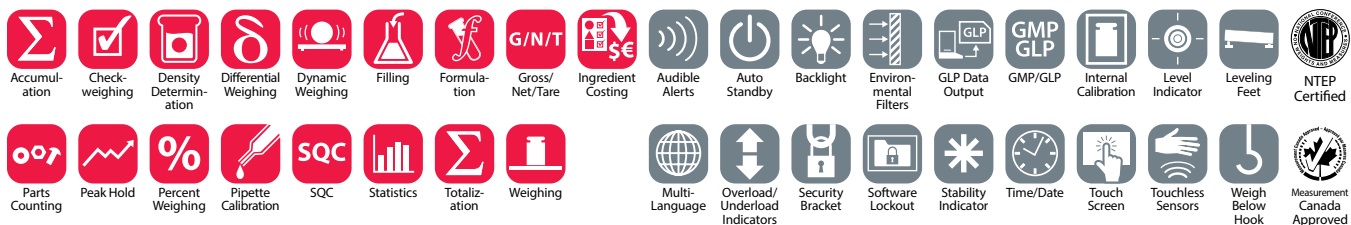
Explorer® Precision Balances

Advanced Functionality to Suit the Intelligent Research Lab

Approved Model	AutoCal™	Draft Shield	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
EX423N	•	•	420 g	1 mg	0.01 g	Ø 5.1 in / Ø 130 mm	83021344	3553
EX1103N	•		1100 g				83021352	4980
EX4202N	•		4200 g	0.01 g	0.1 g	7.5 in × 8 in / 190 mm × 200 mm	83021359	3720
EX10202N	•		10200 g				83021364	4980
EX10201N	•			0.1 g			83021367	3846

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Cable, RS422, 9m, EX EX-HiCap	30078078	149
Auxiliary Display, AD7-RS	30472064	70
Printer, Thermal, STP-103, US	80251992	737
Cable, RS232, CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188

Accessories	Item No.	List Price (USD)
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Anti-Theft Device, MB AX EX	80850043	226
Software, Winwedge	80850080	515
Ethernet Kit, EX EX-HiCap	83021082	188
Cable, RS422, Extension, EX EX-HiCap	83021083	105
Draft Shield Kit, EX	83021084	915
Cable, USB, Type A-B	83021085	188
Foot Switch Kit, EX EX-HiCap	83021086	180
Column Kit, EX	83021102	162
In-Use-Cover, Terminal, EX	83033633	82



Explorer® High Capacity Balances

Advanced Functionality to Suit the Intelligent Research Lab

- 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 and programmable IR sensors make Explorer High-Capacity balances easy and convenient to use.



Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Filling, Totalization/Statistics, Formulation, Differential Weighing, Density Determination, Peak Hold, Ingredient Costing, SQC, Statistics
Display	5.7" (145 mm) Full-color VGA graphic touchscreen display with user-controlled brightness
Operation	AC Adapter (included) or rechargeable battery (accessory sold separately)
Communication	RS232, USB Host, USB Device, optional Ethernet (accessory 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, terminal 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, 14 operating languages

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
EX12001	12000 g	0.1 g	14.8 in × 12.2 in / 377 mm × 311 mm	30057099	3872
EX24001	24000 g			30057100	4717
EX35001	35000 g			30057101	5540

Accessories	Item No.	List Price (USD)
Rechargeable Battery, EX-HiCap R71	30041295	378
Wheel Kit, Set (4), EX-HiCap	30041470	162
Printer, Impact, SF40A, AM	30064203	964
Cable, RS422, 9m, EX EX-HiCap	30078078	149
Column Kit, EX-HiCap	30078082	149
Auxiliary Display, AD7-RS	30472064	70
Printer, Thermal, STP-103, US	80251992	737
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188

Accessories	Item No.	List Price (USD)
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Anti-Theft Device, MB AX EX	80850043	226
Software, Winwedge	80850080	515
Ethernet Kit, EX EX-HiCap	83021082	188
Cable, RS422, Extension, EX EX-HiCap	83021083	105
Cable, USB, Type A-B	83021085	188
Foot Switch Kit, EX EX-HiCap	83021086	180
In-Use-Cover, Terminal, EX	83033633	82



Adventurer® Analytical Balances

Intuitive Balances Designed for a Variety of Needs

- 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.



- Application** Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Totalization/Statistics, Formulation, Density Determination, Display Hold
- Display** 4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness
- Operation** AC adapter (included)
- 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, 9 operating languages

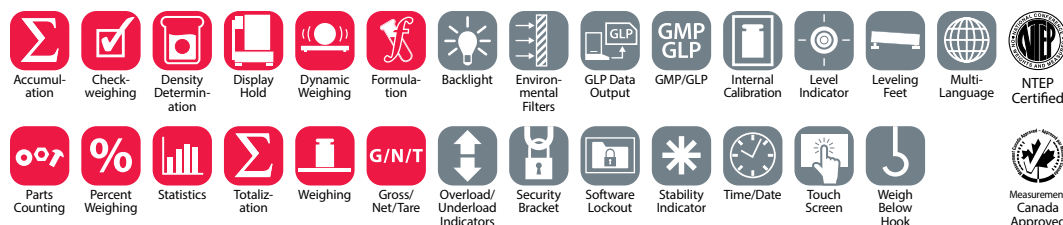


Model	AutoCal™	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
AX124	•	120 g	0.1 mg	—	Ø 3.5 in / Ø 90 mm	30100600	2996
AX124/E						30100601	2531
AX224	•	220 g				30100602	3305
AX224/E						30100603	2790
AX324	•	320 g				30100604	3616

Approved Model	AutoCal™	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
AX224N	•	220 g	0.1 mg	1 mg	Ø 3.5 in / Ø 90 mm	30100630	3511

Accessories	Item No.	List Price (USD)
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Printer, Impact, SF40A, AM	30064203	964
Dust Cover, Balance with Draft Shield	30093334	49
SP In-Use-Cover wo DS AX	30111777	29
SP In-Use-Cover DS AX	30111792	29
Auxiliary Display, AD7-RS	30472064	70

Accessories	Item No.	List Price (USD)
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Anti-Theft Device, MB AX EX	80850043	226
Cable, USB, Type A-B	83021085	188



Adventurer® Precision Balances

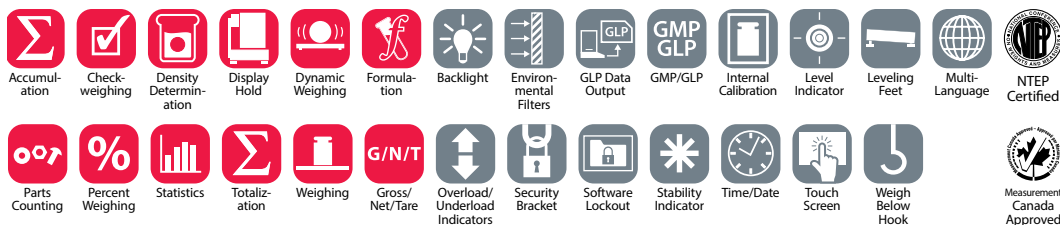
Intuitive Balances Designed for a Variety of Needs

- 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.

Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Totalization/Statistics, Formulation, Density Determination, Display Hold
Display	4.3" (109 mm) Full-color VGA graphic touchscreen with user-controlled brightness
Operation	AC adapter (included)
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 (1 mg models only), 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, 9 operating languages



Model	AutoCal™	Draft Shield	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)	
AX223	•	•	220 g	1 mg	—	Ø 5.1 in / Ø 130 mm	30100605	1835	
AX223/E							30100606	1445	
AX423	•		420 g				30100607	2221	
AX423/E							30100608	1786	
AX523	•		520 g				30100609	2430	
AX523/E							30100610	1965	
AX622	•	•	620 g	0.01 g		7.7 in × 6.9 in / 195 mm × 175 mm	30122632	1395	
AX422/E							420 g	30127981	1011
AX822/E							820 g	30127983	1191
AX1502	•						1520 g	30100611	1705
AX1502/E			30100612					1290	
AX2202	•		2200 g				30100613	1811	
AX2202/E							30100614	1395	
AX4202	•		4200 g				30100615	2276	
AX4202/E							30100616	1811	
AX5202	•		5200 g				30100617	2580	
AX2201/E			2200 g				0.1 g	30248912	1141
AX4201	•		4200 g					30122634	1501
AX4201/E								30122635	1290
AX8201	•	8200 g	30100618	1756					
AX8201/E			30100619	1445					



Approved models and accessories on next page.



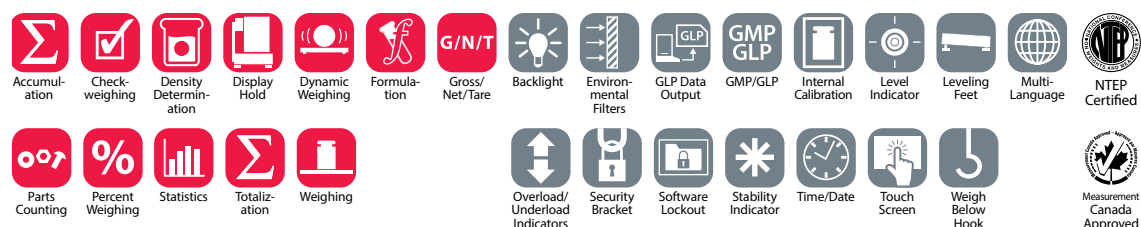
Adventurer® Precision

Intuitive Balances Designed for a Variety of Needs

Approved Model	AutoCal™	Draft Shield	Capacity	Readability	Certified Readability	Pan Size	Item No.	List Price (USD)
AX223N/E		•	220 g	1 mg	0.01 g	Ø 5.1 in / Ø 130 mm	30100631	1601
AX423N	•		420 g				30100632	2375
AX423N/E			420 g				30100633	1910
AX523N/E			520 g				30100634	2120
AX622N/E		•	620 g	0.01 g	0.1 g	7.7 in × 6.9 in / 195 mm × 175 mm	30100635	1240
AX1502N/E			1520 g				30100636	1395
AX2202N/E			2200 g				30100637	1550
AX4202N/E			4200 g				30122655	1965
AX8201N/E			8200 g	0.1 g	1 g		30100639	1550

Accessories	Item No.	List Price (USD)
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Printer, Impact, SF40A, AM	30064203	964
Dust Cover, Balance with Draft Shield	30093334	49
SP In-Use-Cover wo DS AX	30111777	29
SP In-Use-Cover DS AX	30111792	29
Auxiliary Display, AD7-RS	30472064	70

Accessories	Item No.	List Price (USD)
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Anti-Theft Device, MB AX EX	80850043	226
Cable, USB, Type A-B	83021085	188



Pioneer® Semi-Micro Balances

Affordable Balance to Achieve Reliable Results

- 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, and USB/RS232 connectivity for easy communication. Draftshield models feature a static removal (ESR) bar for convenient grounding.



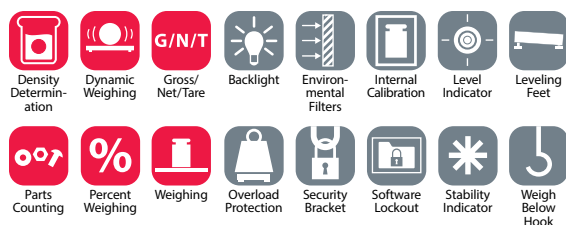
Application	Basic Weighing, Parts Counting, Percent Weighing, Animal Weighing, Density Determination
Display	Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)
Operation	AC adapter (included)
Communication	RS232 and USB device (included); GLP/GMP 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



Model	InCal	Draftshield	Capacity (g)	Readability (g)	Certified Readability	Pan Size	Item No.	List Price (USD)
PX85	•	•	82 g	0.01 mg	—	3.15 in / 80 mm	30475733	4092
PX225D	•	•	82 g; 220 g	0.01 mg; 0.1 mg			30475734	4729

Accessories	Item No.	List Price (USD)
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Printer, Impact, SF40A, AM	30064203	964
Dust Cover, Balance with Draft Shield	30093334	49
Auxiliary Display, AD7-RS	30472064	70
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737
Sinker Glass for Density Determination	83034024	631
Cable, USB, Type A-B	83021085	188
Anti-Theft Device	80850043	226
Static Ionizer, ION-100A, AM	30130302	1698

Accessories	Item No.	List Price (USD)
Cable, RS232, CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Software, Winwedge	80850080	515
In-Use-Cover, PX	30372546	44



Pioneer® Analytical Balances

Affordable Balance to Achieve Reliable Results

- 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, and USB/RS232 connectivity for easy communication. Draftshield models feature a static removal (ESR) bar for convenient grounding.



Application	Basic Weighing, Parts Counting, Percent Weighing, Animal Weighing, Density Determination
Display	Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)
Operation	AC adapter (included)
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



Model	InCal	Draftshield	Capacity (g)	Readability (g)	Certified Readability	Pan Size	Item No.	List Price (USD)
PX84/E		•	82 g	0.1 mg	—	3.54 in / 90 mm	30429845	1689
PX84	•						30429837	1925
PX124/E			120 g				30429846	1947
PX124	•						30429838	2205
PX224/E			220 g				30429847	2164
PX224	•						30430053	2432

Accessories	Item No.	List Price (USD)
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Printer, Impact, SF40A, AM	30064203	964
Dust Cover, Balance with Draft Shield	30093334	49
Auxiliary Display, AD7-RS	30472064	70
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737
Sinker Glass for Density Determination	83034024	631
Cable, USB, Type A-B	83021085	188
Anti-Theft Device	80850043	226
Static Ionizer, ION-100A, AM	30130302	1698

Accessories	Item No.	List Price (USD)
Cable, RS232, CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Software, Winwedge	80850080	515
In-Use-Cover, PX	30372546	44



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

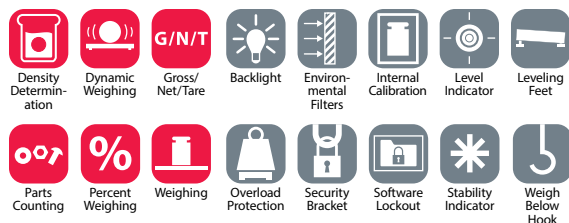
Application	Basic Weighing, Parts Counting, Percent Weighing, Animal Weighing, Density Determination
Display	Backlit Liquid Crystal Display (LCD); Second line display for additional information or guidance (dot matrix)
Operation	AC adapter (included)
Communication	RS232 and USB device (included); GLP/GMP 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



Model	InCal	Draftshield	Capacity (g)	Readability (g)	Certified Readability	Pan Size	Item No.	List Price (USD)	
PX163/E		•	160 g	1 mg	—	4.72 in / 120 mm	30429848	978	
PX163	•						30429839	1206	
PX323/E			320 g				30429849	1142	
PX323	•						30429840	1356	
PX523/E			520 g				30430057	1445	
PX523	•						30430054	1668	
PX1602/E		•	1600 g	0.01 g		7.09 in / 180 mm	30430058	942	
PX1602	•						30430055	1142	
PX2202/E			2200 g				30429850	1033	
PX2202	•						30429841	1236	
PX3202/E			3200 g				30429851	1250	
PX3202	•						30429842	1458	
PX4202/E			4200 g	30429852			1408		
PX4202	•			30429843			1638		
PX2201/E			2200 g	0.1 g			30430059	875	
PX2201	•						30430056	1061	
PX4201/E			4200 g				30429853	1014	
PX4201	•						30429844	1202	

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Dust Cover, Balance with Draft Shield	30093334	49
Auxiliary Display, AD7-RS	30472064	70

Accessories	Item No.	List Price (USD)
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737
Sinker Glass for Density Determination	83034024	631
Cable, USB, Type A-B	83021085	188
Anti-Theft Device	80850043	226
Cable, RS232, CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Density Kit, Solids	80253384	757
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Software, Winwedge	80850080	515
In-Use-Cover, PX	30372546	44



PR Series

Economical Balances For Routine Weighing Applications

- 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.



Application	Basic Weighing, Parts Counting, Percent Weighing
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included)
Communication	RS-232 port (standard), USB or Ethernet (via an interface kit)
Construction	ABS housing, stainless steel pan, glass draftshield (milligram models only), weigh below hook, security lock interface, LFT lockout switch
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, software overload/underload indicator, stability indicator

Model	InCal	Draftshield	Capacity (g)	Readability (g)	Pan Size	Item No	List Price (USD)
PR64/E			62 g			30430060	1420
PR124	•		120 g	0.1 mg	4.72 in / 120 mm	30529065	1850
PR124/E						30529066	1635
PR224	•	•	220 g			30430061	2045
PR224/E						30430062	1820
PR223/E			520 g	1 mg		30529239	900
PR523/E			1600 g			30430063	1215
PR1602/E			2200 g	0.01 g	7.09 in / 180 mm	30529067	825
PR2202/E			4200 g			30430064	950
PR4202/E			2200 g	0.1 g		30430065	1185
PR2201/E			4200 g			30529238	735
PR4201/E						30430066	850

Model	Class	InCal	Draftshield	Capacity (g)	Readability (g)	Certified Readability	Pan Size	Item No	List Price (USD)
PR323N/E	II			320 g	1 mg		4.72 in / 120 mm	30455605	1100
PR523N/E	II			520 g		0.01 g		30455606	1404
PR523N	II	•	•	320 g				30452494	1626
PR322N/E	II			520 g				30515026	1100
PR522N/E	II			820 g	0.01 g			30515027	1404
PR822N/E	III			2200 g		0.1 g	7.09 in / 180 mm	30455607	903
PR2202N/E	II			5200 g				30455668	1007
PR5202N/E	II			2200 g				30455670	1414
PR2201N/E	II			5200 g	0.1 g			30455671	1032
PR5201N/E	II			6200 g		1 g		30515038	1058
PR6201N/E	III							30455673	1131

Accessories	Item No.	List Price (USD)
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Printer, Impact, SF40A, AM	30064203	964
Auxiliary Display, AD7-RS	30472064	70
Paper Roll, (1), Thermal, STP103	80251931	21
Printer, Thermal, STP-103, US	80251992	737

Accessories	Item No.	List Price (USD)
Anti-Theft Device	80850043	226
Cable, RS232,CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67
Software, Winwedge	80850080	515



Scout® STX Touchscreen

Setting New Standards in Laboratory & Industrial Weighing

- 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.

Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Animal/Dynamic Weighing, Totalization, Density Determination, Display Hold, Mole Weighing
Display	4.3" (109 mm) full-color VGA graphic touchscreen display with user-controlled brightness
Operation	AC adapter (included) or 4 AA batteries (not included)
Communication	RS232, USB Host, USB Device, Ethernet or Bluetooth® (available as accessories)
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 stacking and 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



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
STX123	120 g	0.001 g	Ø 3.7 in / Ø 93 mm	30253005	776
STX223	220 g			30253006	868
STX222	220 g			30253007	568
STX422	420 g	0.01 g	Ø 4.7 in / Ø 120 mm	30253008	796
STX622	620 g			30253009	932
STX1202	1200 g			30253010	1064
STX2202	2200 g			30253011	1196
STX421	420 g	0.1 g	Ø 4.7 in / Ø 120 mm	30253012	323
STX621	620 g			30253013	478
STX2201	2200 g			30253014	603
STX6201	6200 g			30253015	966
STX8200	8200 g	1 g	5.5 in × 6.7 in / 140 mm × 170 mm	30253016	500

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
RS232 Kit, STX SPX ST3100M	30268982	162
USB Kit, Host, STX SPX	30268983	162
USB Kit, Device, STX SPX ST3100M	30268984	113
Bluetooth Kit, STX SPX	30268985	146
Ethernet Kit, STX SPX	30268986	176

Accessories	Item No.	List Price (USD)
Stacking & Storage Cover, x6, STX SPX	30268987	64
Stacking & Storage Cover, x1, STX SPX	30268988	22
Density Kit, STX	30269020	21
Anti-Theft Device, MB AX EX STX SPX	80850043	226
Carrying Case, Scout	30269021	127



Scout® SPX

Setting New Standards in Laboratory & Industrial Weighing

- 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.

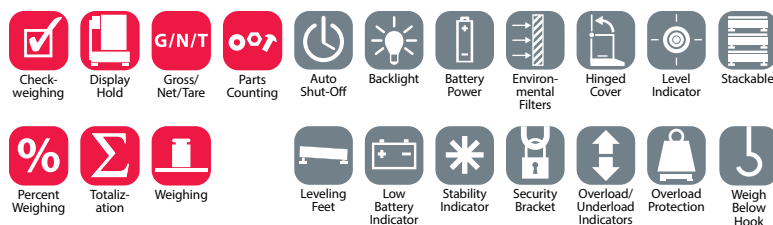
Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Totalization, Display Hold
Display	Liquid crystal display (LCD) with backlight
Operation	AC adapter (included) or 4 AA batteries (not included)
Communication	RS232, USB Host, USB Device, Ethernet or Bluetooth® (available as accessories)
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 stacking & 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



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
SPX123	120 g	0.001 g	Ø 3.7 in / Ø 93 mm	30253017	680
SPX223	220 g			30253018	761
SPX222	220 g			30253019	499
SPX422	420 g	0.01 g	Ø 4.7 in / Ø 120 mm	30253020	699
SPX622	620 g			30253021	817
SPX1202	1200 g			30253022	932
SPX2202	2200 g	0.1 g	5.5 in × 6.7 in / 140 mm × 170 mm	30253023	1049
SPX421	420 g			30253024	276
SPX621	620 g			30253025	408
SPX2201	2200 g	1 g	5.5 in × 6.7 in / 140 mm × 170 mm	30253026	513
SPX6201	6200 g			30253027	846
SPX8200	8200 g			30253028	426

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
RS232 Kit, STX SPX ST3100M	30268982	162
USB Kit, Host, STX SPX	30268983	162
USB Kit, Device, STX SPX ST3100M	30268984	113
Bluetooth Kit, STX SPX	30268985	146
Ethernet Kit, STX SPX	30268986	176

Accessories	Item No.	List Price (USD)
Stacking & Storage Cover, x6, STX SPX	30268987	64
Stacking & Storage Cover, x1, STX SPX	30268988	22
Density Kit, STX	30269020	21
Anti-Theft Device, MB AX EX STX SPX	80850043	226
Carrying Case, Scout	30269021	127



Navigator® Series

Rugged, Multi-Purpose Balances for a Wide Range of General Weighing Applications

- 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.

Application Weighing, Parts Counting, Percent Weighing, Checkweighing

Display Backlit liquid crystal display (LCD)

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

Communication RS232, USB, or Ethernet (available as accessories)

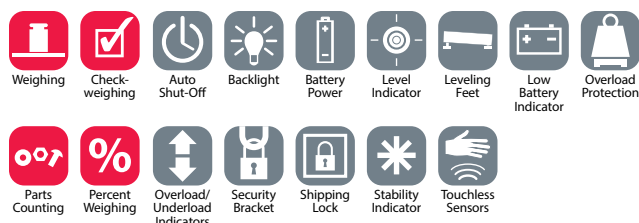
Construction ABS housing, stainless steel pan, transportation lock, menu and calibration lock switch, slip-resistant and adjustable feet, leveling bubble.

Design Features Mechanical and software overload/underload protection, touchless sensor, user selectable print and communication options



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
NV222	220g	0.01g	Ø145 mm / 5.7 in	30456410	360
NV422	420g			30456411	459
NV221	220g	0.1g	190 × 144 mm / 7.5 × 5.7 in	30456412	209
NV621	620g			30456413	308
NV1201	1200g			30456414	349
NV2201	2200g			30456415	388
NVT2201	2200g			30456416	388
NVT4201	4200g	1.0g	230 × 174 mm / 9.1 × 6.9 in	30456417	485
NVT2200	2200g			30456418	365
NVT6200	6200g			30456419	479
NVT12000	12000g			30456420	516
NVT22000	22000g			30456421	620

Accessories	Item No.	List Price (USD)
USB Interface	83032108	162
RS232 Interface	83032107	162
Ethernet Interface	83032109	162
Rechargeable Battery Kit	83032106	56
Carrying Case	30467963	106
Adapter with plugs (EU-US-UK-AU-KR)	30467987	38



Compass™ CX

Energy-Efficient Portable Scale for Workplace and In-the-Field Weighing

- Alkaline batteries provide up to 1,000 hours of continuous use, making for energy efficient weighing in the workplace, classroom, etc.
- 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.



Application	Weighing, Display Hold
Display	Liquid Crystal Display (LCD) with backlight
Operation	3 AA batteries (included) or AC adapter (not included)
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

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
CX221	220 g	0.1 g	5.6 in x 5 in / 142 mm x 128 mm	30428199	163
CX221P*	220 g	0.1 g		30467746	176
CX621	620 g	0.1 g		30428200	169
CX1201	1,200 g	0.1 g		30428201	179
CX2200	2,200 g	1 g		30428202	163
CX2200P*	2,200 g	1 g		30467747	176
CX5200	5,200 g	1 g		30428203	193
CX5200F**	5,200 g	1 g		30467762	222
CX5200P*	5,200 g	1 g		30467761	193

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

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

Accessories	Item No.	List Price (USD)
Carrying Case	30467763	64
Bowl, 1050 mL	80850075	53
Adapter, 5V 1A, US plug	30330714	24
Adapter, 5V 1A, AU plug	30333865	25

Accessories	Item No.	List Price (USD)
Adapter, 5V 1A, UK plug	30333867	25
Carat Bowl XS	12102565	21
Carat Bowl	30020842	31



Weighing



Display Hold



Auto Shut-Off



Battery Power



Overload Protection



Shipping Lock



Stability Indicator



Stackable

Compass™ CR

Quality Portable Electronic Scales Suitable for Everyday Weighing

- 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.

Application Weighing

Display Liquid crystal display (LCD)

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

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

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

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
CR221	220 g	0.1 g	5.2 in × 5 in / 132 mm × 125 mm	30428204	113
CR621	620 g	0.1 g		30428205	118
CR2200	2,200 g	1 g		30428206	113
CR5200	5,200 g	1 g		30428207	156

Accessories	Item No.	List Price (USD)
Carrying Case	30467763	64
Bowl, 1050 mL	80850075	53
Adapter with plugs (EU-US-UK-AU-KR)	30467987	38



HH Series

Convenient, Compact and Portable Weighing in a Functional Design

- HH is available in capacities ranging from 120g to 320g and is ideal for a variety of general, on-the-go weighing applications for many industries.
- A backlit display illuminates the screen for viewing in dim lighting conditions, and a power-saving automatic shut-off feature conserves battery life.
- Among HH's protective features are durable ABS housing and a snap-on cover for protection during storage and transportation.

Application Weighing

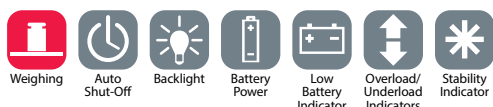
Display Liquid crystal display (LCD)

Operation 2 AAA batteries (included)

Construction ABS housing and pan, protective snap-on cover

Design Features Overload/underload indicators, external push-button calibration

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
HH120	120 g	0.1 g	3.25 in × 3 in / 83 mm × 76 mm	71142842	222
HH120D	60 g / 120 g	0.2 g		71142841	187
HH320	320 g	0.1 g		71142844	277



Portable Balances

PS Series

High Performance Portable Weighing in the Palm Of Your Hand

- 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.

Application	Weighing
Display	Liquid crystal display (LCD)
Operation	2 lithium batteries (included)
Construction	ABS housing and protective sliding pan
Design Features	Software overload/underload indicators, auto shut-off



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
PS121	120 g	0.1 g	2.5 in x 2.5 in / 64 mm x 64 mm	80104060	72
PS251	250 g			80104061	94



YA Series

Portable Precision Weighing in a Compact Case

- 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.

Application	Weighing
Display	Backlit liquid crystal display (LCD)
Operation	2 AAA batteries (included)
Construction	ABS housing, stainless steel pan, protective cover
Design Features	Mechanical and software overload indicator, auto shut-off



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
YA102	100 g	0.01 g	2.8 in x 2 in / 70 mm x 50 mm	80251910	110
YA302	300 g	0.05 g		80251911	95
YA501	500 g	0.1 g		80251912	68



Moisture Analyzer Selector Guide

	Moisture Analyzers			
	MB120	MB90	MB27	MB23
Weighing Capacity Range	120 g	90 g	90 g	110 g
Readability Range	0.001 g	0.001 g	0.001 g	0.01 g
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.	21	22	23	24

MB120

Faster, Smarter, More Efficient Moisture Analysis

- The MB120 removes the guesswork and simplifies method creation and development; SmartGuide™ helps to analyze the sample and automatically create a method with the optimal drying temperature
- Removing a major roadblock to lab efficiency, the MB120 utilizes four pre-set drying profiles, customizable shut-off criteria, and drying temperatures up to 230 °C to reduce time and improve workflow.
- Take control of your data with our internal memory capable of storing 100 methods and 1,000 measurements. Our intuitive User Management system makes exporting and sharing direct and simple.



NEW
SmartGuide™ Software

Application	Percent Moisture Determination, Percent Moisture Regain Determination, Percent Solid Determination, Weighing
Display	4.3" TFT color touchscreen display
Operation	Power cord (included)
Communication	RS232, 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 for up to 100 methods and 1000 test results for all methods, temperature guide, 40 °C to 230 °C heating temperature range (1°C increments), 13 operational languages

Model	Capacity	Readability	Moisture Readability	Pan Size	Item No.	List Price (USD)
MB120	120 g	1 mg	0.01 %	90 mm	30241165	4977

Accessories	Item No.	List Price (USD)
Pan Holder, MB90 MB120	30246947	68
In-Use-Cover, Accessory, MB90 MB120	30284478	78
Scoop, Accessory, MB90 MB120	30284477	49
Temperature Calibration Kit	11113857	567
Anti-Theft Device	80850043	226
Pan, Aluminum, Set (80), MB Series	80850086	64
Filter, Glass Fiber, Set (200)	80850087	100

Accessories	Item No.	List Price (USD)
Cage, Sample, MB Series	80252477	101
Pan, Reusable, Set (3), 7 mm, MB Series	80252478	84
Pan, Reusable, Set (3), 14 mm, MB Series	80252479	88
Printer, Impact, SF40A	30064203	964
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Printer, Thermal, STP-103, US	80251992	737
Software, Winwedge	80850080	515



MB90

Combining Speed and Precision in One Moisture Analyzer —Test More Samples in Less Time

- Halogen heating increases efficiency for faster results.
- Intuitive touchscreen menu offers step-by-step guidance for any application.
- Tool-free cleaning for easy maintenance.



Application	Percent Moisture Determination, Percent Solid Determination, Weighing
Display	4.3" TFT color touchscreen display
Operation	Power cord (included)
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 for up to two methods, 40 °C to 200 °C heating temperature range (1°C increments), 13 operational languages

Model	Capacity	Readability	Moisture Readability	Pan Size	Item No.	List Price (USD)
MB90	90 g	1 mg	0.01 %	90 mm	30241164	3919

Accessories	Item No.	List Price (USD)
Pan Holder, MB90 MB120	30246947	68
In-Use-Cover, Accessory, MB90 MB120	30284478	78
Scoop, Accessory, MB90 MB120	30284477	49
Temperature Calibration Kit	11113857	567
Anti-Theft Device	80850043	226
Pan, Aluminum, Set (80), MB Series	80850086	64

Accessories	Item No.	List Price (USD)
Filter, Glass Fiber, Set (200)	80850087	100
Cage, Sample, MB Series	80252477	101
Pan, Reusable, Set (3), 7 mm, MB Series	80252478	84
Pan, Reusable, Set (3), 14 mm, MB Series	80252479	88
Printer, Impact, SF40A	30064203	964
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Printer, Thermal, STP-103, US	80251992	737
Software, Winwedge	80850080	515



MB27

The Affordable High Capacity Moisture Analyzer

- With 0.01%, 0.001g readability, 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.



Application	Percent Moisture Determination, Percent Solid Determination, Weighing
Display	Backlit liquid crystal display (LCD)
Operation	Power cord (included)
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)

Model	Capacity	Readability	Moisture Readability	Pan Size	Item No.	List Price (USD)
MB27	90 g	1 mg	0.01 %	90 mm	30251683	2925

Accessories	Item No.	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	567
Holder, Pan, MB23 MB27	11113873	133
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US	80251992	737
In-Use-Cover, MB23 MB27	80252475	39
Pan Holder MB23 MB27	80252476	78
Cage, Sample, MB Series	80252477	101
Pan, Reusable, Set (3), 7 mm, MB Series	80252478	84

Accessories	Item No.	List Price (USD)
Pan, Reusable, Set (3), 14 mm, MB Series	80252479	88
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Cable, SF42-AV DV MB Ranger	80500571	188
Anti-Theft Device, MB AX EX	80850043	226
Software, Winwedge	80850080	515
Pan, Aluminum, Set (80), MB Series	80850086	64
Filter, Glass Fiber, Set (200)	80850087	100



MB23

Redefining Value in Moisture Analysis

- Glass-less infrared heating increases efficiency for faster results.
- User-friendly touch-button design for easy operation.
- Compact design suits any workspace.



Application	Percent Moisture Determination, Percent Solid Determination, Weighing
Display	Backlit liquid crystal display (LCD)
Operation	Power cord (included)
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)

Model	Capacity	Readability	Moisture Readability	Pan Size	Item No.	List Price (USD)
MB23	110 g	10 mg	0.1 %	Ø 3.5 in / Ø 90 mm	83999801	2925

Accessories	Item No.	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	567
Holder, Pan, MB23 MB27	11113873	133
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US	80251992	737
In-Use-Cover, MB23 MB27	80252475	39
Pan Holder MB23 MB27	80252476	78
Cage, Sample, MB Series	80252477	101
Pan, Reusable, Set (3), 7 mm, MB Series	80252478	84

Accessories	Item No.	List Price (USD)
Pan, Reusable, Set (3), 14 mm, MB Series	80252479	88
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Cable, SF42-AV DV MB Ranger	80500571	188
Anti-Theft Device, MB AX EX	80850043	226
Software, Winwedge	80850080	515
Pan, Aluminum, Set (80), MB Series	80850086	64
Filter, Glass Fiber, Set (200)	80850087	100



D500M

Economical Mechanical Bench Scale for Basic Industrial Applications

- Heavy-duty mechanical epoxy-painted steel construction makes D500M highly durable for industrial applications.
- Phenolic wheels allow for mobility and a beam lock is integrated to protect the indicator when the scale is in motion.
- Counterpoise weights allow for a maximum capacity of 1,000 lbs.

Display Easy-to-read, dual-side flat beam with a shadow-proof poise

Construction Epoxy painted steel, phenolic wheels



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D500M	1000 lb	0.5 lb	0.5 lb	28.13 in × 19.25 in / 714 mm × 489 mm	80252735	1418



Heavy Duty Solution

The Industry Standard for Precision and High Capacity Mechanical Weighing

- Oversized stainless steel platform to accommodate large samples or containers.
- A lockable Tare feature allows the operator to tare the balance once for multiple weighing procedures for containers up to 2270g.
- Covers protect the self-aligning bearings which require little to no maintenance.

Display Front and rear indicator plate

Construction Metal base and beam, stainless steel pan



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
1119-D0	20 kg	1 g	Ø 11 in / Ø 279 mm	80000000	2398

Accessories	Item No.	List Price (USD)
Weight Set, Metric, 1119-D0	80780008	241



Field Test

Accurate Weighing Even Under Adverse Conditions

- The Field Test scale is available to provide weighing results rain or shine. Without the restrictions of connecting the scale to an outlet, weighing can be conducted in any setting.
- The large stable pan will hold oversized samples without tipping, and the weighted base keeps the entire scale extremely steady.
- The portable Field Test scale can be easily moved from location to location around your work site with the integrated carrying handle.



- Display** Sliding poise and graduated beam
- Construction** Metal base and beam, oversized stainless steel pan
- Design Features** Magnetic damping, positive load stops

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
2400-12	36 lb	0.01 lb	Ø 11 in / Ø 279 mm	80000038	1529
2400-11	16 kg	5 g	Ø 11 in / Ø 279 mm	80000008	1476



Triple Beam Pro®

Best-in-Class Mechanical Balance

- 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 included 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).



- 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 damping to minimize oscillation and speed weighing, security loop, included weight set and storage compartment. Includes rod & clamp assembly for below balance weighing.

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
TP2611 with Rod and Clamp	2610 g	0.1 g	5.8 in x 5.8 in / 147 mm x 147 mm	80621692	223

Accessories	Item No.	List Price (USD)
Kit, Rod and Clamp	80780011	72
Dust Cover, Triple Beam	80780017	39
Weight Set, 2 x 1 kg, 1 x 500 g	80780108	70
Anti-Theft Device, SP PA AV NV	80850000	86
Anti-Theft Device, MB AX EX	80850043	226



Triple Beam 700 Series

The Standard by Which All Other Mechanical Balances Are Measured

- 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.

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

Design Features Metal base and beam, stainless steel pan

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



Model	Tare Beam	Capacity	Readability	Pan Size	Pan Height	Pan Type	Item No.	List Price (USD)
720-00		610 g	0.1 g	12 in × 6 in / 30.5 mm × 152 mm	2.75 in / 70 mm	Polypropylene Scoop	80000032	331
720-S0				12 in × 7.4 in / 305 mm × 188 mm	1.7 in / 43 mm	Stainless Steel Scoop	80000033	384
710-00				Ø 6 in / Ø 152 mm	—	Removable Pan	80000011	281
750-S0						Fixed Pan	80000012	155
760-00	•						80000013	290
710-T0	•					Removable Pan	80000031	343
730-00				Ø 9 in / Ø 229 mm	6 in / 152 mm	Animal Container	80000034	414

Accessories	Item No.	List Price (USD)
Subject Box	80000053	100
Scoop and Counter Weight	80780001	59
Scoop, PP, 0.8 l	80780006	39
Kit, Rod and Clamp	80780011	72
Scoop and Counter Weight, Poly	80780014	54
Scoop and Counter Weight, SST	80780015	127

Accessories	Item No.	List Price (USD)
Scoop and Counter Weight, 1.75 l	80780016	57
Dust Cover, Triple Beam	80780017	39
Weight Set, 2 × 1 kg, 1 × 500 g	80780108	70
Anti-Theft Device, SP PA AV NV	80850000	86
Clamp, Gas Cylinder	80850312	95



Weighing

Triple Beam Junior

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

- 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.



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 damping, zero adjust compensator

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
TJ611	610 g	0.1 g	Ø 5.9 in / Ø 150 mm	80252052	151

Accessories	Item No.	List Price (USD)
Dust Cover, Triple Beam	80780017	39
Anti-Theft Device, SP PA AV NV	80850000	86



Triple Beam Dial-O-Gram® 1600 Series

The Standard by Which All Others Are Measured

- 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.



Display Easy to-read deep-notched, 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.

Model	Tare Beam	Capacity	Readability	Pan Size	Pan Type	Item No.	List Price (USD)
1650-00	•	610 g	0.1 g	Ø 6 in / Ø 152 mm	Fixed Plate	80000006	363
1610-00	•				Removable Pan	80000036	420
1650-W0	•	2610 g			Fixed Plate and attachment weights	80000037	420

Accessories	Item No.	List Price (USD)
Scoop, Flat Bottomed, SST, 0.6 l	80250400	72
Scoop and Counter Weight	80780001	59
Scoop, PP, 0.8 l	80780006	39
Kit, Rod and Clamp	80780011	72
Scoop and Counter Weight, Poly	80780014	54
Scoop and Counter Weight, SST	80780015	127

Accessories	Item No.	List Price (USD)
Scoop and Counter Weight, 1.75 l	80780016	57
Dust Cover, Triple Beam	80780017	39
Weight Set, 2 × 1 kg, 1 × 500 g	80780108	70
Anti-Theft Device, SP PA AV NV	80850000	86
Clamp, Gas Cylinder	80850312	95



Dial-O-Gram® and Cent-O-Gram® 300 Series

Extremely Precise Mechanical Balance with Precise Readability

- 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.

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



Model	Capacity	Readability	Beams	Pan Size	Pan Height	Pan Type	Item No.	List Price (USD)
310-00	310 g	0.01 g	2 Beams with Dial	Ø 3.5 in / Ø 89 mm	0.5 in / 13 mm	Removable Pan	80000009	407
311-00	311 g		4 Beams				80000010	336

Accessories	Item No.	List Price (USD)
Dust Cover, Dial-O-Gram Cent-O-Gram	80780005	39
Anti-Theft Device, SP PA AV NV	80850000	86



Weighing

Harvard Junior

Two Pan Balance Designed to Teach Comparative Weighing

- 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.

Display Steel pointer

Construction ABS base, pans and bowls, metal beam

Design Features Manual damping device, spring-loaded zero adjust compensator
Includes teacher-developed activity guide



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
HJ2001	2000 g	0.5 g	Ø 6 in / Ø 150 mm	80252050	127



Weighing

Mechanical Scales & Balances

Harvard Trip®

Two Pan Balance Designed for Comparative Weighing

- 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 help ensure accurate results.

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



Model	Capacity	Readability	Beams	Pan Size	Item No.	List Price (USD)
1450-SD	2000 g	0.1 g	Singe Beam	Ø 6.2 in / Ø 152 mm	80000003	375
1550-SD			2 Beams		80000004	402
1560-SD			2 Beams and Tare Beam		80000005	421

Accessories	Item No.	List Price (USD)
Scoop, PP, 0.8 l	80780006	39
Kit, Rod and Clamp	80780011	72
Scoop and Counter Weight, Poly	80780014	54
Scoop and Counter Weight, SST	80780015	127

Accessories	Item No.	List Price (USD)
Scoop and Counter Weight, 1.75 l	80780016	57
Anti-Theft Device, SP PA AV NV	80850000	86
Weight Set, 1 kg-1 g, ASTM 6, CYL	80850115	488
Dust Cover,Storage,Harvard	80850262	39



School Balance

The Young Scientist's First Balance

- 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.

Display Plastic pointer

Construction ABS base, beam, and pans

Design Features Zero adjust compensator



Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
SB1200	2000 g	0.5 g	5.5 in × 5.5 in / 140 mm × 140 mm	80000029	65



Primer® Balance

The Scale for Budding Scientists

- 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.



Display Plastic pointer

Construction ABS base, beam, and pans

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

Model	Capacity	Readability	Pan Size	Item No.	List Price (USD)
80410-00	2000 g	1 g	4 in × 4 in / 102 mm × 102 mm	80000024	47



Weighing

Spring Scales

Producing Reproducible Results at Unbeatable Prices

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

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

Model	Capacity	Readability	Item No.	List Price (USD)
8001-MA	9 oz / 250 g	0.25 oz / 10 g	80000039	23
8002-MA	18 oz / 500 g	0.5 oz / 20 g	80000041	23
8004-MA	72 oz / 2000 g	2 oz / 50 g	80000044	23
8001-MN	250 g / 2.5 N	10 g / 0.1 N	80000014	22
8002-MN	500 g / 5 N	20 g / 0.2 N	80000015	22
8003-MN	1000 g / 10 N	25 g / 0.25 N	80000016	22
8004-MN	2000 g / 20 N	50 g / 0.5 N	80000017	22
8008-MN	5000 g / 50 N	100 g / 1 N	80000018	22
8261-MO	100 g	1 g	80000025	25
8262-MO	200 g	2 g	80000026	25
8263-MO	500 g	5 g	80000027	25
8264-MO	1000 g	10 g	80000028	25
8265-MO	2000 g	20 g	80000052	25
8001-PN	0.56 lb / 2.5 N	0.02 lb / 0.1 N	80000040	26
8002-PN	1.12 lb / 5 N	0.04 lb / 0.2 N	80000042	26
8003-PN	2.25 lb / 10 N	0.05 lb / 0.25 N	80000043	26
8004-PN	4.5 lb / 20 N	0.125 lb / 0.5 N	80000045	26
8008-PN	11.25 lb / 50 N	0.25 lb / 1 N	80000046	26



Dial Type Spring Scales

Model	Capacity	Readability	Item No.	List Price (USD)
8011-MA	9 oz / 250 g	0.125 oz / 2 g	80000047	36
8012-MA	18 oz / 500 g	0.25 oz / 5 g	80000048	36
8014-MA	2000 g / 72 oz	20 g / 0.5 oz	80000049	36
8011-MN	250 g / 2.5 N	2 g / 0.02 N	80000019	35
8012-MN	500 g / 5 N	5 g / 0.05 N	80000020	35
8014-MN	2000 g / 20 N	20 g / 0.2 N	80000022	35
8013-MN	1000 g / 10 N	10 g / 0.1 N	80000021	36
8016-00	20 N	1 / 2 N	80000023	70
8015-00	22 hg	1 / 2 hg	80000050	70
8018-50	50 N	2 N	80000051	78



OHAUS Reloading Scales

The Original OHAUS Reloading Scales are Back

- 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.



Application Weighing

Display Notched cast metal beams with large markings for easy reading using poises.

Operation Balance beams with magnetic dampening system to speed reloading.

Construction Cast metal housing and beams, stainless steel fine poises, hardened steel beam pivots, agate bearings, hanging metal pan support, gold-colored scoops with handle and spout

Design Features Scales include single leveling foot, ounce-to-grain conversion label for quick reference and large zero indicator.

Model	Capacity	Readability	Scoop Size	Item No.	List Price (USD)
5-0-2	505 grains	0.1 grains	2" diameter	30332165	92
5-0-5	511 grains			30393272	103



Weighing

[illegible]

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.



Industrial Product Selector Guide

	Compact Bench Scales										Retail	Counting Scales			Modular Bench & Floor Scales					
	Ranger 7000	Ranger 4000	Ranger 3000	FD	Valor 7000	Valor 4000	Valor 3000	Valor 2000	Valor 1000	Catapult 1000	Aviator 7000	Ranger 7000	Ranger Count 4000	Ranger Count 3000	VX/VN Floor	Drum Scale	Defender 5000	Defender 3000	CKW	ES / SD
Weighing Capacity Range (lb)	6 to 150	6 to 60	3 to 60	6 to 30	3 to 60	3 to 30	0.4 to 13.2	3 to 60	6 to 66	20 to 165	30 or 60	6 to 150	6 to 60	3 to 60	2,500 to 10,000	500 to 2,500	5 to 1,000	30 to 660	6 to 60	13 to 440
Lb, oz, lb:oz	All	All	All	All	All	All	All	All	lb, oz	lb	lb	All	All	All	All	All	All	All	All	ES -all SD lb
kg or g	●	●	●	●	●	●	●	●	●	kg		●	●	●	●	●	●	●	●	ES -all SD - kg
Parts Counting	●	●	●									●	●	●	●	●	●	●	●	●
Checkweighing	●	●	●	●	●	●		●*	●			●	●	●		●	●		●	
Percent Weighing	●	●	●	●	●	●	●					●	●				●		●	
Display Hold / Dynamic Weighing	●	●	●									●	●			●	●		●	
Totalization / Accumulation		●	●		●	●			●		●		●	●		●	●		●	SD only
Retail Price/Lb											●									
Label Printing																				
NTEP Certified or Measurement Canada Approved	●	●	●	●*	●	●	NTEP*				NTEP	●	●	●	NTEP**		●	●	●	
Graphical Display	●											●					●			
LCD										●										●
Backlit LCD			●	●	●		●		●		●			●	●	●		●	●	
LED		●				●		●					●							
Numeric Keypad	●A										●	●A	●	●			●A		●A	
Metal	●	●										●	●		● Base	●* I	●* Base			
ABS			●		●	●*		●*	●	●	●			●	●* I		●* I	●*		●*
Stainless Steel				●		●*	●	●*							●* I		●* I	●*	●	●*
Washdown IP/ NEMA Rating						●8	65 / 4X *	●8									67/ 4X **	65 / 4X *	66/ 4X	
NSF Listed/Certified				●	●	●	●	●	●										Base only	
RS232	●	●	●		●							●	●	●	●	●	●	●	●	
2nd RS232	O	O	O		O							O	O	O			O		O	
RS485/422																	O 485		O	
USB	●	O	O		O							●	O	O		O	O			
Ethernet	O	O	O		O							O	O	O		O	O			
AC or DC Relays / Digital I/O	O											O					O		O	
Wireless Connectivity																	WiFi/Blue-tooth			
GMP w/Time/Date	●											●					●		●	
Rechargeable Battery	O	●	●	●	●	●		●	●		O	O	●	●	●		O	●	O	
Disposable Batteries							●			●	●									●
Remote Scale Base Input	O											O							●	
Page No.	55	56	57	59	58	60	61	62	63	63	75	52	53	54	38-39	37	41	47	40	50-51

O Optional A Alphanumeric I Indicator **by base chosen *on specific models

Defender® 3000 Drum Scale

Convenient Portability with Floor Scale Capacity

- Our Drum Scales come in 5 models with platform sizes ranging from 30 × 30 to 36 × 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.



Application	Parts Counting, Dynamic Weighing, Checkweighing, Weight Accumulation
Display	White backlit LCD display
Operation	AC wall adapter included
Communication	Standard RS232; Optional Ethernet or USB available with RS232 kits
Construction	Epoxy-painted carbon steel frame and treaded deck, top adjustable carbon steel feet, IP67 nickel-plated alloy steel shear beam loadcells, IP65 aluminum junction box, T32ME indicator with painted metal back and ABS faceplate, 19.8 ft indicator cord with stainless steel folding cord storage cleats.
Design Features	Easy mobility with integrated stainless steel folding handles and durable polyurethane wheels, indicator cord storage using folding stainless steel cleats on side of base. Indicator includes wall mount bracket.

Model	Capacity	Readability	Platform Size	Item No.	List Price (USD)
DFD32M500ES	500 lb / 250 kg	0.1 lb / 0.05 kg	30 × 30 in / 762 × 762 mm	30469909	1550
DFD32M1000ES	1,000 lb / 500 kg	0.2 lb / 0.1 kg		30469910	1550
DFD32M2500ES	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg		30469911	1550
DFD32M1000ER	1,000 lb / 500 kg	0.2 lb / 0.1 kg	36 × 36 in / 914 × 914 mm	30469912	1799
DFD32M2500ER	2,500 lb / 1,250 kg	0.5 lb / 0.2 kg		30469913	1799

Accessories	Item No.	List Price (USD)
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141
Printer SF40A (includes RS232 cable)	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
RS232 Interface Cable to PC 9-pin	80500525	188

Accessories	Item No.	List Price (USD)
Column Kit, Painted, 39" high for Floor Scale	30047153	106
Column Kit, Stainless Steel, 39" high for Floor Scale	30047154	251
RS232 Interface Cable to PC 25-pin	80500524	188
Software, Winwedge	80850080	515



VX Series

Economical Floor Scale for Basic Industrial Applications



- VX is ruggedly constructed and includes an epoxy painted steel frame, a NEMA 4X/IP65 stainless steel indicator, 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 produce 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.

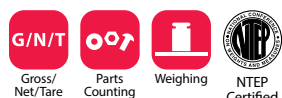
Application	Weighing, Parts Counting
Display	Backlit liquid crystal display (LCD)
Operation	Power cord (included) or rechargeable battery (included)
Communication	Easy access communication port with RS232 interface (included)
Construction	NEMA 4X/IP65 stainless steel indicator with hinged front-cover, 5mm 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

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
VX32XW5000X	5000 lb / 2200 kg	1 lb / 0.5 kg	—	5 ft × 5 ft / 1,524 mm × 1,524 mm	80253296	3091
VX32XW10000L	10000 lb / 4500 kg	2 lb / 1 kg		4 ft × 4 ft / 1,219 mm × 1,219 mm	80253297	3416
VX32XW10000X				5 ft × 5 ft / 1,524 mm × 1,524 mm	80253298	3896

Approved Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
VX32XW2500L	2500 lb / 1000 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	4 ft × 4 ft / 1,219 mm × 1,219 mm	80253294	2699
VX32XW5000L	5000 lb / 2200 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4 ft × 4 ft / 1,219 mm × 1,219 mm	80253295	2699

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Foot Kit, Set (4), VX	80252545	116
Foot Plate, Set (2), Painted, VX	80252548	83
Column Kit, Painted, Floor Scale	30047153	106
Column Kit, Stainless Steel, Floor Scale	30047154	251

Accessories	Item No.	List Price (USD)
Ramp, 48 in wide × 48 in long, 2.5 K/5 K, VX	80252766	955
Ramp, 60 in wide × 48 in long, 5 K, VX	80252767	1206
Ramp, 48 in wide × 48 in long, 10 K, VX	80252795	2048
Ramp, 60 in wide × 48 in long, 10 K, VX	80252796	2263
Bolt Kit, Floor, VX	80252838	30
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Cable, RS232, CKW TxxXW	80500552	174
Software, Winwedge	80850080	515
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141



VN Series

Economical Painted Steel Floor Scales for Basic Industrial Applications

- 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, you can 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.



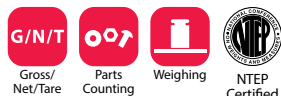
Application	Weighing, Parts Counting
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included) or rechargeable battery (included)
Communication	Easy access communication port with RS232 interface
Construction	ABS plastic indicator, black painted steel treaded platform, NEMA 4X/IP65 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, black painted steel ramps and fixed location foot mounting plate kits (accessories sold separately)

Design Features 125% overload protection

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
VN31P5000L	5000 lb / 2500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4 ft x 4 ft / 1,219 mm x 1,219 mm	80252563	1759
VN31P5000X				5 ft x 5 ft / 1,524 mm x 1,524 mm	80252564	2060

Accessories	Item No.	List Price (USD)
Column Kit, Painted, Floor Scale	30047153	106
Column Kit, SST, Floor Scale	30047154	251
Printer, Impact, SF40A, AM	30064203	964
Foot Plate, Set (2), Painted, VE VN	72198344	58
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737

Accessories	Item No.	List Price (USD)
Ramp, 48 in wide x 26.4 in long, Painted, VN	80252565	776
Ramp, 60 in wide x 26.4 in long, Painted, VN	80252566	881
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141



VN Series Floor Scale Platforms

Basic Level Floor Scale Bases

- Durable epoxy painted steel frame and platform
- NEMA4X/IP65 sealed stainless steel junction box
- IP67 sealed loadcells



Construction Black painted steel platform, raised embossed treads, fixed top plate 5mm 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

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
VN5000L	5000 lb / 2500 kg	1 lb / 0.5 kg	1 lb / 0.5 kg	4 ft x 4 ft / 1,219 mm x 1,219 mm	80252561	1515
VN5000X				5 ft x 5 ft / 1,524 mm x 1,524 mm	80252562	1769



CKW Checkweigher

Advanced Checkweighing Bench Scale for Food Processing Use

- The CKW features multiple Checkweighing options including Positive, Negative, Zero or Net and statistical capabilities to provide accurate results for advanced Checkweighing needs.
- The CKW's base is NSF Certified, supports HACCP-certified systems, and is safe for use in food processing applications.
- The base's open framework can be thoroughly cleaned to eliminate the risk of contamination caused by residue build up.

Application Weighing, Parts Counting, Percent Weighing, Checkweighing, Dynamic/Animal Weighing, Accumulation, Display Hold

Display Large backlit liquid crystal display (LCD) with secondary information line. 3 Checkweighing LEDs for indicating under, OK or over target weight ranges.

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

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

Construction NEMA 4X/IP66 stainless steel indicator, 304 grade stainless steel platform with no visible threads, rounded corners, drain holes, extended skirt and open frame, IP67 stainless steel load cell, stainless steel column and wall bracket, level indicator.

Design Features 128 SKU memories, alphanumeric keypad, 150% overload capacity protection, five operating languages, NTEP Certified and Measurement Canada Approved, Alibi memory kit (accessory sold separately).



Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
CKW3R71XW	IP66 /NEMA4X	6 lb / 3 kg	0.001 lb / 0.5 g	0.002 lb / 1 g	10 in × 10 in / 254 mm × 254 mm	30448472	1739
CKW6R71XW		15 lb / 6 kg	0.002 lb / 1 g	0.005 lb / 2 g		30448473	1739
CKW15L71XW		30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	12 in × 12 in / 305mm × 305mm	30448474	1876
CKW30L71XW		60 lb / 30 kg	0.01 lb / 5 g	0.02 lb / 10 g		30448475	1876

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US	80251992	737
PCBA Kit, Alibi Memory, R71 T71	80500503	120
Cable, RS232, CKW TxxXW	80500552	174
Relay Kit, AC, T51 T71	80500720	346
Wheel Kit, Defenders up to 600 lb / 300 kg capacity	30372146	130

Accessories	Item No.	List Price (USD)
Relay Kit, DC, T51 T71	80500727	297
Rechargeable Battery Kit, T51 T71	80500729	225
RS422/485 Kit, T51 T71	80500731	98
RS232 Kit, T51 T71	80500733	73
Wall Mount Kit, SST, T51XW T71XW	80500735	81
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251

* Base Only



Defender® 5000 Washdown

High Performance Bench Scales for Advanced Applications

- 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, frame, IP67 load cell and IP68 indicator. Defender meets NTEP 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.

Application Parts Counting with APW optimization, Checkweighing or Checkcounting, Percent Weighing, and Dynamic Weighing or Display Hold

Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Hardwired Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

Construction All stainless steel platform, base frame, indicator, column and loadcell.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52XW2WQS6	5 lb / 2.5 kg	0.0002 lb / 0.1g	0.001 lb / 0.5 g	10 × 10 in / 254 × 254 mm	30461673	1523
D52XW5WQS6	10 lb / 5 kg	0.0005 lb / 0.2 g	0.002 lb / 1 g		30461674	1523
D52XW12WQS6	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 5 g		30461675	1523
D52XW12WQR6				30461676	1654	
D52XW25WQR6	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g	12 × 12 in / 305 × 305 mm	30461677	1654
D52XW50WQR6	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461678	1654
D52XW25WQL7	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g	18 × 18 in / 457 × 457 mm	30461679	2342
D52XW50WQL7	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461680	2342
D52XW125WQL7	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30461681	2342
D52XW50WTX7	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 24 in / 457 × 610 mm	30461682	2573
D52XW125WTX7	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30461683	2573
D52XW250WTX7	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461684	2573
D52XW50WQV8	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	24 × 24 in / 610 × 610 mm	30461685	2993
D52XW125WQV8	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30461686	2993
D52XW250WQV8	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461687	3098
D52XW500WQV8*	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30461688	3098

* Aluminum IP67 loadcell

Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162
Ethernet Kit, TD52	30429666	162
Analog Output Kit, TD52	30424403	162
I/O with Relay (2 In/4 Out)	30097591	151
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189
WiFi/BT Dongle, OHAUS (requires 30424406)	30412537	225
USB Host for WiFi/BT Dongle, TD52	30424406	135
Battery Kit, Li-ion, TD52	30424405	195
In-use Cover Set, TD52XW	30424023	27

Accessories	Item No.	List Price (USD)
In-use Cover set (10), TD52XW	30469949	216
LC Extension Cable, 9 meters, D52	30424409	162
M16 Gland with Ferrite, to TD52	30379716	20
Printer SF40A (includes RS232 cable)	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Printer Holder Kit, D52	30424025	60
Software, Winwedge	80850080	515
Wheel Kit, Defenders up to 600 lb / 300 kg capacity	30372146	130



Defender® 5000 Washdown Low Profile

Multifunctional Stainless Steel Washdown Bench Scales for Standard Industrial Applications

- 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, frame, IP67 load cell and IP68 indicator. Defender meets NTEP 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.



Application Parts Counting with APW optimization, Checkweighing or Checkcounting, Percent Weighing, and Dynamic Weighing or Display Hold

Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Hardwired Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

Construction All stainless steel platform, base frame, indicator, indicator front mount and loadcell.

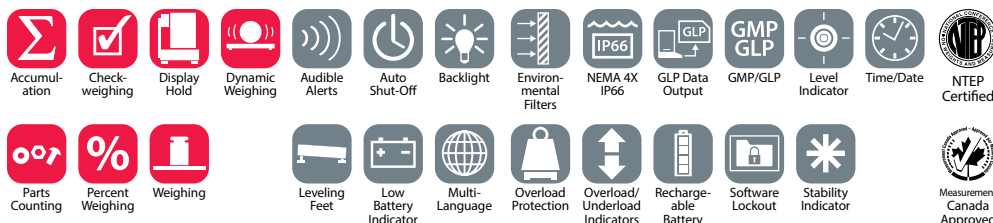
Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52XW2WQS5	5 lb / 2.5 kg	0.0002 lb / 0.1 g	0.001 lb / 0.5 g	10 × 10 in / 254 × 254 mm	30461661	1575
D52XW5WQS5	10 lb / 5 kg	0.0005 lb / 0.2 g	0.002 lb / 1 g		30461662	1575
D52XW12WQS5	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 5 g		30461663	1575
D52XW12WQR5				30461664	1707	
D52XW25WQR5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g	12 × 12 in / 305 × 305 mm	30461665	1707
D52XW50WQR5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461464	1707
D52XW25WQL5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461465	2153
D52XW50WQL5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 18 in / 457 × 457 mm	30461466	2153
D52XW125WQL5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30461467	2153
D52XW50WTX5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461668	2520
D52XW125WTX5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g	18 × 24 in / 457 × 610 mm	30461669	2520
D52XW250WTX5	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461670	2520
D52XW50WQV5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	24 × 24 in / 610 × 610 mm	30461671	2888
D52XW125WQV5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30461672	2888

Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162
Ethernet Kit, TD52	30429666	162
Analog Output Kit, TD52	30424403	162
I/O with Relay (2 In/4 Out)	30097591	151
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	225
USB Host for WiFi/BT Dongle, TD52	30424406	135
Battery Kit, Li-ion, TD52	30424405	195
In-use Cover Set, TD52XW	30424023	27

Accessories	Item No.	List Price (USD)
In-use Cover set (10), TD52XW	30469949	216
LC Extension Cable, 9 meters, D52	30424409	162
M16 Gland with Ferrite, to TD52	30379716	20
Wall Mount Kit, SST, TD52XW	30424026	81
Printer SF40A (includes RS232 cable)	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Printer Holder Kit, D52	30424025	60
Software, Winwedge	80850080	515
Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



Defender® 5000 (SS)

Multifunctional Bench Scales for Standard Industrial Applications

- 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.

Application Parts Counting with APW optimization, Checkweighing or Checkcounting, Percent Weighing, and Dynamic Weighing or Display Hold

Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

Construction Stainless steel platform, powder-coated steel base frame and column, aluminum loadcell and stainless steel indicator.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52XW12RQR1	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 12 in / 305 × 305 mm	30461689	1575
D52XW25RQR1	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461690	1575
D52XW50RQR1	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461691	1575
D52XW12RTR1	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 14 in / 305 × 355 mm	30461692	1575
D52XW25RTR1	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461693	1575
D52XW50RTR1	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461694	1575
D52XW50RQL2	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 18 in / 457 × 457 mm	30461695	1890
D52XW125RQL2	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30461696	1890
D52XW50RTX2	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461697	1995
D52XW125RTX2	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	18 × 24 in / 457 × 610 mm	30461698	1995
D52XW250RTX2	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461699	1995
D52XW50RQV3	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461700	2153
D52XW125RQV3	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	24 × 24 in / 610 × 610 mm	30461701	2153
D52XW250RQV3	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461702	2205
D52XW500RQV3	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30461703	2205
D52XW125RTV3	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	23.6 × 31.5 in / 600 × 800 mm	30461704	2678
D52XW250RTV3	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461705	2678
D52XW500RTV3	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30461706	2678

Accessories	Item No.	List Price (USD)	Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162	In-use Cover set (10), TD52XW	30469949	216
Ethernet Kit, TD52	30429666	162	LC Extension Cable, 9 meters, D52	30424409	162
Analog Output Kit, TD52	30424403	162	M16 Gland with Ferrite, to TD52	30379716	20
I/O with Relay (2 In/4 Out)	30097591	151	Printer SF40A (includes RS232 cable)	30064203	964
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189	Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	225	Cable, RS232, CKW TxxXW	80500552	174
USB Host for WiFi/BT Dongle, TD52	30424406	135	Printer Holder Kit, D52	30424025	60
Battery Kit, Li-ion, TD52	30424405	195	Software, Winwedge	80850080	515
In-use Cover Set, TD52XW	30424023	27	Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



Defender® 5000

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Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

Construction Stainless steel platform, powder-coated steel base frame and column, aluminum loadcell and ABS plastic indicator.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52P12RQR1	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 12 in / 305 × 305 mm	30461630	1418
D52P25RQR1	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461631	1418
D52P50RQR1	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461632	1418
D52P12RTR1	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 14 in / 305 × 355 mm	30461633	1418
D52P25RTR1	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461634	1418
D52P50RTR1	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461635	1418
D52P50RQL2	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 18 in / 457 × 457 mm	30461636	1733
D52P125RQL2	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30461637	1733
D52P50RTX2	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461638	1838
D52P125RTX2	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	18 × 24 in / 457 × 610 mm	30461639	1838
D52P250RTX2	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461640	1838
D52P50RQV3	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461641	1995
D52P125RQV3	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	24 × 24 in / 610 × 610 mm	30461642	1995
D52P250RQV3	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461643	2153
D52P500RQV3	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30461644	2153
D52P125RTV3	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	23.6 × 31.5 in / 600 × 800 mm	30461645	2520
D52P250RTV3	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461646	2520
D52P500RTV3	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30461647	2520

Accessories	Item No.	List Price (USD)	Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162	In-use Cover set (10), TD52P	30469948	162
Ethernet Kit, TD52	30429666	162	LC Extension Cable, 9 meters, D52	30424409	162
Analog Output Kit, TD52	30424403	162	M16 Gland with Ferrite, to TD52	30379716	20
I/O with Relay (2 In/4 Out)	30097591	151	Printer SF40A (includes RS232 cable)	30064203	964
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189	Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	225	RS232 Interface Cable to PC 9-pin	80500525	188
USB Host for WiFi/BT Dongle, TD52	30424406	135	Printer Holder Kit, D52	30424025	60
Battery Kit, Li-ion, TD52	30424405	195	Software, Winwedge	80850080	515
In-use Cover Set, TD52P	30424022	20	Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



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Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Hardwired Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

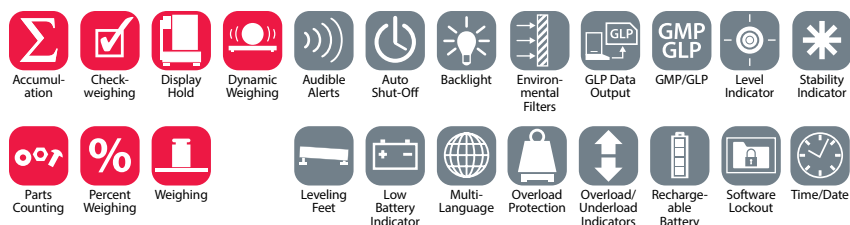
Construction Stainless steel platform and indicator front mount, powder-coated steel base frame, aluminum loadcell and stainless steel indicator.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52XW12RQR5	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 12 in / 305 × 305 mm	30467608	1497
D52XW25RQR5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30467609	1497
D52XW50RQR5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30467610	1497
D52XW12RTR5	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 14 in / 305 × 355 mm	30467611	1549
D52XW25RTR5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30467612	1549
D52XW50RTR5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30467613	1549
D52XW50RQL5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	18 × 18 in / 457 × 457 mm	30467614	1785
D52XW125RQL5					30467615	1785
D52XW50RTX5					30467616	1890
D52XW125RTX5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	18 × 24 in / 457 × 610 mm	30467617	1890
D52XW250RTX5	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30467618	1890
D52XW50RQV5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30467619	1995
D52XW125RQV5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	24 × 24 in / 610 × 610 mm	30467620	1995
D52XW250RQV5	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30470990	1995
D52XW125RTV5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	23.6 × 31.5 in / 600 × 800 mm	30467621	2363

Accessories	Item No.	List Price (USD)	Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162	In-use Cover set (10), TD52XW	30469949	216
Ethernet Kit, TD52	30429666	162	LC Extension Cable, 9 meters, D52	30424409	162
Analog Output Kit, TD52	30424403	162	M16 Gland with Ferrite, to TD52	30379716	20
I/O with Relay (2 In/4 Out)	30097591	151	Wall Mount Kit, SST, TD52XW	30424026	81
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189	Printer SF40A (includes RS232 cable)	30064203	964
WiFi/BT Dongle, OHAUS (requires 30424406)	30412537	225	Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
USB Host for WiFi/BT Dongle, TD52	30424406	135	Cable, RS232, CKW TxxXW	80500552	174
Battery Kit, Li-ion, TD52	30424405	195	Printer Holder Kit, D52	30424025	60
In-use Cover Set, TD52XW	30424023	27	Software, Winwedge	80850080	515
			Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



Defender® 5000 Low Profile

Multifunctional Bench Scales for Standard Industrial Applications

- 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).
- Durably constructed with stainless steel platform and indicator front mount, powder-coated steel bases, aluminum loadcells and ABS plastic indicators.



Application Parts Counting with APW optimization, Checkweighing or Checkcounting, Percent Weighing, and Dynamic Weighing or Display Hold

Display Dot matrix LCD with white LED backlight, 256 × 80 pixels, with on-screen checkweighing display

Operation 100-240 VAC / 50/60 Hz Hardwired Universal Power Supply (included), Rechargeable Lithium battery (optional)

Communication Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Discrete I/O.

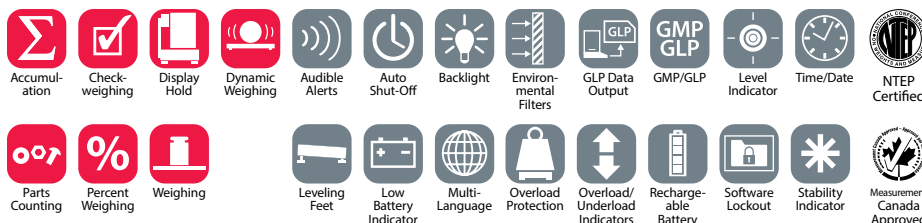
Construction Stainless steel platform and indicator front mount, powder-coated steel base frame, aluminum loadcell and ABS plastic Indicator.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade, GMP/GLP output with time/date, EasyConnect connector allows fast set-up.

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D52P12RQR5	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 12 in / 305 × 305 mm	30461648	1313
D52P25RQR5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461649	1313
D52P50RQR5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461650	1313
D52P12RTR5	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 × 14 in / 305 × 355 mm	30461651	1365
D52P25RTR5	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30461652	1365
D52P50RTR5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461653	1365
D52P50RQL5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 18 in / 457 × 457 mm	30461654	1602
D52P125RQL5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30461655	1602
D52P50RRTX5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461656	1680
D52P125RRTX5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	18 × 24 in / 457 × 610 mm	30461657	1680
D52P250RRTX5	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30461658	1680
D52P50RQV5	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30461659	1785
D52P125RQV5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	24 × 24 in / 610 × 610 mm	30461660	1785
D52P250RQV5	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30467606	1785
D52P125RTV5	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30467607	2363

Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162
Ethernet Kit, TD52	30429666	162
Analog Output Kit, TD52	30424403	162
I/O with Relay (2 In/4 Out)	30097591	151
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189
WiFi/BT Dongle, OHAUS (requires 30424406)	30412537	225
USB Host for WiFi/BT Dongle, TD52	30424406	135
Battery Kit, Li-ion, TD52	30424405	195
In-use Cover Set, TD52P	30424022	20
In-use Cover set (10), TD52P	30469948	162

Accessories	Item No.	List Price (USD)
LC Extension Cable, 9 meters, D52	30424409	162
M16 Gland with Ferrite, to TD52	30379716	20
Wall Mount Kit, CS, TD52P	30424027	60
Printer SF40A (includes RS232 cable)	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
RS232 Interface Cable to PC 9-pin	80500525	188
Printer Holder Kit, D52	30424025	60
Software, Winwedge	80850080	515
Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



Defender® 3000 Washdown

Economical Stainless Steel Bench Scales for Basic Industrial Washdown Applications

- The NEMA 4X/IP66 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).

Application	Weighing, Parts Counting
Display	Backlit liquid crystal display (LCD)
Operation	Power cord (included) or rechargeable battery (included)
Communication	Easy access communication port with RS232 interface (included)
Construction	IP65 stainless steel indicator with hinged front cover, 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, NTEP Certified and Measurement Canada Approved



30 lb model available

Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D32XW15VR	IP65; NEMA 4X	30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5g	14 in × 12 in / 355 mm × 305 mm	30369114	1424
D32XW30VR		66 lb / 30 kg	0.01 lb / 5 g	0.02 lb / 10 g	14 in × 12 in / 355 mm × 305 mm	83999817	1424
D32XW60VR		132 lb / 60 kg	0.02 lb / 10 g	0.05 lb / 20 g	14 in × 12 in / 355 mm × 305 mm	83999818	1424
D32XW60VL					21.7 in × 16.5 in / 550 mm × 420 mm	83999819	1794
D32XW150VL		330 lb / 150 kg	0.05 lb / 20 g	0.1 lb / 50 g	21.7 in × 16.5 in / 550 mm × 420 mm	83999820	1794
D32XW150VX					25.6 in × 19.7 in / 650 mm × 500 mm	83999821	2364
D32XW300VX					25.6 in × 19.7 in / 650 mm × 500 mm	83999822	2364

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130



Defender® 3000

Economical Bench Scales for Basic Industrial Applications

- 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).

Application	Weighing, Parts Counting
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included) or rechargeable battery (included)
Communication	Easy access communication port with RS232 interface (included)
Construction	ABS indicator with reversible rear cover, 304 grade stainless steel platform with painted steel tubular frame, IP67 aluminum load cell, self-adjusting stainless steel feet with removable rubber caps. Regular models have painted steel column and wall bracket, front mount models (Model ends in 5) have painted front mount.

Design Features 125% overload protection, NTEP Certified and Measurement Canada Approved



30 lb model available



Column Mount Models

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D31P15BR	30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	14 in x 12 in / 355 mm x 305 mm	30369116	797
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	797
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	797
D31P60BL				21.7 in x 16.5 in / 550 mm x 420 mm	83998113	980
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	980
D31P150BX				25.6 in x 19.7 in / 650 mm x 500 mm	83998115	1035
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	1035

Front Mount Models

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D31P15BR5	30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	14 in × 12 in / 355 mm × 305 mm	30490640	683
D31P30BR5	66 lb / 30 kg	0.01 lb / 5 g	0.02 lb / 10 g		30490641	683
D31P60BR5	132 lb / 60 kg	0.02 lb / 10 g	0.05 lb / 20 g		30490642	683
D31P60BL5				30490643	788	
D31P150BL5	330 lb / 150 kg	0.05 lb / 20 g	0.1 lb / 50 g	21.7 in × 16.5 in / 550 mm × 420 mm	30490644	788

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141
Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130
Handle Kit, D3K	30381321	99



Defender® Digital Field Test Scale

Portable Precision Ready for the Field

- 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.

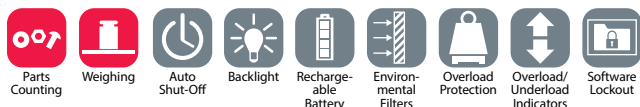


NEW

Application	Weighing, Counting
Display	Backlit LCD display
Operation	AC wall adapter and internal rechargeable battery included
Communication	Standard RS232; Optional Ethernet or USB available with RS232 kits
Construction	Painted steel base, ABS plastic indicator, metal carrying case
Design Features	Bright backlit display, internal rechargeable battery with 70 hours use between recharges, metal case with locking latches, 9 ft. indicator cord to base, 9ft. cord from AC adapter to indicator, in-use cover included

Model	Capacity	Readability	Platform Size	Item No.	List Price (USD)
D31P75SD	165 lb / 75 kg	0.05 lb / 0.02 kg	12.4 × 11 in / 316 × 280 mm	30448500	370

Accessories	Item No.	List Price (USD)
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141
Printer SF40A (includes RS232 cable)	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
RS232 Interface Cable to PC 9-pin	80500525	188
Software, Winwedge	80850080	515



ES Series
Multipurpose Low Profile Shipping Scale

- 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.

- Application

Display

Operation

Construction

Design Features
- Weighing

Liquid crystal display (LCD)

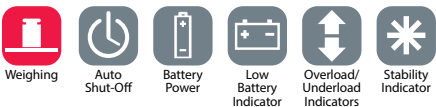
AC adapter (included) or 6 AA batteries (not included)

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

Auto-zero tracking, auto shut-off



Model	Capacity	Readability	Platform Size	Item No.	List Price (USD)
ES6R	13 lb / 6 kg	0.005 lb / 0.002 kg	12.2 in × 10.8 in / 310 mm × 270 mm	71138830	835
ES30R	66 lb / 30 kg	0.05 lb / 0.01 kg	12.2 in × 10.8 in / 310 mm × 270 mm	71138831	835
ES50R	110 lb / 50 kg	0.05 lb / 0.02 kg	12.2 in × 10.8 in / 310 mm × 270 mm	71138832	835
ES50L			20.5 in × 15.7 in / 520 mm × 400 mm	71138833	889
ES100L	220 lb / 100 kg	0.1 lb / 0.05 kg	20.5 in × 15.7 in / 520 mm × 400 mm	71138834	889
ES200L	440 lb / 200 kg	0.2 lb / 0.1 kg	20.5 in × 15.7 in / 520 mm × 400 mm	71138835	889



SD Series

Rugged Economical Shipping Scales

- The SD is available in three capacities of 35 kg, 75 kg and 200 kg 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 not only provides accurate general weight determination but also has the software to support dynamic/animal weighing and display hold.
- New WeighAlert mode flashes weight display when weight on platform is greater than 70lb and less than 151lb, alerting user that package is too heavy for USPS service but below Less-Than-Truckload (LTL) limit for shipping.

Application Weighing, Animal/Dynamic Weighing, Display Hold

Display Liquid crystal display (LCD)

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

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)



WeighAlert mode available



Model	Capacity	Readability	Platform Size	Item No.	List Price (USD)
SD35	77 lb / 35 kg	0.05 lb / 0.02 kg	12.4 in × 11 in / 316 mm × 280 mm	83998234	230
SD75	165 lb / 75 kg	0.1 lb / 0.05 kg	12.4 in × 11 in / 316 mm × 280 mm	83998235	246
SD75L			20.5 in × 15.7 in / 520 mm × 400 mm	83998236	401
SD200	440 lb / 200 kg	0.2 lb / 0.1 kg	12.4 in × 11 in / 316 mm × 280 mm	83998237	289
SD200L			20.5 in × 15.7 in / 520 mm × 400 mm	83998238	433



Display Hold



Dynamic Weighing



Weighing



Auto Shut-Off



Battery Power



Low Battery Indicator



Overload/Underload Indicators



Stability Indicator

Ranger® 7000

Simplifying Even the Most Complex Industrial Applications

- 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.

- Application** Weighing, Parts Counting with Auto Optimization, Percent Weighing, Advanced Checkweighing, Animal/Dynamic Weighing, Display Hold, Filling, Formulation, Differential Weighing, Density Determination, Sieve Analysis
- Display** 4.3" (109 mm) Full-color WQVGA graphic display with user-controlled brightness
- Operation** AC power (included) or rechargeable battery (accessory sold separately)
- Communication** Easy access communication port including standard USB and RS232 (included) and an optional third port of RS232 or Ethernet (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 auto-print settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-; Checkweighing lights with selectable operation and audible signal settings, several selectable operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-dim, auto-sleep, auto tare, chain tare.



With added Counting Features

Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item No.	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	1870
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	1870
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	1870
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	1870
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	1870

Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
R71MHD3	•	6 lb / 3 kg	0.00002 lb / 0.01 g	0.0002 lb / 0.1 g	9.4 in x 9.4 in / 240 mm x 240 mm	30088840	2940
R71MHD6	•	15 lb / 6 kg	0.00005 lb / 0.02 g	0.0005 lb / 0.2 g	9.4 in x 9.4 in / 240 mm x 240 mm	30088841	3272
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	4326
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	5214

Accessories	Item No.	List Price (USD)
Ethernet Kit, R31 RC31 R71 V71	30037447	151
RS232 Kit, R31 RC31 R71 V71	30037448	151
Rechargeable Battery, EX-HiCap R71	30041295	378
Printer, Impact, SF40A, AM	30064203	964
Column Kit, Painted, R71	30095408	151
PCBA Kit, 2nd Platform, R71	30097590	152

Accessories	Item No.	List Price (USD)
Discrete I/O Kit, 2-In/4-Out, R71	30097591	151
Cable, Extension, 9m, R71	30101495	106
PCBA Kit, Alibi Memory, R71 T71	80500503	120
Accessory, In Use Cover, R71	30135320	44
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515

* Not in parts counting mode



Ranger® Count 4000

The Best Value for Durable Industrial Counting

- 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.

Application	Weighing, Parts Counting with Auto Optimization, Checkweighing, Accumulation
Display	3 window backlit liquid crystal display (LCD), 3 color Checkweighing LEDs
Operation	AC power (included) or rechargeable battery (included)
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

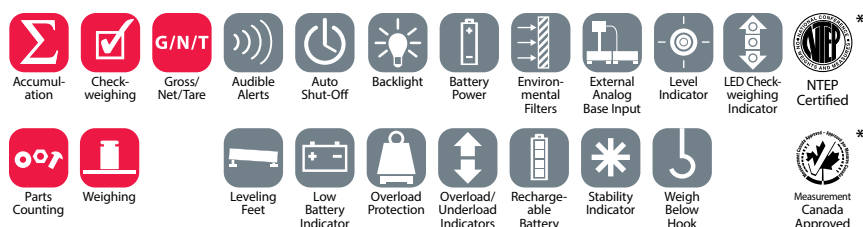


Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
RC41M3	6 lb / 3 g	0.0002 lb / 0.1 g	0.002 lb / 1 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236779	988
RC41M6	15 lb / 6 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236940	988
RC41M15	30 lb / 15 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236941	988
RC41M30	60 lb / 30 kg	0.002 lb / 1 g	0.02 lb / 10 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236942	988

Accessories	Item No.	List Price (USD)
PCBA Kit, 2nd Platform, RC31 RC41	30037446	151
Ethernet Kit, R31 RC31 R71 V71 RC41	30037447	151
RS232 Kit, R31 RC31 R71 V71 RC41	30037448	151
USB Kit, R31 RC31 V71 RC41	30037449	151
In Use Cover	30240697	36

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515

* Not in parts counting mode



Ranger® Count 3000

Multipurpose Compact Counting Scales for Basic Industrial Applications

- 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. Features three backlit LCD displays, including a centrally located count display, and an easy-to-navigate menu.
- Eliminate waiting time and increase control of your operation with accurate one-second results.



- Application** Weighing, Parts Counting with Auto Optimization, Checkweighing, Accumulation
- Display** 3 window backlit liquid crystal display (LCD), 3 color Checkweighing LEDs
- Operation** AC power (included) or rechargeable battery (included)
- 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

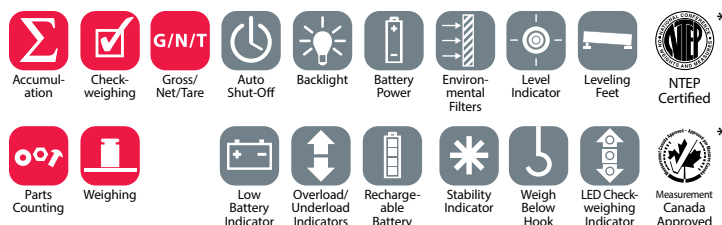


Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
RC31P1502	3 lb / 1.5 kg	0.0001 lb / 0.05 g	0.001 lb / 0.5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031787	813
RC31P3	6 lb / 3 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031788	813
RC31P6	15 lb / 6 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031789	813
RC31P15	30 lb / 15 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031790	813
RC31P30	60 lb / 30 kg	0.002 lb / 1 g	0.02 lb / 10 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031791	813

Accessories	Item No.	List Price (USD)
PCBA Kit, 2nd Platform, RC31	30037446	151
Ethernet Kit, R31 RC31 R71 V71	30037447	151
RS232 Kit, R31 RC31 R71 V71	30037448	151
USB Kit, R31 RC31 V71	30037449	151
Hook, R21 RC21 R31 RC31 V71	30037450	108

Accessories	Item No.	List Price (USD)
In-Use-Cover, R21 RC21 R31 RC31	30037451	38
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Carrying Case, TR TC R31 TC31 RC31	80850084	363
Software, Winwedge	80850080	515

* Not in parts counting mode



Ranger® 7000

Simplifying Even the Most Complex Industrial Applications

- 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.

- Application** Weighing, Parts Counting with Auto Optimization, Percent Weighing, Advanced Checkweighing, Animal/Dynamic Weighing, Display Hold, Filling, Formulation, Differential Weighing, Density Determination, Sieve Analysis Mode with customizable printout
- Display** 4.3" (109 mm) Full-color WQVGA graphic display with user-controlled brightness
- Operation** AC power (included) or rechargeable battery (accessory sold separately)
- Communication** Easy access communication port including standard USB and RS232 (included) and an optional third port of RS232 or Ethernet (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 auto-print settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-; Checkweighing lights with selectable operation and audible signal settings, several selectable operating languages, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, selectable brightness settings, auto-dim, auto-sleep, auto tare, chain tare, NTEP Certified and Measurement Canada Approved



With Sieve Analysis Mode

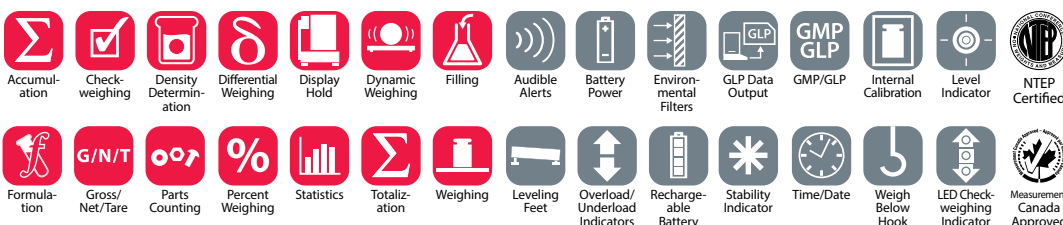


Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
R71MD3		6 lb / 3 kg	0.0001 lb / 0.05 g	0.001 lb / 0.5 g	11 in × 11 in / 280 mm × 280 mm	30070289	1870
R71MD6		15 lb / 6 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	11 in × 11 in / 280 mm × 280 mm	30070310	1870
R71MD15		30 lb / 15 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	12.2 in × 14.8 in / 311 mm × 377 mm	30070311	1870
R71MD35		70 lb / 35 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	12.2 in × 14.8 in / 311 mm × 377 mm	30070312	1870
R71MD60		150 lb / 60 kg	0.002 lb / 1 g	0.02 lb / 10 g	12.2 in × 14.8 in / 311 mm × 377 mm	30212873	1870

Model	InCal™	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
R71MHD3	•	6 lb / 3 kg	0.00002 lb / 0.01 g	0.0002 lb / 0.1 g	9.4 in × 9.4 in / 240 mm × 240 mm	30088840	2940
R71MHD6	•	15 lb / 6 kg	0.00005 lb / 0.02 g	0.0005 lb / 0.2 g	9.4 in × 9.4 in / 240 mm × 240 mm	30088841	3272
R71MHD15	•	30 lb / 15 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	12.2 in × 14.8 in / 311 mm × 377 mm	30088842	4326
R71MHD35	•	70 lb / 35 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	12.2 in × 14.8 in / 311 mm × 377 mm	30088843	5214

Accessories	Item No.	List Price (USD)
Ethernet Kit, R31 RC31 R71 V71	30037447	151
RS232 Kit, R31 RC31 R71 V71	30037448	151
Rechargeable Battery, EX-HiCap R71	30041295	378
Printer, Impact, SF40A, AM	30064203	964
Column Kit, Painted, R71	30095408	151
PCBA Kit, 2nd Platform, R71	30097590	152

Accessories	Item No.	List Price (USD)
Discrete I/O Kit, 2-In/4-Out, R71	30097591	151
Cable, Extension, 9m, R71	30101495	106
PCBA Kit, Alibi Memory, R71 T71	80500503	120
Accessory, In Use Cover, R71	30135320	44
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515



Compact Bench Scales

Ranger® 4000

The Best Value for Durable Industrial Weighing

- 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 Smart Text™ for easy operation and setup to ensure efficiency in the workplace.
- With the largest display in its class, checkweighing LED indicators and backlit LCD display, the Ranger 4000 can function in almost any industrial environment.

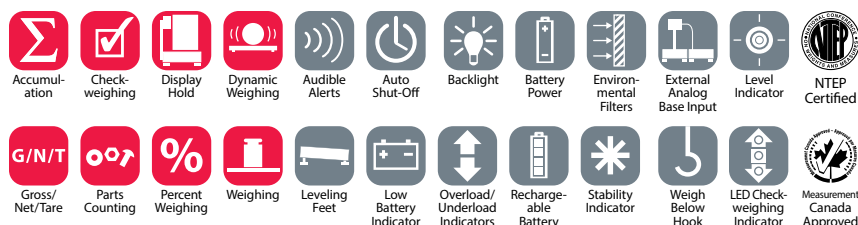


Application	Weighing, Parts Counting, Checkweighing, Percent Weighing, Animal/Dynamic Weighing, Display Hold, Accumulation
Display	Light-emitting diode display (LED), 3 color Checkweighing LEDs
Operation	AC power (included) or rechargeable battery (included)
Communication	Easy access communication port 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, NTEP Certified and Measurement Canada Approved

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
R41ME3	6 lb / 3 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236775	934
R41ME6	15 lb / 6 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236776	934
R41ME15	30 lb / 15 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236777	934
R41ME30	60 lb / 30 kg	0.002 lb / 1 g	0.02 lb / 10 g	8.9 in × 11.8 in / 225 mm × 300 mm	30236778	934

Accessories	Item No.	List Price (USD)
PCBA Kit, 2nd Platform, RC31 R41	30037446	151
Ethernet Kit, R31 RC31 R71 V71 R41	30037447	151
RS232 Kit, R31 RC31 R71 V71 R41	30037448	151
USB Kit, R31 RC31 V71 R41	30037449	151
In Use Cover	30240697	36

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515



Ranger® 3000

Multipurpose Compact Bench Scales for Basic Industrial Applications

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



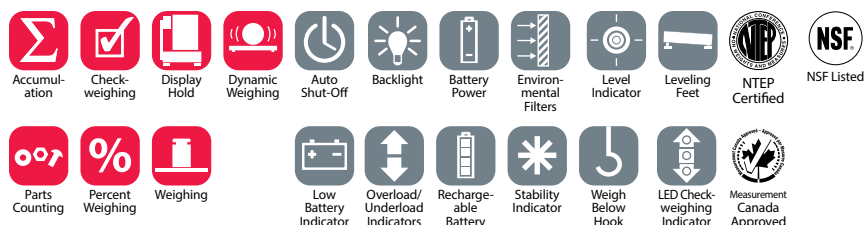
- Application** Weighing, Parts Counting, Checkweighing, Percent Weighing, Animal/Dynamic Weighing, Display Hold, Accumulation
- Display** Backlit liquid crystal display (LCD), 3 color Checkweighing LEDs
- Operation** AC power (included) or rechargeable battery (included)
- Communication** Easy access 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, NTEP Certified and Measurement Canada Approved



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
R31P1502	3 lb / 1.5 kg	0.0001 lb / 0.05 g	0.001 lb / 0.5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031707	658
R31P3	6 lb / 3 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031708	658
R31P6	15 lb / 6 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031709	658
R31P15	30 lb / 15 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031710	658
R31P30	60 lb / 30 kg	0.002 lb / 1 g	0.02 lb / 10 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031711	658

Accessories	Item No.	List Price (USD)
Ethernet Kit, R31 RC31 R71 V71 R41	30037447	151
RS232 Kit, R31 RC31 R71 V71 R41	30037448	151
USB Kit, R31 RC31 V71 R41	30037449	151
In-Use-Cover, R21 RC21 R31 RC31 R41	30037451	38

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Carrying Case, TR TC R31 TC31 V71	80850084	363
Software, Winwedge	80850080	515



Compact Bench Scales

Valor® 7000

The Best Compact Food Scale in its Class

- 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.

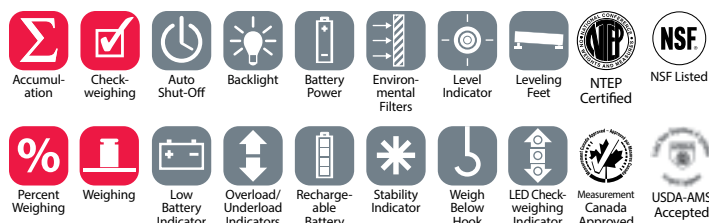


- Application** Weighing, Percent Weighing, Checkweighing, Accumulation
- Display** Dual backlit liquid crystal displays (LCD)
- Operation** AC power (included) or rechargeable battery (included)
- Communication** RS232 (included) or second RS232 or USB or Ethernet (accessories sold separately)
- Construction** 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, NTEP Certified and Measurement Canada Approved

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
V71P1502T	3 lb / 1.5 kg	0.0001 lb / 0.05 g	0.001 lb / 0.5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031827	681
V71P3T	6 lb / 3 kg	0.0002 lb / 0.1 g	0.002 lb / 1 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031828	681
V71P6T	15 lb / 6 kg	0.0005 lb / 0.2 g	0.005 lb / 2 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031829	681
V71P15T	30 lb / 15 kg	0.001 lb / 0.5 g	0.01 lb / 5 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031830	681
V71P30T	60 lb / 30 kg	0.002 lb / 1 g	0.02 lb / 10 g	8.9 in × 11.8 in / 225 mm × 300 mm	30031831	681

Accessories	Item No.	List Price (USD)
In-Use-Cover, V71	30037445	38
Ethernet Kit, R31 RC31 R71 V71	30037447	151
RS232 Kit, R31 RC31 R71 V71	30037448	151
USB Kit, R31 RC31 V71	30037449	151
Hook, R21 RC21 R31 RC31 V71	30037450	108

Accessories	Item No.	List Price (USD)
In-Use-Cover, Set (10), V71	30037469	77
Printer, Impact, SF40A, AM	30064203	964
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Carrying Case, TR TC R31 TC31 V71	80850084	363
Software, Winwedge	80850080	515



FD Series

Speed, Durability and Cleanliness Designed for Food Service Use

- The fully stainless steel FD is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of the weighing of all food products.
- With software for general weighing, percent weighing and Checkweighing, the FD can be used for a variety of food weighing needs.
- The 120-hour internal rechargeable battery will help ensure that your scale is up and running when you need it, even during long shifts.



Application	Weighing, Percent Weighing, Checkweighing
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included) or rechargeable battery (included)
Construction	Stainless steel housing and platform, up-front level indicator
Design Features	Manual or automatic tare, audible buzzer alerts, LED Checkweighing lights, foot switch (optional), NTEP Certified and Measurement Canada Approved

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
FD3H	6 lb / 3 kg	0.0002 lb / 0.1 g	—	8.2 in × 8.2 in / 209 mm × 209 mm	83998147	951
FD6H	15 lb / 6 kg	0.001 lb / 0.2 g		8.2 in × 8.2 in / 209 mm × 209 mm	83998148	951
FD15H	30 lb / 15 kg	0.001 lb / 1 g		8.2 in × 8.2 in / 209 mm × 209 mm	83998149	951

Approved Model*	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
FD3	6 lb / 3 kg	0.001 lb / 0.5 g	0.002 lb / 1 g	8.2 in × 8.2 in / 209 mm × 209 mm	83998117	848
FD6	15 lb / 6 kg	0.002 lb / 1 g	0.005 lb / 2 g	8.2 in × 8.2 in / 209 mm × 209 mm	83998118	848
FD15	30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	8.2 in × 8.2 in / 209 mm × 209 mm	83998119	848

Accessories	Item No.	List Price (USD)
In-Use-Cover, FD V51	80251140	40
Pan, SST, Flat, FD V51	80251141	60
Carrying Case, FD V51	80251394	128



Compact Bench Scales

Valor® 4000

Legal-for-Trade Food Scale That Enhances Efficiency in Harsh Environments

- The fully stainless steel FD is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of the weighing of all food products.
- Increase productivity with its touchless tare sensor, half-second stabilization time, check weighing mode, LEDs, and percent weighing mode.
- Unique knife resistant keypad and IP68 protection ensures durability and safe operation in wet conditions.

Application Weighing, Percent Weighing, Checkweighing, Accumulation

Display Dual light emitting diode (LED) displays

Operation AC adapter (included) or rechargeable battery (included)

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, NTEP Certified and Measurement Canada Approved



XW Models Feature Stainless Steel Top Housing

Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
V41XWE1501T	IPX8	3 lb / 1.5 kg	0.0005 lb / 0.2 g	0.001 lb / 0.5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035444	587
V41XWE3T		6 lb / 3 kg	0.001 lb / 0.5 g	0.002 lb / 1 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035445	587
V41XWE6T		15 lb / 6 kg	0.002 lb / 1 g	0.005 lb / 2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035446	587
V41XWE15T		30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035447	587

PW Models Feature ABS Housing

Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
V41PWE1501T	IPX8	3 lb / 1.5 kg	0.0005 lb / 0.2 g	0.001 lb / 0.5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035434	502
V41PWE3T		6 lb / 3 kg	0.001 lb / 0.5 g	0.002 lb / 1 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035435	502
V41PWE6T		15 lb / 6 kg	0.002 lb / 1 g	0.005 lb / 2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035436	502
V41PWE15T		30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035437	502

Accessories	Item No.	List Price (USD)
Large Pan, 11.8 × 8.8 in V22 V41	30251753	58
In-Use Cover for V41P	Call OHAUS for information	



Valor® 3000

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

- 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 0.01 g, 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.

Application Weighing, Percent Weighing, Specific Gravity

Display Backlit liquid crystal display (LCD)

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

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, NTEP Certified models available



Model	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
V31XH202	Not Applicable	0.441 lb / 200 g	0.00005 lb / 0.01 g	—	Ø 4.7 in / Ø 120 mm	83998130	755
V31XW301	IP65; NEMA 4X	0.662 lb / 300 g	0.0005 lb / 0.1 g		6.2 in × 5.7 in / 158 mm × 146 mm	83998134	588
V31XH402	Not Applicable	0.88 lb / 400 g	0.00005 lb / 0.01 g		Ø 4.7 in / Ø 120 mm	83998178	1032
V31X501		1.1 lb / 500 g	0.0005 lb / 0.1 g		Ø 4.7 in / Ø 120 mm	83998176	552
V31XH2		4.4 lb / 2 kg			6.2 in × 5.7 in / 158 mm × 146 mm	83998131	755
V31X3		6 lb / 3 kg	0.005 lb / 1 g		6.2 in × 5.7 in / 158 mm × 146 mm	83998132	498
V31XH4		8.8 lb / 4 kg	0.0005 lb / 0.1 g		6.2 in × 5.7 in / 158 mm × 146 mm	83998177	1032
V31X6		15 lb / 6 kg	0.005 lb / 1 g		6.2 in × 5.7 in / 158 mm × 146 mm	83998133	498

Approved Model*	Protection Rating	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
V31XW3	IP65; NEMA 4X	6 lb / 3 kg	0.005 lb / 0.5 g	0.005 lb / 1 g	6.2 in × 5.7 in / 158 mm × 146 mm	83998135	582
V31X3N	Not Applicable				6.2 in × 5.7 in / 158 mm × 146 mm	83999992	585
V31X6N	IP65; NEMA 4X	13.23 lb / 6 kg	0.005 lb / 1 g	0.005 lb / 2 g	6.2 in × 5.7 in / 158 mm × 146 mm	83999996	585
V31XW6		15 lb / 6 kg			6.2 in × 5.7 in / 158 mm × 146 mm	83998136	582

Accessories	Item No.	List Price (USD)
Large Pan, SST, Sandwich, V31	80251147	83
Holder, SST, French Fries, V31	80251148	83
Holder, SST, Ice Cream Cone, V31	80251149	83
Carrying Case, V31	80251216	128



Compact Bench Scales

Valor® 2000

A Rapid-Response Food Scale That Enhances Productivity in Harsh Environments

- The sturdy polycarbonate keypad offers protection from knives and other sharp instruments used in food preparation, processing and portioning applications.
- A unique IP68 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.

Application Weighing, Checkweighing (XW only)

Display Dual light emitting diode (LED) displays

Operation AC adapter (included) or rechargeable battery (included)

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



60 lb models
available

XW Models Feature Stainless Steel Top Housing

Model	Protection Rating	Capacity	Readability	Platform Size	Item No.	List Price (USD)
V22XWE1501T	IPX8	3 lb / 1.5 kg	0.0005 lb / 0.2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035439	536
V22XWE3T		6 lb / 3 kg	0.001 lb / 0.5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035440	536
V22XWE6T		15 lb / 6 kg	0.002 lb / 1 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035441	536
V22XWE15T		30 lb / 15 kg	0.005 lb / 2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035442	536
V22XWE30T		60 lb / 30 kg	0.01 lb / 5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30251705	536

PW Models Feature ABS Housing

Model	Protection Rating	Capacity	Readability	Platform Size	Item No.	List Price (USD)
V22PWE1501T	IPX8	3 lb / 1.5 kg	0.0005 lb / 0.2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035682	451
V22PWE3T		6 lb / 3 kg	0.001 lb / 0.5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035683	451
V22PWE6T		15 lb / 6 kg	0.002 lb / 1 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035684	451
V22PWE15T		30 lb / 15 kg	0.005 lb / 2 g	7.5 in × 9.5 in / 190 mm × 242 mm	30035685	451
V22PWE30T		60 lb / 30 kg	0.01 lb / 5 g	7.5 in × 9.5 in / 190 mm × 242 mm	30251704	451

Accessories	Item No.	List Price (USD)
Large Pan, 11.8 × 8.8 in V22 V41	30251753	58
In-Use Cover for V22P	Call OHAUS for information	



Valor® 1000

Economical, Multipurpose Weighing

- Valor 1000 is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of all food products weighed on the scale.
- With software for general weighing, Checkweighing, and accumulation, Valor 1000 can be used for a variety of food weighing and measurement needs.
- An 80-hour internal rechargeable battery provides portability and ensures the scale will be operational when you need it.

Application Weighing, Checkweighing, Accumulation

Display Backlit liquid crystal display (LCD)

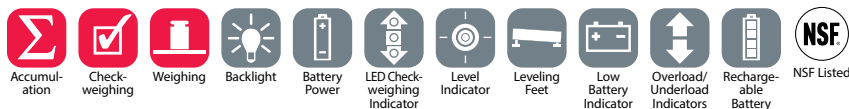
Operation AC adapter (included) or rechargeable battery (included)

Construction ABS housing, stainless steel platform, up-front level indicator

Design Features External calibration software, selectable environmental settings, selectable weighing units



Model	Dual Display	Capacity	Readability	Platform Size	Item No.	List Price (USD)
V11P3		6.6 lb / 3 kg	0.001 lb / 0.5 g	9.9 in × 7.1 in / 250 mm × 180 mm	83998126	268
V11P3T	•			9.9 in × 7.1 in / 250 mm × 180 mm	83998172	284
V11P6		13 lb / 6 kg	0.002 lb / 1 g	9.9 in × 7.1 in / 250 mm × 180 mm	83998127	268
V11P6T	•			9.9 in × 7.1 in / 250 mm × 180 mm	83998173	284
V11P15		33 lb / 15 kg	0.005 lb / 2 g	9.9 in × 7.1 in / 250 mm × 180 mm	83998128	268
V11P15T	•			9.9 in × 7.1 in / 250 mm × 180 mm	83998174	284
V11P30		66 lb / 30 kg	0.01 lb / 5 g	9.9 in × 7.1 in / 250 mm × 180 mm	83998129	268
V11P30T	•			9.9 in × 7.1 in / 250 mm × 180 mm	83998175	284



Catapult® 1000

Economical Compact Shipping Scales

- Valor 1000 is NSF Certified and supports HACCP-Certified systems helping to ensure the integrity and safety of all food products weighed on the scale.
- Bring the Catapult 1000 right to your work with the integrated carrying handle and its battery powered operation.
- Catapult 1000 not only provides accurate general weight determination but also has the software to support dynamic/animal weighing.
- New WeighAlert mode in C11P75 model flashes weight display when weight on platform is greater than 70lb and less than 151lb, alerting user that package is too heavy for USPS service but below Less-Than-Truckload (LTL) limit for shipping.



WeighAlert mode available

Application Weighing, Animal/Dynamic Weighing, Display Hold

Display Liquid crystal display (LCD)

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

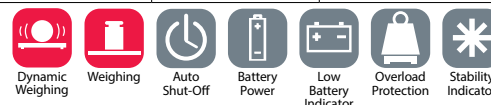
Construction ABS housing and platform, stainless steel platform (accessory sold separately), transportation handle

Design Features Low profile, compact design



Model	Capacity	Readability	Platform Size	Item No.	List Price (USD)
C11P9	20 lb / 9 kg	0.01 lb / 0.005 kg	11 in × 12.4 in / 280 mm × 316 mm	83998137	258
C11P20	44 lb / 20 kg	0.02 lb / 0.01 kg	11 in × 12.4 in / 280 mm × 316 mm	83998138	258
C11P75	165 lb / 75 kg	0.1 lb / 0.05 kg	11 in × 12.4 in / 280 mm × 316 mm	83998139	285

Accessories	Item No.	List Price (USD)
Pan, SST, C11P	80251248	53



TD52

Multifunctional Indicators for Standard Industrial Applications

- 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.

Application	Parts Counting with APW optimization, Checkweighing or Checkcounting, Percent Weighing, and Dynamic Weighing or Display Hold
Display	Dot matrix LCD with white LED backlight, 256 × 80 pixels
Operation	100-240 VAC / 50/60 Hz Universal Power Supply (included), Hardwired (TD52XW) or Line Cord (TD52P), Rechargeable Lithium battery (optional)
Communication	Standard RS232, MicroSD Card included; Optional Ethernet, WiFi/Bluetooth, 2nd RS232/RS485/USB, Analog Output, or 2 In/4 Out Digital I/O.
Construction	TD52XW: All stainless steel housing and bracket, TD52P: ABS plastic housing and powder-coated steel bracket
Design Features	Configurable resolution 75,000d/10,000e NTEP Class III/IIIL certified and Measurement Canada Class III/IIILD approved, GMP/GLP output with time/date, Alibi or standard memory, multiple operating languages, EasyConnect connector allows fast set-up with compatible Defender bases. Includes internal terminal block for hardwiring TD52 indicator to bases without EasyConnect module.



TD52P



TD52XW

Model	Protection Rating	Item No.	List Price (USD)
TD52P	Dry Use ABS Indicator	30424078	670
TD52XW	IP68 / NEMA 4X Stainless Steel Indicator	30424079	824

Accessories	Item No.	List Price (USD)
2nd RS232/RS485/USB, TD52	30424404	162
Cable, RS232, CKW TxxXW	80500552	174
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Ethernet Kit, TD52	30429666	162
Analog Output Kit, TD52	30424403	162
I/O with Relay (2 In/4 Out)	30097591	151
Light Tower, R-Y-G, IP65, 24VDC (requires 30097591)	30424021	189
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	225
USB Host for Dongle, TD52	30424406	135
Battery Kit, Li-ion, TD52	30424405	195

Accessories	Item No.	List Price (USD)
In-use Cover Set, TD52P	30424022	20
In-use Cover Set, TD52XW	30424023	27
In-use Cover set (10), TD52P	30469948	162
In-use Cover set (10), TD52XW	30469949	216
LC Extension Cable, 9 meters, D52	30424409	162
M16 Gland with Ferrite, to TD52	30379716	20
Wall Mount Kit, SST, TD52XW	30424026	81
Wall Mount Kit, CS, TD52P	30424027	60
Printer SF40A	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Software, Winwedge	80850080	515



T72XW

Advanced Performance Stainless Steel Indicator with External Device Control Capabilities

- 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 and ID information.

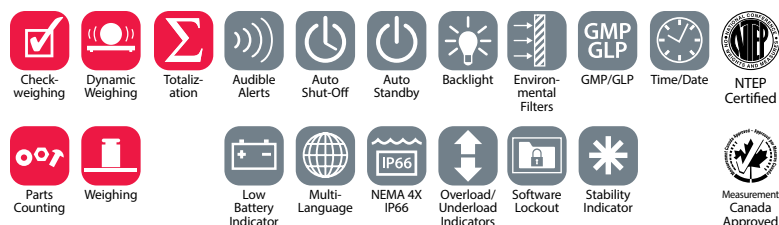


With Truck In/Out Mode

Application	Weighing, Parts Counting, Checkweighing, Animal / Dynamic Weighing , Totalization, Truck In/Out
Display	Transflective graphic LCD with white backlight, 240 × 96 pixels
Operation	AC Power (Included)
Communication	RS232 and SD card reader with SD card included. Ethernet, USB/Discrete I/O or COM2 kit with 2nd RS232/485 available.
Construction	IP66/NEMA 4X stainless steel housing and mounting bracket
Design Features	User-configurable resolution 50,000d/10,000e, Checkweighing lights with selectable operation and audible signal settings, sealed front panel, five operating languages (English, Spanish, French, German and Italian), selectable environmental and auto-print settings, stability indicator, overload/underload indicators, NTEP Certified and Measurement Canada Approved

Model	Protection Rating	Item No.	List Price (USD)
T72XW	IP66; NEMA 4X	30126959	872

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Ethernet Kit, T72XW	30132163	151
USB with I/O Kit, T72XW	30132164	168
COM2 Kit, T72XW	30132165	151
Column Adapter, SST, T32XW T51XW T71XW	72209340	53
Cable, RS232, CKW TxxXW	80500552	174
Cable ST103 - TxxXW	80252584	210
Software, Winwedge	80850080	515



T51XW

Multifunctional Stainless Steel Washdown Indicator for Standard Industrial Applications

- 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 RS422/485, second RS232 and 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.

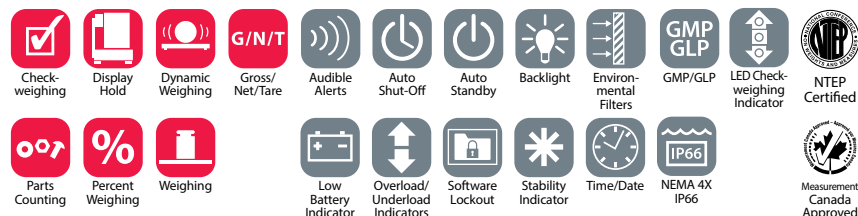


For a Limited Time

Application	Weighing, Parts Counting, Percent Weighing, Checkweighing, Dynamic/Animal Weighing, Display Hold
Display	Backlit liquid crystal display (LCD), 3 color Checkweighing LEDs
Operation	Power cord (included) or rechargeable battery (accessory sold separately)
Communication	RS232 (included). Internal 2nd RS232, RS232/RS485, AC or DC relay kits available. 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, NTEP Certified and Measurement Canada Approved

Model	Protection Rating	Item No.	List Price (USD)
T51XW	IP66; NEMA 4X	83999840	629

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Relay Kit, AC, T51 T71	80500720	346
Relay Kit, DC, T51 T71	80500727	297
Rechargeable Battery Kit, T51 T71	80500729	225
RS422/485 Kit, T51 T71	80500731	98
RS232 Kit, T51 T71	80500733	73
Wall Mount Kit, SST, T51XW T71XW	80500735	81
Cable Kit, Loadcell Adapter, T51 T71	80500736	70
Software, Winwedge	80850080	515
Column Kit, 23 cm / 9 in, Stainless Steel for T71XW/T51XW Indicator	30454644	247
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Cable ST103 - TxxXW	80252584	210



T32XW

Economical Stainless Steel Washdown Indicator for Basic Industrial Applications

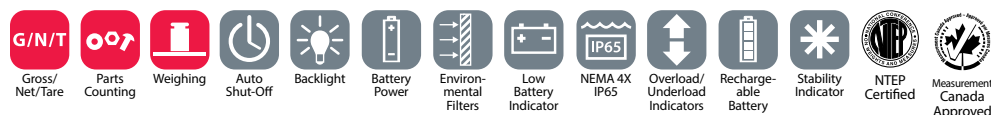
- The NEMA 4X/IP65 stainless steel construction protects the indicator from water damage and a hinged front cover opens up easily, offering instant access for servicing.
- The long-lasting internal rechargeable battery provides continuous operation for up to 58 hours, ensuring uninterrupted operation 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.



Application	Weighing, Parts Counting
Display	Backlit liquid crystal display (LCD)
Operation	Power cord (included) or rechargeable battery (included)
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, NTEP Certified and Measurement Canada Approved

Model	Protection Rating	Item No.	List Price (USD)
T32XW	IP65; NEMA 4X	83999823	450

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, CKW TxxXW	80500552	174
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Cable ST103 - TxxXW	80252584	210



T32M

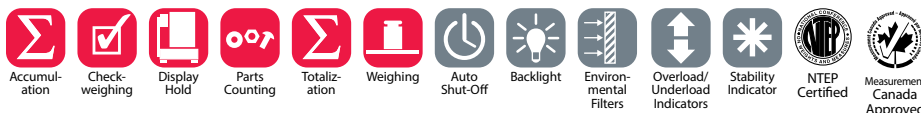
Economical Metal Indicator for Basic Industrial Applications

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

Application	Weighing, Parts Counting, Checkweighing, Accumulation, Display Hold
Display	T32MC: Backlit liquid crystal display (LCD) T32ME: Light-emitting diode display (LED)
Operation	AC adapter (included)
Communication	Easy access communication port including RS232 interface (included). External RS232-USB or RS232-Ethernet connectors available.
Construction	Front ABS/rear painted steel housing and painted steel mounting bracket
Design Features	User-configurable resolution up to 20,000d/6,000e, NTEP Certified and Measurement Canada Approved

Model	Item No.	List Price (USD)
T32ME	83998166	291
T32MC	83998167	291

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141



T31P

Economical ABS Plastic Indicator for Basic Industrial Applications

- 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.

Application Weighing, Parts Counting

Display Backlit liquid crystal display (LCD)

Operation AC adapter (included) or rechargeable battery (included)

Communication Easy access communication port including RS232 interface (included). External RS232-USB or RS232-Ethernet connectors available.

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

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



Front mount handle accessory available

Model	Item No.	List Price (USD)
T31P	83998110	370

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525	188
Software, Winwedge	80850080	515
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, Stainless Steel, Floor Stand	30047154	251
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141
Handle Kit, D3K	30381321	99



CKW Bases

High Quality Washdown Checkweighing Base

- The CKW base is NSF Certified, USDA-AMS Accepted, supports HACCP-certified systems, and is safe for use in food processing applications.
- Constructed of IP67 stainless steel loadcells, 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.



- Construction** 304 grade stainless steel platform with no visible threads, rounded corners, drain holes, extended skirt and open frame, IP67 stainless steel load cells
- Design Features** No visible threads for conformance to food safety requirements, NSF Certified, USDA-AMS Accepted, and supports HACCP-certified systems with NTEP Certified and Measurement Canada Approved

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
CKW3R	6 lb / 3 kg	0.001 lb / 0.5 g	0.002 lb / 1 g	10 in × 10 in / 254 mm × 254 mm	30379430	826
CKW6R	15 lb / 6 kg	0.002 lb / 1 g	0.005 lb / 2 g	10 in × 10 in / 254 mm × 254 mm	30379431	826
CKW15L	30 lb / 15 kg	0.005 lb / 2 g	0.01 lb / 5 g	12 in × 12 in / 305 mm × 305 mm	30379432	957
CKW30L	60 lb / 30 kg	0.01 lb / 5 g	0.02 lb / 10 g	12 in × 12 in / 305 mm × 305 mm	30379433	957

Accessories	Item No.	List Price (USD)
Column Kit, 23 cm / 9 in, Stainless Steel for T71XW/T51XW Indicator	30454644	247
Wall Mount Bracket Stainless Steel for T71XW/T51XW Indicator	80500735	81

Defender WQ & WT Series Stainless Steel Bases

High Quality All Stainless Steel Base for Washdown Industrial Weighing



- Welded stainless steel construction in square and rectangular shapes for demanding industrial applications.
- Resolutions up to 25,000d/5,000e NTEP Class III and Measurement Canada Class III approved for legal-for-trade performance.
- Durably constructed with stainless steel platform, bases and loadcells.

Construction Stainless steel platform, base frame and loadcell.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade performance, EasyConnect connector allows fast set-up with OHAUS TD52 indicators, speeding configuration and installation. Adapter available for wiring to non-TD52 indicator.

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D2WQS	5 lb / 2.5 kg	0.0002 lb / 0.1 g	0.001 lb / 0.5 g	10 × 10 in / 254 × 254 mm	30419628	820
D5WQS	10 lb / 5 kg	0.0005 lb / 0.2 g	0.002 lb / 1 g		30419629	820
D12WQS	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 5 g		30419630	820
D12WQR				30419634	872	
D25WQR	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g	12 × 12 in / 305 × 305 mm	30419635	872
D50WQR	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30419636	872
D25WQL	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g	18 × 18 in / 457 × 457 mm	30419642	1384
D50WQL	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30419643	1384
D125WQL	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30419644	1384
D50WTX	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 × 24 in / 457 × 610 mm	30419648	1615
D125WTX	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30419649	1615
D250WTX	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30419650	1615
D50WQV	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	24 × 24 in / 610 × 610 mm	30419655	1922
D125WQV	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 50 g		30419656	1922
D250WQV	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30419657	2045
D500WQV*	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30419658	2045

* Aluminum IP67 load cell

Accessories	Item No.	List Price (USD)
Column Kit, 35 cm / 13.9 in, Painted Carbon Steel to TD52 Indicator	30424410	71
Column Kit, 68 cm / 26.9 in, Painted Carbon Steel to TD52 Indicator	30424411	92
Column Kit, 98 cm / 38.8 in, Painted Carbon Steel to TD52 Indicator	30424412	103
Column Kit, 35 cm / 13.9 in, Stainless Steel to TD52 Indicator	30424413	157
Column Kit, 68 cm / 26.9 in, Stainless Steel to TD52 Indicator	30424414	200
Column Kit, 98 cm / 38.8 in, Stainless Steel to TD52 Indicator	30424415	216
Indicator Front Mount Kit Stainless Steel for TD52 Indicator	30424024	108
Column Mounted Printer Holder Kit	30424025	60
LC Extension Cable, 9m/29.7 ft to TD52 Indicator	30424409	162
Load Cell Cable Adapter Kit, non-TD52 Indicator to D52 Base	30429931	49
Wheel Kit, Defender Series (for bases up to 300 kg/600lb)	30372146	130



Defender RQ & RT Series Bases

High Quality Powder-Coated Steel Bases for Industrial Weighing

- Welded steel construction in square and rectangular shapes for demanding industrial applications.
- Resolutions up to 25,000d/5,000e NTEP Class III and Measurement Canada Class III approved for legal-for-trade performance.
- Durably constructed with stainless steel platform, powder-coated steel bases and aluminum loadcells.



Construction Stainless steel platform, powder-coated base frame and aluminum loadcell.

Design Features Up to 25,000d/5,000e NTEP Class III certified and Measurement Canada Class III approved legal-for-trade performance, EasyConnect connector allows fast set-up with OHAUS TD52 indicators, speeding configuration and installation. Adapter available for wiring to non-TD52 indicator.

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D12RQR	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 x 12 in / 305 x 305 mm	30419631	718
D25RQR	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30419632	718
D50RQR	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30419633	718
D12RTR	25 lb / 12.5 kg	0.001 lb / 0.5 g	0.005 lb / 2 g	12 x 14 in / 305 x 355 mm	30419637	820
D25RTR	50 lb / 25 kg	0.002 lb / 1 g	0.01 lb / 5 g		30419638	820
D50RTR	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g		30419639	820
D50RQL	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 x 18 in / 457 x 457 mm	30419640	1025
D125RQL	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30419641	1025
D50RTX	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	18 x 24 in / 457 x 610 mm	30419645	1077
D125RTX	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30419646	1077
D250RTX	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30419647	1077
D50RQV	100 lb / 50 kg	0.005 lb / 2 g	0.02 lb / 10 g	24 x 24 in / 610 x 610 mm	30419651	1205
D125RQV	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g		30419652	1205
D250RQV	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30419653	1230
D500RQV	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30419654	1230
D125RTV	250 lb / 125 kg	0.01 lb / 5 g	0.05 lb / 20 g	23.6 x 31.5 in / 600 x 800 mm	30419659	1615
D250RTV	500 lb / 250 kg	0.02 lb / 10 g	0.1 lb / 50 g		30419660	1615
D500RTV	1,000 lb / 500 kg	0.05 lb / 20 g	0.2 lb / 100 g		30419661	1615

Accessories	Item No.	List Price (USD)
Column Kit, 35 cm / 13.9 in, Painted Carbon Steel to TD52 Indicator	30424410	71
Column Kit, 68 cm / 26.9 in, Painted Carbon Steel to TD52 Indicator	30424411	92
Column Kit, 98 cm / 38.8 in, Painted Carbon Steel to TD52 Indicator	30424412	103
Column Kit, 35 cm / 13.9 in, Stainless Steel to TD52 Indicator	30424413	157
Column Kit, 68 cm / 26.9 in, Stainless Steel to TD52 Indicator	30424414	200
Column Kit, 98 cm / 38.8 in, Stainless Steel to TD52 Indicator	30424415	216
Indicator Front Mount Kit Stainless Steel for TD52 Indicator	30424024	108
Column Mounted Printer Holder Kit	30424025	60
LC Extension Cable, 9m/29.7 ft to TD52 Indicator	30424409	162
Load Cell Cable Adapter Kit, non-TD52 Indicator to D52 Base	30429931	49
Wheel Kit, Defender Series (for bases up to 300 kg/600lb)	30372146	130



Defender® V Series Stainless Steel Bases

Economical Base for Washdown Industrial Weighing

- 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.



30 lb model available

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

Design Features 125% capacity overload protection, NTEP Certified and Measurement Canada Approved, Wheel kits (optional)

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D15VR	30 lb / 15 kg	0.005 lb / 2g	0.01 lb / 5 g	14 in × 12 in / 355 mm × 305 mm	30379441	763
D30VR	60 lb / 30 kg	0.01 lb / 5 g	0.02 lb / 10 g	14 in × 12 in / 355 mm × 305 mm	30379442	763
D60VR	150 lb / 60 kg	0.02 lb / 10 g	0.05 lb / 20 g	14 in × 12 in / 355 mm × 305 mm	30379443	763
D60VL				21.7 in × 16.5 in / 550 mm × 420 mm	30379444	1288
D150VL	300 lb / 150 kg	0.05 lb / 20 g	0.1 lb / 50 g	21.7 in × 16.5 in / 550 mm × 420 mm	30379445	1288
D150VX				25.6 in × 19.7 in / 650 mm × 500 mm	30379446	1913
D300VX	600 lb / 300 kg	0.1 lb / 50 g	0.2 lb / 100 g	25.6 in × 19.7 in / 650 mm × 500 mm	30379447	1913

Accessories	Item No.	List Price (USD)
Column Kit, 23 cm / 9 in, Stainless Steel for T71XW/T51XW Indicator	30454644	247
Wall Mount Bracket Stainless Steel for T71XW/T51XW Indicator	80500735	81
Wheel Kit, Defender Series (for bases up to 300 kg/600lb)	30372146	130
Column Kit, 35 cm / 13.9 in, Stainless Steel, to T51/71/72XW	80500725	170
Column Kit, 68 cm / 26.9 in, Stainless Steel, to T51/71/72XW	80500726	216
Column Adapter, Painted, T31P Indicators	72209339	27
Column Adapter, Stainless Steel, T32XW/T51XW/T71XW	72209340	53
Cable Kit, Loadcell Adapter to T51/T71 Indicators	80500736	70

Defender® B Series Bases

Economical Base for Industrial Weighing

- 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.

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

Design Features 125% capacity overload protection, NTEP Certified and Measurement Canada Approved, Wheel kits (optional)



30 lb model available

Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
D15BR	30lb / 15kg	0.005 lb / 2g	0.01 lb / 5 g	14 in x 12 in / 355 mm x 305 mm	30379434	684
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	684
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	684
D60BL				21.7 in x 16.5 in / 550 mm x 420 mm	30379437	710
D150BL	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	30379438	710
D150BX				25.6 in x 19.7 in / 650 mm x 500 mm	30379439	789
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	789

Accessories	Item No.	List Price (USD)
Column Kit, 23 cm / 9 in, Stainless Steel for T71XW/T51XW Indicator	30454644	247
Wall Mount Bracket Stainless Steel for T71XW/T51XW Indicator	80500735	81
Wheel Kit, Defender Series (for bases up to 300 kg/600lb)	30372146	130
Column Kit, 35 cm / 13.9 in, Stainless Steel, to T51/71/72XW	80500725	170
Column Kit, 68 cm / 26.9 in, Stainless Steel, to T51/71/72XW	80500726	216
Column Adapter, Painted, T31P Indicators	72209339	27
Column Adapter, Stainless Steel, T32XW/T51XW/T71XW	72209340	53
Cable Kit, Loadcell Adapter to T51/T71 Indicators	80500736	70

Aviator 7000*

Versatile Counter Top Price Computing Scale for Retail Business

- Multiple connection possibilities—POS, External printer, RS232 or USB
- Fast light-touch keyboard with exchangeable preset card and keysheet layers
- Standard D-cell batteries plus integrated carry handles for portability

Application Weighing, Price Computing

Display 4-line backlit LCD including 6-digit weight, 6-digit unit price, 7-digit total price and 4-digit preset tare line

Operation AC Adapter (Included) or 6 Alkaline (not included)

Communication RS232 (Available as an Accessory), USB (as an accessory)

Construction ABS housing with stainless steel platform

Design Features 100 PLU and 24 preset keys plus exchangeable preset card and keysheet layers, adjustable rubber non-slip feet & front level bubble, integrated adapter storage and carry handles, NTEP Certified



Model	Capacity	Readability	Certified Readability	Platform Size	Item No.	List Price (USD)
A71P15DNUS	15 lb; 30 lb / 6 kg; 15 kg	0.005 lb; 0.01 lb / 2 g; 5 g	0.005 lb; 0.01 lb / 2 g; 5 g	9.5 in × 13.3 in / 240 mm × 337 mm	72248760	453
A71P15DTNUS					72248762	512
A71P30DNUS	30 lb; 60 lb / 15 kg; 30 kg	0.01 lb; 0.02 lb / 5 g; 10 g	0.01 lb; 0.02 lb / 5 g; 10 g		72248761	453
A71P30DTNUS					72248763	512

Accessories	Item No.	List Price (USD)
Printer, Impact, SF40A, AM	30064203	964
SP, Keypad, Silicone, bRite A71	72231249	33
Keypad White Silicone Pad bRite A71	72231250	24
Cable, RJ45-RS232, POS, bRite A71	72237981	46
Cable, RJ45-USB, POS, bRite A71	72237984	46
Function Keyboard NA 100g OHAUS bLite	72241852	18

Accessories	Item No.	List Price (USD)
In-Use-Cover, bRite A51 A71	72247038	37
In-Use-Cover, Pan, bRite A51 A71	72247039	24
Cable, RJ45-RS232, Printer, bRite A71	72249531	46
Thermal Printer Head Assy bRite A71 AM	72253293	735
Paper Roll, (1), Printer, bRite A71	72255953	20
Printer, Thermal, STP-103, US (requires 80500525)	80251992	737

*Available for use in U.S. only. Not approved for Canada.



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Calibration Weights



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 1mg to 2000kg, and are available with certifications.



Weights & Weight Sets Overview



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.

Troemner UltraClass Individual Weights

Weight tolerance is equal to ANSI/ASTM E617 Class 0

- UltraClass weights combine high precision with the advantage of two-piece construction (1 g and larger) avoiding costly replacement issues associated with one-piece weights.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Individual weights 1 mg through 10 kg are supplied in durable polycarbonate cases. Case lids lock tightly to ensure that your weight is held securely and kept clean and dust free.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg	30390204	10208	50 kg	30390236	10924	50 kg	30390269	11105
30 kg	30390203	6916	30 kg	30390235	6959	30 kg	30390268	7635
25 kg	30390202	5479	25 kg	30390234	5550	25 kg	30390267	5614
20 kg	30390201	2964	20 kg	30390233	3118	20 kg	30390266	3201
10 kg	30390200	2537	10 kg	30390232	2672	10 kg	30390265	3011
5 kg	30390199	1372	5 kg	30390231	1435	5 kg	30390264	1605
3 kg	30390198	1187	3 kg	30390230	1251	3 kg	30390263	1332
2 kg	30390197	926	2 kg	30390229	998	2 kg	30390262	1081
1 kg	30390196	585	1 kg	30390228	662	1 kg	30390261	747
500 g	30390195	285	500 g	30390227	328	500 g	30390260	369
300 g	30390194	209	300 g	30390226	269	300 g	30390259	310
200 g	30390193	196	200 g	30390225	240	200 g	30390258	302
100 g	30390192	128	100 g	30390224	134	100 g	30390257	196
50 g	30390191	104	50 g	30390223	130	50 g	30390256	177
30 g	30390190	104	30 g	30390222	129	30 g	30390255	177
20 g	30390189	87	20 g	30390221	106	20 g	30390254	164
10 g	30390188	87	10 g	30390220	106	10 g	30390253	155
5 g	30390187	87	5 g	30390219	97	5 g	30390252	155
3 g	30390186	87	3 g	30390218	97	3 g	30390251	155
2 g	30390185	87	2 g	30390217	97	2 g	30390250	155
1 g	30390184	87	1 g	30390216	97	1 g	30390249	155
500 mg	30390183	86	500 mg	30390215	95	500 mg	30390248	140
300 mg	30390182	86	300 mg	30390214	95	300 mg	30390247	140
200 mg	30390181	86	200 mg	30390213	95	200 mg	30390246	140
100 mg	30390180	86	100 mg	30390212	95	100 mg	30390245	140
50 mg	30390179	86	50 mg	30390211	95	50 mg	30390244	140
30 mg	30390178	86	30 mg	30390210	95	30 mg	30390243	140
20 mg	30390177	86	20 mg	30390209	95	20 mg	30390242	140
10 mg	30390176	86	10 mg	30390208	95	10 mg	30390241	140
5 mg	30390175	86	5 mg	30390207	95	5 mg	30390240	140
3 mg	30390174	86	3 mg	30390206	95	3 mg	30390239	140
2 mg	30390173	86	2 mg	30390205	95	2 mg	30390238	140
1 mg	30390172	86	1 mg	30390204	95	1 mg	30390237	140

ASTM Class 1 Individual Weights

Adjusted to meet ASTM Class 1 Tolerances

- 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.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Individual weights 1 mg through 10 kg are supplied in durable polycarbonate cases. Case lids lock tightly to ensure that your weight is held securely and kept clean and dust free.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg	30391425	9878	50 kg	30391607	10693	50 kg	30391458	10887
30 kg	30391424	6289	30 kg	30391606	6782	30 kg	30391457	7274
25 kg	30391423	4978	25 kg	30391605	5028	25 kg	30391456	5212
20 kg	30391422	3387	20 kg	30391604	3523	20 kg	30391455	3567
10 kg	30391421	2314	10 kg	30391603	2372	10 kg	30391454	2429
5 kg	30391420	1258	5 kg	30391602	1367	5 kg	30391453	1519
3 kg	30391419	1076	3 kg	30391601	1233	3 kg	30391452	1258
2 kg	30391418	840	2 kg	30391600	928	2 kg	30391451	995
1 kg	30391417	533	1 kg	30391599	629	1 kg	30391450	697
500 g	30391416	251	500 g	30391598	306	500 g	30391449	359
300 g	30391415	192	300 g	30391597	257	300 g	30391448	298
200 g	80781143	186	200 g	30391596	239	200 g	80781144	289
100 g	80781141	115	100 g	30391595	159	100 g	80781142	170
50 g	80781139	109	50 g	30391594	154	50 g	80781140	165
30 g	30391411	103	30 g	30391593	149	30 g	30391444	160
20 g	80781135	98	20 g	30391592	144	20 g	80781136	158
10 g	80781133	98	10 g	30391591	144	10 g	80781134	156
5 g	80781131	98	5 g	30391590	144	5 g	80781132	154
3 g	30391407	88	3 g	30391589	134	3 g	30391440	145
2 g	80781127	88	2 g	30391588	134	2 g	80781128	145
1 g	80781125	82	1 g	30391587	122	1 g	80781126	133
500 mg	80781123	80	500 mg	30391586	111	500 mg	80781124	126
300 mg	30391403	80	300 mg	30391585	111	300 mg	30391436	126
200 mg	80781119	80	200 mg	30391584	111	200 mg	80781120	126
100 mg	80781117	80	100 mg	30391583	111	100 mg	80781118	126
50 mg	80781115	80	50 mg	30391582	111	50 mg	80781116	126
30 mg	30391399	80	30 mg	30391581	111	30 mg	30391432	126
20 mg	80781111	80	20 mg	30391580	111	20 mg	80781112	126
10 mg	80781109	80	10 mg	30391579	111	10 mg	80781110	126
5 mg	80781107	80	5 mg	30391578	111	5 mg	80781108	126
3 mg	30391395	80	3 mg	30391577	111	3 mg	30391428	126
2 mg	80781103	80	2 mg	30391576	111	2 mg	80781104	126
1 mg	80781101	80	1 mg	30391575	111	1 mg	80781102	126

ASTM Class 4 Individual Weights

Adjusted to meet ASTM Class 4 Tolerances

- Can be used for calibration of semi-analytical balances and for student use.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Individual weights 1 mg through 10 kg are supplied in durable polycarbonate cases. Case lids lock tightly to ensure that your weight is held securely and kept clean and dust free.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg	30391295	9510	50 kg	30391108	9523	50 kg	30391328	9642
30 kg	30391294	5928	30 kg	30391107	5989	30 kg	30391327	6138
25 kg	30391293	4489	25 kg	30391106	4581	25 kg	30391326	4725
20 kg	30391292	2465	20 kg	30391105	2511	20 kg	30391325	2675
10 kg	30391291	1558	10 kg	30391104	1585	10 kg	30391324	1974
5 kg	30391290	1153	5 kg	30391103	1223	5 kg	30391323	1350
3 kg	30391289	942	3 kg	30391102	995	3 kg	30391322	1070
2 kg	30391288	737	2 kg	30391101	857	2 kg	30391321	896
1 kg	30391287	470	1 kg	30391100	518	1 kg	30391320	563
500 g	30391286	220	500 g	30391099	226	500 g	30391319	302
300 g	30391285	155	300 g	30391098	180	300 g	30391318	237
200 g	30391284	137	200 g	30391097	166	200 g	30391317	219
100 g	80780063	90	100 g	30391096	120	100 g	80850287	144
50 g	80780075	90	50 g	30391095	113	50 g	80850297	141
30 g	30391281	78	30 g	30391094	113	30 g	30391314	137
20 g	80780068	78	20 g	30391093	103	20 g	80850292	133
10 g	80780062	72	10 g	30391092	103	10 g	80850286	129
5 g	80780074	56	5 g	30391091	87	5 g	80850296	124
3 g	30391277	56	3 g	30391090	84	3 g	30391310	124
2 g	80780067	56	2 g	30391089	84	2 g	80850291	124
1 g	80780061	56	1 g	30391088	84	1 g	80850285	119
500 mg	80780073	36	500 mg	30391087	71	500 mg	80850295	102
300 mg	30391273	36	300 mg	30391086	71	300 mg	30391306	102
200 mg	80780066	36	200 mg	30391085	71	200 mg	80850290	102
100 mg	80780060	36	100 mg	30391084	71	100 mg	80850284	102
50 mg	80780072	36	50 mg	30391083	71	50 mg	80850294	102
30 mg	30391269	36	30 mg	30391082	71	30 mg	30391302	102
20 mg	80780065	36	20 mg	30391081	71	20 mg	80850289	102
10 mg	80780059	36	10 mg	30391080	71	10 mg	80850283	102
5 mg	80780071	36	5 mg	30391079	71	5 mg	80850293	102
3 mg	30391265	36	3 mg	30391078	71	3 mg	30391298	102
2 mg	80780064	36	2 mg	30391077	71	2 mg	80850288	102
1 mg	80780058	36	1 mg	30391076	71	1 mg	80850282	102

Cal-Paks

Designed for Routine Maintenance of Your Balance

- The three weights included in the set will test the accuracy and linearity of your balance throughout its entire range.
- Cal-Pak components and carrying case are linked through the use of a unique serial number. You can trace your individual weights to the appropriate NVLAP Certificate and master carrying case.
- Cal-Paks are supplied in a case with accessories for care and handling of the weights including gloves and forceps.



Model	Item No.	List Price (USD)
2 G-1 MG CAL-PAK ULTRACCLASS W/ NVLAP	30391799	412
5 G-1 MG CAL-PAK ULTRACCLASS W/ NVLAP	30391798	412
20 G-20 MG CAL-PAK CL 1 W/ NVLAP	30391797	405
20 G-200 MG CAL-PAK CL 1 W/ NVLAP	30391796	405
50 G-200 MG CAL-PAK CL 1 W/ NVLAP	30390007	394
50 G-2 G CAL-PAK CL 1 W/ NVLAP	30391795	394
100 G-20 MG CAL-PAK CL 1 W/NVLAP	30391794	394
100 G-200 MG CAL-PAK CL 1 W/NVLAP	30391793	394
100 G-2 G CAL-PAK CL 1 W/NVLAP	30391792	408
200 G-200 MG CAL-PAK CL 1 W/NVLAP	30391791	460
200 G-2 G CAL-PAK CL 1 W/NVLAP	30391790	460
500 G-20 MG CAL-PAK CL 1 W/NVLAP	30391789	582
500 G-200 MG CAL-PAK CL 1 W/NVLAP	30391788	582
500 G-2 G CAL-PAK CL 1 W/NVLAP	30391787	582
1 KG-2 G CAL-PAK CL 1 W/NVLAP	30391786	716
1 KG-20 G CAL-PAK CL 1 W/NVLAP	30391785	858
2 KG-2 G CAL-PAK CL 1 W/NVLAP	30391784	1045
2 KG-20 G CAL-PAK CL 1 W/NVLAP	30391783	1339
5 KG-2 G CAL-PAK CL 1 W/NVLAP	30390006	1405
5 KG-2 G CAL-PAK CLASS 1 W/NVLAP	30390005	1497
5 KG-20 G CAL-PAK CL 1 W/NVLAP	30391782	1560
5 KG-20 G CAL-PAK CLASS 1 W/NVLAP	30390004	1536
5 KG-2 G CAL-PAK CL 1 W/NVLAP	30390003	1537
5 KG-2 G CAL-PAK CLASS 1 W/NVLAP	30390002	1634
5 KG-20 G CAL-PAK CL 1 W/NVLAP	30390001	1478
5 KG-20 G CAL-PAK CLASS 1 W/NVLAP	30390000	1634

Troemner UltraClass Weight Sets

Weight tolerance is equal to ANSI/ASTM E617 Class 0

- UltraClass weights combine high precision with the advantage of two-piece construction (1 g and larger) avoiding costly replacement issues associated with one-piece weights.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Weight sets 500 g and below include a polycarbonate case. Weight sets where the largest weight is 1 kg and above are supplied in a tough, lightweight, rugged case, designed to protect your weight set under any shipping circumstance.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg-1 g	30390097	25781	50 kg-1 g	30390134	27741	50 kg-1 g	30390171	28222
50 kg-1 mg	30390096	26252	50 kg-1 mg	30390133	28825	50 kg-1 mg	30390170	29225
30 kg-1 g	30390095	18001	30 kg-1 g	30390132	19761	30 kg-1 g	30390169	20159
30 kg-1 mg	30390094	18866	30 kg-1 mg	30390131	20612	30 kg-1 mg	30390168	21394
25 kg-1 g	30390093	17687	25 kg-1 g	30390130	18059	25 kg-1 g	30390167	18399
25 kg-1 mg	30390092	18236	25 kg-1 mg	30390129	18751	25 kg-1 mg	30390166	19449
20 kg-1 g	30390091	11476	20 kg-1 g	30390128	12864	20 kg-1 g	30390165	13149
20 kg-1 mg	30390090	11788	20 kg-1 mg	30390127	13639	20 kg-1 mg	30390164	14374
10 kg-1 g	30390089	8963	10 kg-1 g	30390126	9299	10 kg-1 g	30390163	9802
10 kg-1 mg	30390088	9433	10 kg-1 mg	30390125	10229	10 kg-1 mg	30390162	10950
5 kg-1 g	30390087	6133	5 kg-1 g	30390124	6820	5 kg-1 g	30390161	7496
5 kg-1 mg	30390086	6761	5 kg-1 mg	30390123	7789	5 kg-1 mg	30390160	8529
2 - 2 kg-1 g	30390011	4876	2 - 2 kg-1 g	30390015	5659	2 - 2 kg-1 g	30390019	6031
2 - 2 kg-1 mg	30390010	5347	2 - 2 kg-1 mg	30390014	6588	2 - 2 kg-1 mg	30390018	7255
2 kg-1 g	30390085	4089	2 kg-1 g	30390122	4496	2 kg-1 g	30390159	4820
2 kg-1 mg	30390084	4719	2 kg-1 mg	30390121	5349	2 kg-1 mg	30390158	6016
1 kg-1 g	30390083	3028	1 kg-1 g	30390120	3502	1 kg-1 g	30390157	3904
1 kg-1 mg	30390082	3695	1 kg-1 mg	30390119	4451	1 kg-1 mg	30390156	5106
500 g-1 g	30390081	2044	500 g-1 g	30390118	2557	500 g-1 g	30390155	2892
500 g-1 mg	30390080	2671	500 g-1 mg	30390117	3489	500 g-1 mg	30390154	4119
2 - 200 g-1 g	30390009	1158	2 - 200 g-1 g	30390013	1403	2 - 200 g-1 g	30390017	1795
2 - 200 g-1 mg	30390008	1636	2 - 200 g-1 mg	30390012	2365	2 - 200 g-1 mg	30390016	3201
200 g-1 g	30390079	1047	200 g-1 g	30390116	1228	200 g-1 g	30390153	1620
200 g-1 mg	30390078	1495	200 g-1 mg	30390115	2163	200 g-1 mg	30390152	2854
100 g-1 g	30390077	878	100 g-1 g	30390114	1052	100 g-1 g	30390151	1415
100 g-100 mg	30390076	1070	100 g-100 mg	30390113	1314	100 g-100 mg	30390150	1853
100 g-10 mg	30390075	1289	100 g-10 mg	30390112	1667	100 g-10 mg	30390149	2277
100 g-5 mg	30390074	1342	100 g-5 mg	30390111	1723	100 g-5 mg	30390148	2152
100 g-1 mg	30390073	1397	100 g-1 mg	30390110	1851	100 g-1 mg	30390147	2615
50 g-1 g	30390072	939	50 g-1 g	30390109	1067	50 g-1 g	30390146	1357
50 g-100 mg	30390071	1033	50 g-100 mg	30390108	1324	50 g-100 mg	30390145	1735
50 g-10 mg	30390070	1225	50 g-10 mg	30390107	1637	50 g-10 mg	30390144	2152
50 g-5 mg	30390069	1297	50 g-5 mg	30390106	1737	50 g-5 mg	30390143	2090
50 g-1 mg	30390068	1477	50 g-1 mg	30390105	1876	50 g-1 mg	30390142	2499
20 g-1 g	30390067	789	20 g-1 g	30390104	928	20 g-1 g	30390141	1062
20 g-100 mg	30390066	985	20 g-100 mg	30390103	1121	20 g-100 mg	30390140	1551
20 g-10 mg	30390065	1163	20 g-10 mg	30390102	1526	20 g-10 mg	30390139	1867
20 g-5 mg	30390064	1245	20 g-5 mg	30390101	1427	20 g-5 mg	30390138	1937
20 g-1 mg	30390063	1424	20 g-1 mg	30390100	1774	20 g-1 mg	30390137	2238
500 mg-10 mg	30390062	570	500 mg-10 mg	30390099	892	500 mg-10 mg	30390136	1180
500 mg-1 mg	30390061	851	500 mg-1 mg	30390098	1047	500 mg-1 mg	30390135	1465

Weights by



ASTM Class 1 Weight Sets

Adjusted to meet ASTM Class 1 Tolerances

- 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.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Weight sets 500 g and below include a polycarbonate case. Weight sets where the largest weight is 1 kg and above are supplied in a tough, lightweight, rugged case, designed to protect your weight set under any shipping circumstance.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg-1 g	30391360	22166	50 kg-1 g	30391574	24179	50 kg-1 g	30391392	24522
50 kg-1 mg	30391359	22638	50 kg-1 mg	30391573	25107	50 kg-1 mg	30391391	25414
30 kg-1 g	30391358	15563	30 kg-1 g	30391572	17202	30 kg-1 g	30391390	17603
30 kg-1 mg	30391357	16115	30 kg-1 mg	30391571	17978	30 kg-1 mg	30391389	18607
25 kg-1 g	30391356	15251	25 kg-1 g	30391570	15655	25 kg-1 g	30391388	15946
25 kg-1 mg	30391355	15721	25 kg-1 mg	30391569	16428	25 kg-1 mg	30391387	16911
20 kg-1 g	30391354	9905	20 kg-1 g	30391568	11004	20 kg-1 g	30391386	11388
20 kg-1 mg	30391353	11476	20 kg-1 mg	30391567	11857	20 kg-1 mg	30391385	12446
10 kg-1 g	30391352	7785	10 kg-1 g	30391566	8061	10 kg-1 g	30391384	8497
10 kg-1 mg	30391351	8174	10 kg-1 mg	30391565	8914	10 kg-1 mg	30391383	9531
5 kg-1 g	30391350	5308	5 kg-1 g	30391564	5969	5 kg-1 g	30391382	6355
5 kg-1 mg	30391349	5817	5 kg-1 mg	30391563	6744	5 kg-1 mg	30391381	7402
2 - 2 kg-1 g	30390054	4246	2 - 2 kg-1 g	30390060	4882	2 - 2 kg-1 g	30390056	5259
2 - 2 kg-1 mg	30390053	4557	2 - 2 kg-1 mg	30390059	5734	2 - 2 kg-1 mg	30390055	6308
2 kg-1 g	30391348	3458	2 kg-1 g	30391562	3836	2 kg-1 g	30391380	4187
2 kg-1 mg	30391347	4089	2 kg-1 mg	30391561	4643	2 kg-1 mg	30391379	5236
1 kg-1 g	30391346	2595	1 kg-1 g	30391560	3053	1 kg-1 g	30391378	3381
1 kg-1 mg	30391345	3183	1 kg-1 mg	30391559	3859	1 kg-1 mg	30391377	4428
500 g-1 g	30391344	1761	500 g-1 g	30391558	2219	500 g-1 g	30391376	2524
500 g-1 mg	30391343	2390	500 g-1 mg	30391557	3069	500 g-1 mg	30391375	3721
2 - 200 g-1 g	80781033	956	2 - 200 g-1 g	30390058	1348	2 - 200 g-1 g	80781034	1551
2 - 200 g-1 mg	80781031	1409	2 - 200 g-1 mg	30390057	2169	2 - 200 g-1 mg	80781032	2761
200 g-1 g	30391342	858	200 g-1 g	30391556	1174	200 g-1 g	30391374	1360
200 g-1 mg	30391341	1285	200 g-1 mg	30391555	1940	200 g-1 mg	30391373	2544
100 g-1 g	80781029	734	100 g-1 g	30391554	964	100 g-1 g	80781030	1275
100 g-100 mg	30391340	868	100 g-100 mg	30391553	1196	100 g-100 mg	30391372	1613
100 g-10 mg	30391339	1070	100 g-10 mg	30391552	1507	100 g-10 mg	30391371	2059
100 g-5 mg	30391338	1129	100 g-5 mg	30391551	1526	100 g-5 mg	30391370	1867
100 g-1 mg	80781027	1219	100 g-1 mg	30391550	1723	100 g-1 mg	80781028	2392
50 g-1 g	80781025	708	50 g-1 g	30391549	966	50 g-1 g	80781026	1222
50 g-100 mg	30391337	858	50 g-100 mg	30391548	1146	50 g-100 mg	30391369	1536
50 g-10 mg	30391336	988	50 g-10 mg	30391547	1367	50 g-10 mg	30391368	1918
50 g-5 mg	30391335	1058	50 g-5 mg	30391546	1456	50 g-5 mg	30391367	1991
50 g-1 mg	80781023	1170	50 g-1 mg	30391545	1651	50 g-1 mg	80781024	2238
20 g-1 g	30391334	663	20 g-1 g	30391544	786	20 g-1 g	30391366	923
20 g-100 mg	30391333	797	20 g-100 mg	30391543	1015	20 g-100 mg	30391365	1272
20 g-10 mg	30391332	947	20 g-10 mg	30391542	1314	20 g-10 mg	30391364	1551
20 g-5 mg	30391331	984	20 g-5 mg	30391541	1338	20 g-5 mg	30391363	1629
20 g-1 mg	30391330	1144	20 g-1 mg	30391540	1572	20 g-1 mg	30391362	2022
500 mg-10 mg	30391329	481	500 mg-10 mg	30391539	773	500 mg-10 mg	30391361	1027
500 mg-1 mg	80781021	672	500 mg-1 mg	30391538	965	500 mg-1 mg	80781022	1224

Weights by



ASTM Class 4 Weight Sets

Adjusted to meet ASTM Class 4 Tolerances

- Can be used for calibration of semi-analytical balances and for student use.
- Weights are designed so the specifications on surface finish, markings, construction, material density, and magnetic properties become more restrictive as the weight tolerances decrease.
- Weight sets 500 g and below include a polycarbonate case. Weight sets where the largest weight is 1 kg and above are supplied in a tough, lightweight, rugged case, designed to protect your weight set under any shipping circumstance.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg - 1 g	30391228	18236	50 kg - 1 g	30391075	20922	50 kg - 1 g	30391262	21569
50 kg - 1 mg	30391227	18510	50 kg - 1 mg	30391074	21695	50 kg - 1 mg	30391261	22085
30 kg - 1 g	30391226	12733	30 kg - 1 g	30391073	14832	30 kg - 1 g	30391260	15245
30 kg - 1 mg	30391225	13245	30 kg - 1 mg	30391072	15498	30 kg - 1 mg	30391259	16123
25 kg - 1 g	30391224	12343	25 kg - 1 g	30391071	13562	25 kg - 1 g	30391258	13849
25 kg - 1mg	30391223	12971	25 kg - 1mg	30391070	14261	25 kg - 1mg	30391257	14729
20 kg - 1 g	30391222	8138	20 kg - 1 g	30391069	9533	20 kg - 1 g	30391256	9910
20 kg - 1 mg	30391221	9544	20 kg - 1 mg	30391068	10229	20 kg - 1 mg	30391255	10874
10 kg - 1 g	30391220	6369	10 kg - 1 g	30391067	6974	10 kg - 1 g	30391254	7367
10 kg -1 mg	30391219	6715	10 kg -1 mg	30391066	7673	10 kg -1 mg	30391253	8281
5 kg -1 g	30391218	4388	5 kg -1 g	30391065	5117	5 kg -1 g	30391252	5522
5 kg - 1 mg	30391217	4764	5 kg - 1 mg	30391064	5889	5 kg - 1 mg	30391251	6293
2 - 2kg-1 g	30390048	3458	2 - 2kg-1 g	30390044	4262	2 - 2kg-1 g	30390052	4543
2 - 2 kg-1 mg	30390047	4072	2 - 2 kg-1 mg	30390043	4959	2 - 2 kg-1 mg	30390051	5605
2 kg - 1 g	30391216	2861	2 kg - 1 g	30391063	3333	2 kg - 1 g	30391250	3678
2 kg - 1 mg	30391215	3335	2 kg - 1 mg	30391062	4007	2 kg - 1 mg	30391249	4651
1 kg - 1 g	30391214	2154	1 kg - 1 g	30391061	2634	1 kg - 1 g	30391248	3070
1 kg - 1 mg	30391213	2642	1 kg - 1 mg	30391060	3333	1 kg - 1 mg	30391247	3856
500 g - 1 g	30391212	1441	500 g - 1 g	30391059	1921	500 g - 1 g	30391246	2237
500 g - 1 mg	30391211	1854	500 g - 1 mg	30391058	2624	500 g - 1 mg	30391245	3107
2 - 200 g - 1 g	30390046	765	2 - 200 g - 1 g	30390042	878	2 - 200 g - 1 g	30390050	1106
2 - 200 g - 1 mg	30390045	985	2 - 200 g - 1 mg	30390041	1426	2 - 200 g - 1 mg	30390049	1853
200 g - 1 g	30391210	655	200 g - 1 g	30391057	830	200 g - 1 g	30391244	965
200 g - 1 mg	30391209	902	200 g - 1 mg	30391056	1215	200 g - 1 mg	30391243	1705
100 g - 1 g	30391208	605	100 g - 1 g	30391055	746	100 g - 1 g	30391242	860
100 g - 100 mg	30391207	693	100 g - 100 mg	30391054	901	100 g - 100 mg	30391241	1168
100 g - 10 mg	30391206	828	100 g - 10 mg	30391053	1033	100 g - 10 mg	30391240	1396
100 g - 5 mg	30391205	833	100 g - 5 mg	30391052	1146	100 g - 5 mg	30391239	1449
100 g - 1 mg	80780101	853	100 g - 1 mg	30391051	1197	100 g - 1 mg	80850265	1642
50 g - 1 g	30391204	466	50 g - 1 g	30391050	572	50 g - 1 g	30391238	791
50 g - 100 mg	30391203	556	50 g - 100 mg	30391049	718	50 g - 100 mg	30391237	1018
50 g - 10 mg	30391202	646	50 g - 10 mg	30391048	928	50 g - 10 mg	30391236	1360
50 g - 5 mg	30391201	671	50 g - 5 mg	30391047	1102	50 g - 5 mg	30391235	1492
50 g - 1 mg	80780111	737	50 g - 1 mg	30391046	1136	50 g - 1 mg	80850264	1536
20 g - 1 g	30391200	387	20 g - 1 g	30391045	489	20 g - 1 g	30391234	697
20 g - 100 mg	30391199	461	20 g - 100 mg	30391044	622	20 g - 100 mg	30391233	819
20 g - 10 mg	30391198	511	20 g - 10 mg	30391043	738	20 g - 10 mg	30391232	1000
20 g - 5 mg	30391197	557	20 g - 5 mg	30391042	866	20 g - 5 mg	30391231	1201
20 g - 1 mg	30391196	620	20 g - 1 mg	30391041	966	20 g - 1 mg	30391230	1380
500 mg - 10 mg	30391195	238	500 mg - 10 mg	30391040	465	500 mg - 10 mg	30391229	749
500 mg - 1 mg	80780100	346	500 mg - 1 mg	30391039	566	500 mg - 1 mg	80850263	825

ASTM Class 1 Electronic Balance Weights

Adjusted to meet ASTM Class 1 Tolerances

- Can be used to check or verify the accuracy of your balance and/or scale between calibrations.
- Weights are available in a cylindrical design up through 5 kg and a stackable grip-handle design from 5 kg through 30 kg for all necessary testing, calibration and adjustment of electronic scales and balances.
- Weights 10 g through 10 kg are supplied in a high quality polycarbonate case; a nylon glove is included to protect weights during use.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
30 kg grip	80781007	2146	30 kg grip	30391520	2333	30 kg grip	80781008	2425
25 kg grip	30391488	1831	25 kg grip	30391519	1908	25 kg grip	30391537	1938
24 kg grip	30391487	1778	24 kg grip	30391518	1870	24 kg grip	30391536	1864
20 kg grip	80781005	1526	20 kg grip	30391517	1621	20 kg grip	80781006	1634
16 kg grip	30391485	1423	16 kg grip	30391516	1470	16 kg grip	30391535	1495
10 kg grip	80781003	1018	10 kg grip	30391515	1117	10 kg grip	80781004	1150
8 kg grip	30391483	982	8 kg grip	30391514	1056	8 kg grip	30391534	1090
5 kg grip	80781001	742	5 kg grip	30391513	792	5 kg grip	80781002	887
5 kg cyl	30391481	678	5 kg cyl	30391512	743	5 kg cyl	30391533	810
4 kg grip	30391480	689	4 kg grip	30391511	722	4 kg grip	30391532	840
4 kg cyl	80780027	582	4 kg cyl	30391510	664	4 kg cyl	80850275	730
3 kg cyl	30391478	349	3 kg cyl	30391509	431	3 kg cyl	30391531	497
2 kg cyl	80780024	214	2 kg cyl	30391508	287	2 kg cyl	80850272	366
1500 g cyl	30391476	194	1500 g cyl	30391507	281	1500 g cyl	30391530	356
1000 g cyl	80780021	187	1000 g cyl	30391506	270	1000 g cyl	80850269	330
600 g cyl	30391474	184	600 g cyl	30391505	241	600 g cyl	30391529	310
500 g cyl	80780029	146	500 g cyl	30391504	213	500 g cyl	80850277	276
400 g cyl	80780026	144	400 g cyl	30391503	202	400 g cyl	80850274	269
300 g cyl	30391471	132	300 g cyl	30391502	190	300 g cyl	30391528	260
200 g cyl	80780023	126	200 g cyl	30391501	185	200 g cyl	80850271	255
160 g cyl	30391469	124	160 g cyl	30391500	182	160 g cyl	30391527	251
150 g cyl	30391468	111	150 g cyl	30391499	169	150 g cyl	30391526	237
100 g cyl	80780020	106	100 g cyl	30391498	144	100 g cyl	80850268	164
80 g cyl	30391466	102	80 g cyl	30391497	140	80 g cyl	30391525	164
70 g cyl	30391465	99	70 g cyl	30391496	138	70 g cyl	30391524	164
60 g cyl	30391464	94	60 g cyl	30391495	136	60 g cyl	30391523	164
50 g cyl	80780028	90	50 g cyl	30391494	134	50 g cyl	80850276	164
40 g cyl	80780025	90	40 g cyl	30391493	134	40 g cyl	80850273	164
30 g cyl	30391461	90	30 g cyl	30391492	134	30 g cyl	30391522	164
20 g cyl	80780022	90	20 g cyl	30391491	134	20 g cyl	80850270	164
10 g cyl	30391459	90	10 g cyl	30391490	134	10 g cyl	30391521	164

ASTM Class 4 Electronic Balance Weights

Adjusted to meet ASTM Class 4 Tolerances

- Can be used to check or verify the accuracy of your balance and/or scale between calibrations.
- Weights are available in a cylindrical design up through 5 kg and a stackable grip-handle design from 5 kg through 30 kg for all necessary testing, calibration and adjustment of electronic scales and balances.
- Weights 10 g through 10 kg are supplied in a high quality polycarbonate case; a nylon glove is included to protect weights during use.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
30 kg grip	30391139	1477	30 kg grip	30391170	1667	30 kg grip	30391194	1784
25 kg grip	30391138	1316	25 kg grip	30391169	1321	25 kg grip	30391193	1414
24 kg grip	30391137	1252	24 kg grip	30391168	1283	24 kg grip	30391192	1373
20 kg grip	30391136	1072	20 kg grip	30391167	1128	20 kg grip	30391191	1207
16 kg grip	30391135	938	16 kg grip	30391166	1040	16 kg grip	30391190	1112
10 kg grip	30391134	720	10 kg grip	30391165	779	10 kg grip	30391189	833
8 kg grip	30391133	698	8 kg grip	30391164	715	8 kg grip	30391188	765
5 kg grip	30391132	487	5 kg grip	30391163	524	5 kg grip	30391187	606
5 kg cyl	30391131	470	5 kg cyl	30391162	495	5 kg cyl	30391186	564
4 kg grip	30391130	455	4 kg grip	30391161	507	4 kg grip	30391185	546
4 kg cyl	30391129	460	4 kg cyl	30391160	471	4 kg cyl	30391184	536
3 kg cyl	30391128	285	3 kg cyl	30391159	331	3 kg cyl	30391183	368
2 kg cyl	80780145	182	2 kg cyl	30391158	244	2 kg cyl	80780146	264
1500 g cyl	30391126	179	1500 g cyl	30391157	243	1500 g cyl	30391182	321
1000 g cyl	80780143	169	1000 g cyl	30391156	203	1000 g cyl	80780144	231
600 g cyl	30391124	159	600 g cyl	30391155	189	600 g cyl	30391181	218
500 g cyl	80780141	123	500 g cyl	30391154	158	500 g cyl	80780142	209
400 g cyl	80780139	123	400 g cyl	30391153	153	400 g cyl	80780140	194
300 g cyl	80780137	111	300 g cyl	30391152	146	300 g cyl	80780138	186
200 g cyl	80780135	108	200 g cyl	30391151	144	200 g cyl	80780136	184
160 g cyl	30391119	104	160 g cyl	30391150	139	160 g cyl	30391180	200
150 g cyl	30391118	94	150 g cyl	30391149	144	150 g cyl	30391179	200
100 g cyl	80780133	90	100 g cyl	30391148	116	100 g cyl	80780134	136
80 g cyl	30391116	87	80 g cyl	30391147	110	80 g cyl	30391178	136
70 g cyl	30391115	85	70 g cyl	30391146	110	70 g cyl	30391177	136
60 g cyl	30391114	84	60 g cyl	30391145	110	60 g cyl	30391176	136
50 g cyl	30391113	81	50 g cyl	30391144	107	50 g cyl	30391175	128
40 g cyl	30391112	76	40 g cyl	30391143	101	40 g cyl	30391174	128
30 g cyl	30391111	76	30 g cyl	30391142	101	30 g cyl	30391173	128
20 g cyl	30391110	76	20 g cyl	30391141	101	20 g cyl	30391172	128
10 g cyl	30391109	76	10 g cyl	30391140	101	10 g cyl	30391171	128

OIML E1 & E2 Individual Weights

Manufactured to meet OIML R 111 weight specifications

- OIML R 111 weight specifications are designed so the specifications on surface finish, markings, construction, material density and magnetic properties become more restrictive as weight tolerances decrease in order to enable the weight to maintain its tolerance over time.
- Weights 1 g and above are one-piece construction. Weights 1 g and larger are cylindrical in shape with a tapered neck for easy gripping. They are perfectly flat on top to stack easily on center. Weight bottoms are slightly recessed to expose the smallest possible area to wear.
- Individual weights 1 mg through 10 kg are supplied in durable polycarbonate cases. Case lids lock tightly to ensure that your weight is held securely and kept clean and dust free.



E1 Weights NVLAP		
Model	Item No.	List Price (USD)
50 kg	30390927	10569
20 kg	30390928	4811
10 kg	30390929	3165
5 kg	30390930	2345
2 kg	30390931	1711
1 kg	30390932	1165
500 g	30390933	956
200 g	30390934	780
100 g	30390935	688
50 g	30390936	617
20 g	30390937	584
10 g	30390938	557
5 g	30390939	538
2 g	30390940	519
1 g	30390941	519
500 mg	30390942	281
200 mg	30390943	281
100 mg	30390944	281
50 mg	30390945	281
20 mg	30390946	281
10 mg	30390947	281
5 mg	30390948	281
2 mg	30390949	281
1 mg	30390950	281

E2 Weights NVLAP		
Model	Item No.	List Price (USD)
50 kg	30390903	9365
20 kg	80780306	3040
10 kg	80780305	2352
5 kg	80780304	1347
2 kg	80780303	850
1 kg	80780302	633
500 g	80780301	441
200 g	80780300	349
100 g	80780299	264
50 g	80780298	238
20 g	80780297	228
10 g	80780296	220
5 g	80780295	214
2 g	80780294	208
1 g	80780293	208
500 mg	80780292	130
200 mg	80780291	130
100 mg	80780290	130
50 mg	80780289	130
20 mg	80780288	130
10 mg	80780287	130
5 mg	80780286	130
2 mg	80780285	130
1 mg	80780284	130

OIML F1 & F2 Individual Weights

Manufactured to meet OIML R 111 weight specifications

- OIML R 111 weight specifications are designed so the specifications on surface finish, markings, construction, material density and magnetic properties become more restrictive as weight tolerances decrease in order to enable the weight to maintain its tolerance over time.
- Weights 1 g and above are two-piece construction. OIML Calibration Weights 1 g and larger are cylindrical in shape with a tapered neck for easy gripping. They are perfectly flat on top to stack easily on center. Weight bottoms are slightly recessed to expose the smallest possible area to wear.
- Individual weights 1 mg through 10 kg are supplied in durable polycarbonate cases. Case lids lock tightly to ensure that your weight is held securely and kept clean and dust free.



F1 Weights Without Certificate			F1 Weights NVLAP Certificate			F2 Weights Without Certificate			F2 Weights NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg	80780330	6686	50 kg	30390901	6749	50 kg	30390853	4732	50 kg	30390877	4856
20 kg	80780329	2418	20 kg	80780353	2544	20 kg	30390854	2085	20 kg	30390878	2274
10 kg	80780328	1741	10 kg	80780352	1862	10 kg	30390855	1307	10 kg	30390879	1456
5 kg	80780327	1020	5 kg	80780351	1169	5 kg	30390856	713	5 kg	30390880	861
2 kg	80780326	600	2 kg	80780350	749	2 kg	30390857	564	2 kg	30390881	713
1 kg	80780325	423	1 kg	80780349	551	1 kg	30390858	364	1 kg	30390882	492
500 g	80780324	243	500 g	80780348	371	500 g	30390859	243	500 g	30390883	371
200 g	80780323	190	200 g	80780347	318	200 g	30390860	185	200 g	30390884	313
100 g	80780322	135	100 g	80780346	191	100 g	30390861	113	100 g	30390885	169
50 g	80780321	118	50 g	80780345	175	50 g	30390862	113	50 g	30390886	169
20 g	80780320	118	20 g	80780344	175	20 g	30390863	113	20 g	30390887	169
10 g	80780319	118	10 g	80780343	175	10 g	30390864	113	10 g	30390888	138
5 g	80780318	118	5 g	80780342	175	5 g	30390865	113	5 g	30390889	169
2 g	80780317	118	2 g	80780341	175	2 g	30390866	113	2 g	30390890	169
1 g	80780316	118	1 g	80780340	175	1 g	30390867	113	1 g	30390891	169
500 mg	80780315	49	500 mg	80780339	105	500 mg	30390868	43	500 mg	30390892	100
200 mg	80780314	49	200 mg	80780338	105	200 mg	30390869	43	200 mg	30390893	100
100 mg	80780313	49	100 mg	80780337	105	100 mg	30390870	43	100 mg	30390894	100
50 mg	80780312	49	50 mg	80780336	105	50 mg	30390871	43	50 mg	30390895	100
20 mg	80780311	49	20 mg	80780335	105	20 mg	30390872	43	20 mg	30390896	100
10 mg	80780310	49	10 mg	80780334	105	10 mg	30390873	43	10 mg	30390897	100
5 mg	80780309	49	5 mg	80780333	105	5 mg	30390874	43	5 mg	30390898	100
2 mg	80780308	49	2 mg	80780332	105	2 mg	30390875	43	2 mg	30390899	100
1 mg	80780307	49	1 mg	80780331	105	1 mg	30390876	43	1 mg	30390900	100

OIML E1 & E2 Weight Sets

Manufactured to meet OIML R 111 weight specifications

- OIML R 111 weight specifications are designed so the specifications on surface finish, markings, construction, material density and magnetic properties become more restrictive as weight tolerances decrease in order to enable the weight to maintain its tolerance over time.
- Weights 1 g and above are one-piece construction. Weights 1 g and larger are cylindrical in shape with a tapered neck for easy gripping. They are perfectly flat on top to stack easily on center. Weight bottoms are slightly recessed to expose the smallest possible area to wear.
- Weight sets 500 g and below include a polycarbonate case. Weight sets where the largest weight is 1 kg and above are supplied in a tough, lightweight, rugged case, designed to protect your weight set under any shipping circumstance.



E1 Sets NVLAP		
Model	Item No.	List Price (USD)
50 kg - 1 g	30390904	39881
50 kg - 1 mg	30390905	41144
20 kg - 1 g	30390906	18991
20 kg - 1 mg	30390907	20258
10 kg - 1 g	30390908	15192
10 kg - 1 mg	30390909	15699
5 kg - 1 kg	30390910	7091
5 kg - 1 g	30390911	11289
5 kg - 1 mg	30390912	12154
2 kg - 1 g	30390913	7091
2 kg - 1 mg	30390914	9020
(2) 2 kg - 1 g	30390037	8483
(2) 2 kg - 1 mg	30390038	10128
1 kg - 1 g	30390915	5950
1 kg - 1 mg	30390916	7471
500 g - 1 g	30390917	5065
500 g - 1 mg	30390918	6837
200 g - 1 g	30390919	4306
200 g - 1 mg	30390920	5486
(2) 200 g - 1 g	30390039	4684
(2) 200 g - 1 mg	30390040	5698
100 g - 1 g	30390921	3926
100 g - 1 mg	30390922	5317
50 g - 1 g	30390923	3419
50 g - 1 mg	30390924	4432
5 g - 1 mg	30390925	3419
500 mg - 1 mg	30390926	2153

E2 Sets NVLAP		
Model	Item No.	List Price (USD)
50 kg - 1 g	80780407	22917
50 kg - 1 mg	80780406	23295
20 kg - 1 g	80780405	11280
20 kg - 1 mg	80780404	11956
10 kg - 1 g	80780403	8483
10 kg - 1 mg	80780402	8737
5 kg - 1 kg	80780401	3912
5 kg - 1 g	80780400	5825
5 kg - 1 mg	80780399	6711
2 kg - 1 g	80780398	4052
2 kg - 1 mg	80780397	4939
(2) 2 kg - 1 g	80780396	4633
(2) 2 kg - 1 mg	80780395	5131
1 kg - 1 g	80780394	3666
1 kg - 1 mg	80780393	4781
500 g - 1 g	80780392	2533
500 g - 1 mg	80780391	3188
200 g - 1 g	80780390	1646
200 g - 1 mg	80780389	2890
(2) 200 g - 1 g	80780388	2280
(2) 200 g - 1 mg	80780387	2786
100 g - 1 g	80780386	1299
100 g - 1 mg	80780385	2141
50 g - 1 g	80780384	1139
50 g - 1 mg	80780383	1899
5 g - 1 mg	80780382	1488
500 mg - 1 mg	80780381	1292

OIML F1 & F2 Weight Sets

Manufactured to meet OIML R 111 weight specifications

- OIML R 111 weight specifications are designed so the specifications on surface finish, markings, construction, material density and magnetic properties become more restrictive as weight tolerances decrease in order to enable the weight to maintain its tolerance over time.
- Weights 1 g and above are two-piece construction. OIML Calibration Weights 1 g and larger are cylindrical in shape with a tapered neck for easy gripping. They are perfectly flat on top to stack easily on center. Weight bottoms are slightly recessed to expose the smallest possible area to wear.
- Weight sets 500 g and below include a polycarbonate case. Weight sets where the largest weight is 1 kg and above are supplied in a tough, lightweight, rugged case, designed to protect your weight set under any shipping circumstance.



F1 Weights Without Certificate			F1 Weights NVLAP Certificate			F2 Weights Without Certificate			F2 Weights NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
50 kg - 1 g	80780434	15216	50 kg - 1 g	80780461	16459	50 kg - 1 g	30390807	12701	50 kg - 1 g	30390830	12914
50 kg - 1 mg	80780433	14686	50 kg - 1 mg	80780460	17092	50 kg - 1 mg	30390808	12966	50 kg - 1 mg	30390831	13546
20 kg - 1 g	80780432	9061	20 kg - 1 g	80780459	10378	20 kg - 1 g	30390809	8072	20 kg - 1 g	30390832	9389
20 kg - 1 mg	80780431	9328	20 kg - 1 mg	80780458	11050	20 kg - 1 mg	30390810	8297	20 kg - 1 mg	30390833	10019
10 kg - 1 g	80780430	6898	10 kg - 1 g	80780457	8108	10 kg - 1 g	30390811	6145	10 kg - 1 g	30390834	7355
10 kg - 1 mg	80780429	7139	10 kg - 1 mg	80780456	8677	10 kg - 1 mg	30390812	6345	10 kg - 1 mg	30390835	7883
5 kg - 1 g	80780428	3402	5 kg - 1 g	80780455	3704	5 kg - 1 g	30390813	3101	5 kg - 1 g	30390836	3496
5 kg - 1 mg	80780427	4270	5 kg - 1 mg	80780454	5371	5 kg - 1 mg	30390814	3665	5 kg - 1 mg	30390837	4767
2 kg - 1 g	80780425	2834	2 kg - 1 g	80780452	3695	2 kg - 1 g	30390815	4152	2 kg - 1 mg	30390838	5587
2 kg - 1 mg	80780424	3665	2 kg - 1 mg	80780451	4730	2 kg - 1 mg	30390816	2804	2 kg - 1 g	30390839	3665
(2) 2 kg - 1 g	80780423	3352	(2) 2 kg - 1 g	80780450	4336	(2) 2 kg - 1 g	30390817	3178	2 kg - 1 mg	30390840	4521
(2) 2 kg - 1 mg	80780422	3834	(2) 2 kg - 1 mg	80780449	4887	(2) 2 kg - 1 mg	30390029	3178	(2) 2 kg - 1 g	30390033	4213
1 kg - 1 g	80780421	2496	1 kg - 1 g	80780448	3445	(2) 2 kg - 1 mg	30390030	3229	(2) 2 kg - 1 mg	30390034	4644
1 kg - 1 mg	80780420	2692	1 kg - 1 mg	80780447	4310	1 kg - 1 g	30390818	2476	1 kg - 1 g	30390841	3224
500 g - 1 g	80780419	1410	500 g - 1 g	80780446	2066	1 kg - 1 mg	30390819	2599	1 kg - 1 mg	30390842	3839
500 g - 1 mg	80780418	1897	500 g - 1 mg	80780445	3045	500 g - 1 g	30390820	1251	500 g - 1 g	30390843	1907
200 g - 1 g	80780417	995	200 g - 1 g	80780444	1548	500 g - 1 mg	30390821	1615	500 g - 1 mg	30390844	2763
200 g - 1 mg	80780416	1563	200 g - 1 mg	80780443	2690	200 g - 1 g	30390822	974	200 g - 1 g	30390845	1421
(2) 200 g - 1 g	80780415	1077	(2) 200 g - 1 g	80780442	1611	200 g - 1 mg	30390823	1537	200 g - 1 mg	30390846	2490
(2) 200 g - 1 mg	80780414	1604	(2) 200 g - 1 mg	80780441	2650	(2) 200 g - 1 g	30390031	1024	(2) 200 g - 1 g	30390035	1528
100 g - 1 g	80780413	733	100 g - 1 g	80780440	1097	(2) 200 g - 1 mg	30390032	1563	(2) 200 g - 1 mg	30390036	2609
100 g - 1 mg	80780412	1113	100 g - 1 mg	80780439	1963	100 g - 1 g	30390824	702	100 g - 1 g	30390847	1066
50 g - 1 g	80780411	636	50 g - 1 g	80780438	954	100 g - 1 mg	30390825	877	100 g - 1 mg	30390848	1727
50 g - 1 mg	80780410	1046	50 g - 1 mg	80780437	1856	50 g - 1 g	30390826	626	50 g - 1 g	30390849	943
5 g - 1 mg	80780409	621	5 g - 1 mg	80780436	1051	50 g - 1 mg	30390827	856	50 g - 1 mg	30390850	1666
500 mg - 1 mg	80780408	539	500 mg - 1 mg	80780435	1020	5 g - 1 mg	30390828	586	5 g - 1 mg	30390851	1031
						500 mg - 1 mg	30390829	533	500 mg - 1 mg	30390852	1015

ASTM Class 6 Weights - Cylindrical

Adjusted to Meet or Exceed ASTM Class 6 Tolerances

- Weights from 1 g to 2 kg are Stainless Steel and Weights 500 mg and below are Aluminum.
- Weight Sets include a Weight Case.
- Individual Weights do not include a case



Cylindrical Weights

Model	Item No.	List Price (USD)
Weight Set, 500 mg-1 mg, ASTM 6, Cyl	80850110	81
Weight Set, 50 g-10 mg, ASTM 6, Cyl	80850111	190
Weight Set, 100 g-1 mg, ASTM 6, Cyl	80850112	228
Weight Set, 200 g-1 mg, ASTM 6, Cyl	80850113	279
Weight Set, 500 g-1 g, ASTM 6, Cyl	80850114	356
Weight Set, 1 kg-1 g, ASTM 6, Cyl	80850115	488
Weight Set, 2 kg-1 g, ASTM 6, Cyl	80850116	742
Weight Set, 50 g-1 g, ASTM 6, Cyl	80850117	156
Weight, 1 g, ASTM 6, Cyl, Body	80850118	17
Weight, 2 g, ASTM 6, Cyl, Body	80850119	17
Weight, 5 g, ASTM 6, Cyl, Body	80850120	18
Weight, 10 g, ASTM 6, Cyl, Body	80850121	20
Weight, 20 g, ASTM 6, Cyl, Body	80850122	23
Weight, 50 g, ASTM 6, Cyl, Body	80850123	25
Weight, 100 g, ASTM 6, Cyl, Body	80850124	35
Weight, 200 g, ASTM 6, Cyl, Body	80850125	45
Weight, 300 g, ASTM 6, Cyl, Body	80850126	59
Weight, 500 g, ASTM 6, Cyl, Body	80850127	72
Weight, 1 kg, ASTM 6, Cyl, Body	80850128	125
Weight, 2 kg, ASTM 6, Cyl, Body	80850129	199

Hooked Weights

Model	Item No.	List Price (USD)
Weight Set, 1 kg-10 g, ASTM 6, Hooked	80850130	186
Weight, 10 g, Hooked	80850131	23
Weight, 20 g, Hooked	80850132	23
Weight, 50 g, Hooked	80850133	24
Weight, 100 g, Hooked	80850134	25
Weight, 200 g, Hooked	80850135	36
Weight, 500 g, Hooked	80850136	49
Weight, 1 kg, Hooked	80850137	90

Slotted Weights

Model	Item No.	List Price (USD)
Weight Set, Slotted 500 g-10 g	80850138	153
Weight Set, Slotted 500 g-1 g	80850139	196
Weight Set, 1 g, ASTM 6, Slotted	80850140	25
Weight Set, 2 g, ASTM 6, Slotted	80850141	25
Weight Set, 5 g, ASTM 6, Slotted	80850142	25
Weight Set, 20 g, ASTM 6, Slotted	80850144	25
Weight Set, 50 g, ASTM 6, Slotted	80850145	25
Weight Set, 100 g, ASTM 6, Slotted	80850146	27
Weight Set, 200 g, ASTM 6, Slotted	80850147	34
Weight Set, 500 g, ASTM 6, Slotted	80850148	57
Weight, 50 g, Hanger	80850149	34

NIST Class F Cast Iron Grip Weights

Manufactured to meet NIST Handbook 105-1 specifications

- Cast Iron Grip Handle Weights are primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians.
- Cast Iron Grip Handle Weights larger than 5 kg/10 lb are legal-for-trade, which means their design is acceptable for use in checking weighing devices where the price of the item being purchased is based on its weight.
- All surfaces are smooth and free of scratches, dents and pores as outlined in NIST Handbook 105-1.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
5000 lb	30391735	14919	5000 lb	30391764	17053	5000 lb	30391781	17411
3000 lb	30391734	9358	3000 lb	30391763	10042	3000 lb	30391780	10782
2500 lb	30391733	8400	2500 lb	30391762	9274	2500 lb	30391779	9425
2000 lb	30391732	7426	2000 lb	30391761	7874	2000 lb	30391778	7988
1500 lb	30391731	6494	1500 lb	30391760	6731	1500 lb	30391777	7004
1250 lb	30391730	5622	1250 lb	30391759	6064	1250 lb	30391776	6185
1000 lb	30391729	2626	1000 lb	30391758	3345	1000 lb	30391775	2861
500 lb	30391728	1686	500 lb	30391757	2260	500 lb	30391774	1885
250 lb	30391727	1546	250 lb	30391756	1899	250 lb	30391773	1745
200 lb	30391726	1347	200 lb	30391755	1670	200 lb	30391772	1550
100 lb	80850311	580	100 lb	30391754	860	100 lb	30391771	685
50 lb	80850310	138	50 lb	30391753	228	50 lb	30391770	235
30 lb	30391723	184	30 lb	30391752	206	30 lb	30391769	266
25 lb	80850309	124	25 lb	30391751	192	25 lb	30391768	206
20 lb	80850308	100	20 lb	30391750	158	20 lb	30391767	175
10 lb	80850307	78	10 lb	30391749	130	10 lb	30391766	160
5 lb	80850306	60	5 lb	30391748	114	5 lb	30391765	147

Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
1000 kg	30391717	7431	1000 kg	30391746	8108	1000 kg	30391705	8223
500 kg	30391716	3016	500 kg	30391745	3747	500 kg	30391704	3844
250 kg	30391715	1729	250 kg	30391744	2144	250 kg	30391703	2246
200 kg	30391714	1486	200 kg	30391743	1938	200 kg	30391702	2039
100 kg	30391713	1363	100 kg	30391742	1703	100 kg	30391701	1806
50 kg	80850305	599	50 kg	30391741	824	50 kg	30391700	710
25 kg	80850304	189	25 kg	30391740	261	25 kg	30391699	235
20 kg	80850303	141	20 kg	30391739	209	20 kg	30391698	255
10 kg	80850302	136	10 kg	30391738	162	10 kg	30391697	205
5 kg	80850301	82	5 kg	30391737	130	5 kg	30391696	162
2 kg	80850300	71	2 kg	30391736	112	2 kg	30391695	146

NIST Class F Stainless Steel Individual Weights

Manufactured to meet NIST Handbook 105-1 specifications

- Stainless Steel Test Weights are primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians.
- Weights 5 kg /10 lb and below must be made of stainless steel of quality no lower than 300 series. Adjusting cavities are typically on the top of the weight and must be tamper resistant.
- All surfaces have a satin finish and conform to specifications in NIST Handbook 105-1.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
20 kg grip	30390593	868	20 kg grip	30390657	977	20 kg grip	30390721	1033
16 kg grip	30390592	852	16 kg grip	30390656	958	16 kg grip	30390720	1023
10 kg grip	30390591	630	10 kg grip	30390655	694	10 kg grip	30390719	737
8 kg grip	30390590	595	8 kg grip	30390654	657	8 kg grip	30390718	717
5 kg grip	30390589	370	5 kg grip	30390653	406	5 kg grip	30390717	493
5000 g	30390588	234	5000 g	30390652	284	5000 g	30390716	346
4000 g	30390587	216	4000 g	30390651	272	4000 g	30390715	329
3000 g	30390586	196	3000 g	30390650	259	3000 g	30390714	313
2000 g	30390585	139	2000 g	30390649	211	2000 g	30390713	251
1000 g	30390584	80	1000 g	30390648	165	1000 g	30390712	194
500 g	30390582	73	500 g	30390646	154	500 g	30390710	183
400 g	30390580	70	400 g	30390644	152	400 g	30390708	183
300 g	30390579	67	300 g	30390643	128	300 g	30390707	150
200 g	30390577	50	200 g	30390641	111	200 g	30390705	135
100 g	30390575	47	100 g	30390639	100	100 g	30390703	118
50 g	30390573	41	50 g	30390637	96	50 g	30390701	118
30 g	30390572	40	30 g	30390636	95	30 g	30390700	109
20 g	30390571	37	20 g	30390635	95	20 g	30390699	109
10 g	30390570	37	10 g	30390634	95	10 g	30390698	109
5 g	30390569	31	5 g	30390633	89	5 g	30390697	99
3 g	30390568	31	3 g	30390632	89	3 g	30390696	99
2 g	30390567	31	2 g	30390631	89	2 g	30390695	99
1 g	30390566	31	1 g	30390630	89	1 g	30390694	99

Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
20 lb. grip	30390550	577	20 lb. grip	30390614	628	20 lb. grip	30390678	704
10 lb. grip	30390549	352	10 lb. grip	30390613	490	10 lb. grip	30390677	599
10 lb.	30390548	230	10 lb.	30390612	296	10 lb.	30390676	353
5 lb.	30390547	149	5 lb.	30390611	231	5 lb.	30390675	276
4 lb.	30390546	141	4 lb.	30390610	224	4 lb.	30390674	271
3 lb.	30390545	131	3 lb.	30390609	217	3 lb.	30390673	263
2 lb.	30390544	93	2 lb.	30390608	181	2 lb.	30390672	219
1 lb.	30390542	67	1 lb.	30390606	166	1 lb.	30390670	202
12 oz	30390540	57	12 oz	30390604	113	12 oz	30390668	135
8 oz	30390539	53	8 oz	30390603	109	8 oz	30390667	135
8 oz cube	30390538	119	8 oz cube	30390602	158	8 oz cube	30390666	184
4 oz	30390537	48	4 oz	30390601	106	4 oz	30390665	125
4 oz cube	30390536	106	4 oz cube	30390600	150	4 oz cube	30390664	176
2 oz	30390535	43	2 oz	30390599	102	2 oz	30390663	124
2 oz cube	30390534	97	2 oz cube	30390598	142	2 oz cube	30390662	169
1 oz	30390533	40	1 oz	30390597	100	1 oz	30390661	118

NIST Class F Stainless Steel Weight Sets

Manufactured to meet NIST Handbook 105-1 specifications

- Stainless Steel Test Weights are primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians.
- Weights 5 kg /10 lb and below must be made of stainless steel of quality no lower than 300 series. Adjusting cavities are typically on the top of the weight and must be tamper resistant.
- All surfaces have a satin finish and conform to specifications in NIST Handbook 105-1.



Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
5000 g-1 mg	30390403	905	5000 g-1 mg	30390459	998	5000 g-1 mg	30390515	1207
5000 g-1 mg	30390397	1577	5000 g-1 mg	30390453	1691	5000 g-1 mg	30390509	1813
5000 g-1 g	30390405	795	5000 g-1 g	30390461	901	5000 g-1 g	30390517	1085
5000 g-1 g	30390399	1454	5000 g-1 g	30390455	1590	5000 g-1 g	30390511	1720
2000 g-1 mg	30390406	673	2000 g-1 mg	30390462	736	2000 g-1 mg	30390518	888
2000 g-1 g	30390408	591	2000 g-1 g	30390464	671	2000 g-1 g	30390520	811
2000 g-10 mg	30390407	639	2000 g-10 mg	30390463	707	2000 g-10 mg	30390519	863
2000 g-1 mg	30390400	1519	2000 g-1 mg	30390456	1648	2000 g-1 mg	30390512	1762
1000 g-1 g	30390411	503	1000 g-1 g	30390467	597	1000 g-1 g	30390523	722
500 g-1 g	30390414	394	500 g-1 g	30390470	510	500 g-1 g	30390526	620
100 g-1 mg	30390415	281	100 g-1 mg	30390471	421	100 g-1 mg	30390527	518
50 g-1 g	30390420	190	50 g-1 g	30390476	214	50 g-1 g	30390532	266
50 g-10 mg	30390419	240	50 g-10 mg	30390475	381	50 g-10 mg	30390531	456

Without Certificate			Traceable Certificate			NVLAP Certificate		
Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)	Model	Item No.	List Price (USD)
10 lb-1/32 oz	30390384	859	10 lb-1/32 oz	30390440	1324	10 lb-1/32 oz	30390496	1602
10 lb-.001 lb	30390383	870	10 lb-.001 lb	30390439	1338	10 lb-.001 lb	30390495	1628
5 lb-.001 lb	30390373	1231	5 lb-.001 lb	30390429	1558	5 lb-.001 lb	30390485	1823
5 lb-.001 lb	30390375	1219	5 lb-.001 lb	30390431	1531	5 lb-.001 lb	30390487	1805
5 lb-1/32 oz	30390376	1200	5 lb-1/32 oz	30390432	1532	5 lb-1/32 oz	30390488	1788
5 lb-.05 oz	30390374	1230	5 lb-.05 oz	30390430	1558	5 lb-.05 oz	30390486	1823
5 lb-1/32 oz	30390387	581	5 lb-1/32 oz	30390443	978	5 lb-1/32 oz	30390499	1171
4 oz-1/32 oz	30390379	225	4 oz-1/32 oz	30390435	356	4 oz-1/32 oz	30390491	602
.2 lb-.001 lb	30390381	242	.2 lb-.001 lb	30390437	380	.2 lb-.001 lb	30390493	481

Accessories for Weighing

Printers

SF40A

OHAUS Value in a Full-Featured, Portable Printer

- 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.



Application Impact Printing, Statistics, Totalization

Display Not Applicable

Operation AC adapter (included)

Communication RS232 (included)

Construction ABS Housing

Design Features Status indicator, 40 characters per line, compatible with continuous label paper, perform zero and tare operations directly from the printer

Model	Item No.	List Price (USD)
SF40A	30064203	964



STP103

Economical Palm-Sized Thermal Printer

- 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.



Application Thermal Printing

Display Not Applicable

Operation AC Adapter (Included)

Communication RS232 (included)

Construction ABS Housing

Design Features Status indicator, paper feeder, graphical printing capabilities

Model	Item No.	List Price (USD)
Printer, Thermal, STP103, 120vac US	80251992	737



Adapters

Accessories	Item No.	List Price (USD)
Cable Kit, Loadcell Adapter, T51 T71	80500736	70
LC Extension Cable, 9 meters, D52	30424409	162
Load Cell Cable Adapter Kit, to D52 Base	30429931	49

Anti-Theft Devices

Accessories	Item No.	List Price (USD)
Anti-Theft Device, SP PA AV NV	80850000	86
Anti-Theft Device, MB AX EX	80850043	226

Auxiliary Displays

Accessories	Item No.	List Price (USD)
Auxiliary Display, TAD7, SP SPJ TA TAJ	80251395	67
Auxiliary Display, AD7-RS	30472064	70

Base Mounts

Accessories	Item No.	List Price (USD)
Handle Kit, D3K	30381321	99
Front Mount Kit, SS, TD52	30424024	108

Carrying Cases

Accessories	Item No.	List Price (USD)
Carrying Case, CS	80010624	64
Carrying Case, V31	80251216	128
Carrying Case, FD V51	80251394	128
Carrying Case, EB EC	80251532	200
Carrying Case, SP	80850028	123
Carrying Case, Ranger	80850083	363
Carrying Case, TR TC R31 TC31 V71	80850084	363
Carrying Case, NVT	83032224	116
Carrying Case, NVL	83032225	116
Carrying Case, NV	83032226	116
Portable Bag STARTER	30031635	59
Carrying Case, SD	30454761	88

Column Mounts

Accessories	Item No.	List Price (USD)
Column Kit, Painted, Floor Stand	30047153	106
Column Kit, SST, Floor Stand	30047154	251
Column Kit, EX-HiCap	30078082	149
Column Kit, Painted, R71	30095408	151
Column Kit, 230mm / 9" SST, T71XW to CKW Bases	30454644	247
Column Adapter, Painted, T31P	72209339	27
Column Adapter, SST, T32XW T51XW	72209340	53
Column Kit, 35 cm, CS, TD52	30424410	71
Column Kit, 68 cm, CS, TD52	30424411	92

Column Mounts

Accessories	Item No.	List Price (USD)
Column Kit, 98 cm, CS, TD52	30424412	103
Column Kit, 35 cm, SST, TD52	30424413	157
Column Kit, 68 cm, SST, TD52	30424414	200
Column Kit, 98 cm, SST, TD52	30424415	216
Print Holder Kit, TD52	30424025	60
Column Kit, 350mm, Painted, T31P	80251743	88
Column Kit, 700mm, Painted, T31P	80251744	98
Column Kit, 350mm, SST, T32XW	80251745	198
Column Kit, 700mm, SST, T32XW	80251746	248
Column Kit, 350mm, Painted, T51P T71P	80500723	77
Column Kit, 680mm, Painted, T51P T71P	80500724	88
Column Kit, 350mm, SST, T51XW T71XW	80500725	170
Column Kit, 680mm, SST, T51XW T71XW	80500726	216
Column Kit, EX	83021102	162

Density Determination Kits

Accessories	Item No.	List Price (USD)
Density Kit ,SP SPJ	71147378	21
Density Kit, Solids	80253384	757

Dust Covers

Accessories	Item No.	List Price (USD)
Dust Cover, Balance with Draft Shield	30093334	49
Stacking Kit, x6, STX SPX SKX SJX/E	30268987	64
Stacking Kit, x1, STX SPX SKX SJX/E	30268988	22
Dust Cover, Dial-O-Gram Cent-O-Gram	80780005	39
Dust Cover, Triple Beam	80780017	39
Dust Cover, Storage, Harvard	80850262	39

Interface Cables and Kits

Accessories	Item No.	List Price (USD)
Ethernet Kit, R31 RC31 R71 V71	30037447	151
RS232 Kit, R31 RC31 R71 V71	30037448	151
USB Kit, R31 RC31 V71	30037449	151
Cable, RS422, 9m, EX EX-HiCap	30078078	149
Cable, Extension, 9m, R71	30101495	106
Ethernet Kit, T72XW	30132163	151
USB with I/O Kit, T72XW	30132164	168
COM2 Kit, T72XW	30132165	151
RS232 Interface, STX SPX ST3100M	30268982	162
USB Host Interface, STX SPX	30268983	162
USB Device Interface, STX SPX ST3100M	30268984	113
Bluetooth Interface, STX SPX	30268985	146
Ethernet Interface, STX SPX	30268986	176
RS232 Kit, T51 T71	80500733	73
RS232 Kit, 2nd, AV	80850092	188

Interface Cables and Kits

Accessories	Item No.	List Price (USD)
Ethernet Kit, EX EX-HiCap	83021082	188
Cable, USB, Type A-B	83021085	188
RS232 Kit, SP TA Navigator	83032107	162
USB Kit, SP TA NV NVL NVT	83032108	162
Ethernet Kit, NV NVL NVT	83032109	162
USB Kit, AV	83033014	188
Interface Kit, RS232-USB	30304101	141
Interface Kit, RS232-Ethernet	30304102	141
WiFi/BT Dongle, OHAUS (Requires 30424406)	30412537	225
USB Host for Dongle, TD52	30424406	135
Analog Output Kit, TD52	30424403	162
2nd RS232/RS485/USB, TD52	30424404	162
Ethernet Kit, TD52	30429666	162
Discrete I/O Kit, 2-In/4-Out, R71 TD52	30097591	151

In-Use Covers

Accessories	Item No.	List Price (USD)
In-Use-Cover, AR	12104951	53
In-Use-Cover, Small, RC RD RP	21203719	80
In-Use-Cover, V71	30037445	38
In-Use-Cover, R21 RC21 R31 RC31	30037451	38
In-Use-Cover, Set (10), V71	30037469	77
In-Use-Cover, STARTER	30058734	23
In-Use-Cover wo DS AX	30111777	29
In-Use-Cover DS AX	30111792	29
Accessory, In Use Cover, R71	30135320	44
In-Use-Cover, Scout	30269022	22
In-Use-Cover, Set (3), SP	71168909	55
In-Use-Cover, bRite A51 A71	72247038	37
In-Use-Cover, Pan, bRite A51 A71	72247039	24
Cover In-Use R11P RC11P	80120028	53
In-Use-Cover, FD V51	80251140	40
In-Use-Cover, MB23 MB27	80252475	39
In-Use-Cover, MB35 MB45	80850085	76
In-Use-Cover, PA	83020221	46
In-Use-Cover, NVL	83032222	34
In-Use-Cover, NV	83032223	34
In-Use-Cover, Terminal, EX	83033633	82
In-Use-Cover, ST5000	30129897	27
In-use Cover Set, TD52P	30424022	20
In-use Cover Set, TD52XW	30424023	27
In-use Cover set (10), TD52P	30469948	162
In-use Cover set (10), TD52XW	30469949	216

Miscellaneous

Accessories	Item No.	List Price (USD)
Scoop, Gold	30020842	31
PCBA Kit, 2nd Platform, RC31 R41 RC41	30037446	151
Hook, R21 RC21 R31 RC31 R41 RC41 V71	30037450	108
Wheel Kit, Set (4), EX-HiCap	30041470	162
Holder, Attached, Electrode	30058732	44
Holder, Stand Alone, Electrode	30058733	85
PCBA Kit, 2nd Platform, R71	30097590	152
Static Ionizer, ION-100A, AM	30130302	1698
Pipette Adjustment Kit, EX Semi-Micro	30252145	1413
Thermal Printer Head Assy bRite A71 AM	72253293	735
Subject Box	80000053	100
PCBA Kit, Alibi Memory, R71 T71	80500503	120
Kit, Rod and Clamp	80780011	72
Test Tube, 310-00 311-00	80780018	39
Weight Set, 2 x 1 kg, 1 x 500 g	80780108	70
Clamp, Gas Cylinder	80850312	95
Cable, RS422, Extension, EX EX-HiCap	83021083	105
Draft Shield Kit, EX	83021084	915
Foot Switch Kit, EX EX-HiCap	83021086	180
Seal kit, STARTER portables	83032962	45
Wheel Kit, Defender up to 600 lb / 300 kg capacity	30372146	130
Light Tower, R-Y-G, IP65, 24VDC	30424021	189

Moisture Analyzer Accessories

Accessories	Item No.	List Price (USD)
Temp. Calibration Kit, MB Series	11113857	567
Holder, Pan, MB35 MB45	11113873	133
Scoop, Accessory, MB90 MB120	30284477	49
In-Use-Cover, Accessory, MB90 MB120	30284478	78
Holder, Pan, MB Series	80252476	78
Cage, Sample, MB Series	80252477	101
Pan, Reusable, Set (3), 7 mm, MB Series	80252478	84
Pan, Reusable, Set (3), 14 mm, MB Series	80252479	88
Pan, Aluminum, Set (100), MB200	80780012	80
Pan, Aluminum, Set (80), MB Series	80850086	64
Filter, Glass Fiber, Set (200)	80850087	100
Pan, Reusable(3), D90mm, MB45	80850088	197

Pans, Stands, Bowls

Accessories	Item No.	List Price (USD)
Pan, SST, R21 RC21 R31 RC31 V71	30037452	59
Platform, SST, 300x225mm, V22 V41	30251753	58
Pan, SST, Flat, FD V51	80251141	60
Pan, SST, Sandwich, V31	80251147	83
Holder, SST, French Fries, V31	80251148	83
Holder, SST, Ice Cream Cone, V31	80251149	83
Pan, SST, C11P	80251248	53
Bowl, 1050ml, CS	80850075	53
Pan Cover, SST, CS	80850076	58

Printer Cables

Accessories	Item No.	List Price (USD)
Cable, PC, 9 Pin, NV AV	12106964	194
Adapter, 9 Pin-9 Pin, PC-SF40A	30059316	37
Cable, RJ45-RS232, Printer, bRite A71	72249531	46
Adapter, 25 Pin-9 Pin, STP103	80251930	37
Adapter, 25 Pin -9 Pin, CBM910-SPU TA	80251934	37
Cable, RS232,CBM910-AV DV EX MB PA TxxP	80252571	188
Cable, RS232, CBM910-CKW TxxXW	80252574	210
Cable, ST103-AR EP VP	80252580	188
Cable, ST103-AV DV EX MB PA TxxP	80252581	188
Cable, ST103-TC TR	80252583	188
Cable, ST103-CKW55 TxxXW	80252584	210
Cable, 25 Pin-9 Pin, PC-TxxP	80500524	188
Cable, RS232, IBM 9P, AV DV MB Ranger TD52P	80500525	188
Cable, RS232 Connector, Ranger	80500526	188
Cable, RS232, CKW TxxXW	80500552	174
Cable, RS232, Ranger	80500556	188
Cable, SF42-AV DV MB Ranger	80500571	188
Adapter, 25 Pin-9 Pin, SF42 SRP275	80500572	67

Printer Supplies

Accessories	Item No.	List Price (USD)
Paper Roll, Set (5), SF42	12101511	78
Paper Roll, Set (2), 57.5mm, SF40A	12120799	18
Axis, Paper Roll, SF40A	30063920	19
Paper Roll, (1), Thermal, STP103	80251931	21
Paper Roll, (1), CBM910	80251932	19
Ink Ribbon, CBM910	80251933	54

Ramps

Accessories	Item No.	List Price (USD)
Foot Plate, Set (2), Painted, VE VN	72198344	58
Ramp, 48 in x 26.4 in long, Painted, VN	80252565	776
Ramp, 60 in x 26.4 in long, Painted, VN	80252566	881
Ramp, 60 in x 48 in, 2.5 K/5 K, VX	80252766	955
Ramp, 60 in x 48 in, 5 K, VX	80252767	1206
Ramp, 60 in x 48 in, 10 K, VX	80252795	2048
Ramp, 60 in x 48 in, 10 K, VX	80252796	2263

Relay Kits

Accessories	Item No.	List Price (USD)
USB with I/O Kit, T72XW	30132164	168
Discrete I/O Kit, 2-In/4-Out, R71 TD52	30097591	151
Relay Kit, AC, T51 T71	80500720	346
Relay Kit, DC, T51 T71	80500727	297

Rechargeable Batteries

Accessories	Item No.	List Price (USD)
Rechargeable Battery, EX-HiCap R71	30041295	378
Rechargeable Battery Kit, T51 T71	80500729	225
Rechargeable Battery, NVL NVT	83032106	56
Battery Kit, Li-ion, TD52	30424405	195

Scoops

Accessories	Item No.	List Price (USD)
Scoop, 110 x 90 x 30 mm, Black	80250048	36
Scoop, Flat Bottomed, SST, 0.6 l	80250400	72
Scoop, Large, Flat Bottomed, SST	80250954	89
Scoop and Counter Weight	80780001	59
Scoop, PP, 0.8 l	80780006	39
Scoop and Counter Weight, Poly	80780014	54
Scoop and Counter Weight, SST	80780015	127
Scoop and Counter Weight, 1.75 l	80780016	57
Scoop, Small, Analytical	80850321	37
Scoop, Large, PAJ	80850322	39
Scoop, Poly, 0.6l	80850359	40
Scoop, Small, PAJ	80850364	29

Software

Accessories	Item No.	List Price (USD)
Software, Winwedge	80850080	515

Wall Mounts

Accessories	Item No.	List Price (USD)
Wall Mount Kit, Painted, T31P	80251747	43
Wall Mount Kit, SST, T32XW	80251748	53
Wall Mount Kit, SST, T51XW T71XW	80500735	81
Wall Mount Kit, SST, TD52XW	30424026	81
Wall Mount Kit, CS, TD52P	30424027	60

Weight Accessories

Accessories	Item No.	List Price (USD)
Weight Set, Metric, 1119-D0	80780008	241
Forceps, 70 mm, 2-3/8 in.	80780009	24
Forceps, 3-3/8	80780010	24

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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

Smooth and Dependable High-Speed Microliter Centrifuges for Life Science Separation Applications

- Excellent functionality when used with rotors compatible with 1.5/2.0ml or 5ml 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.

Application	Centrifugation
Display	LCD, Backlight, 2 lines
Operation	AC Power (Included)
Construction	Brushless quiet motor, small footprint
Design Features	High sample throughput, multi-safety control, personal program function



FC5513



FC5515R

Model	Speed Range	Temp Range	Max g-force	Capacity	Weight	Dimensions (L x W x H)	Item No.	List Price (USD)
FC5513	200 rpm -13,500 rpm	Air Cooled	17,317 g	24 x 1.5 / 2.0 ml	28lb / 12.5Kg	11.0 x 9.4 x 13.8" (280 x 240 x 350 mm)	30393188	1808
FC5515	200 rpm-15,200 rpm		21,953 g	44 x 1.5/2.0 ml; 12 x 5 ml; 4 x 8 place PCR Strips	37.4lb / 17Kg	15.43 x 11.3 x 11.5" (392 x 287 x 292 mm)	30130867	2655
FC5515R		-20° to 40°C			77lb / 35Kg	21.85 x 11.3 x 11.5" (555 x 287 x 292 mm)	30130869	5728

Accessories for FC5515 and FC5515R	Item No.	List Price (USD)
Rotor, Angle, 24 x 1.5 / 2.0 ml	30130870	715
Rotor, Angle, 24 x 1.5 / 2.0 ml, Sealable	30130871	953
Rotor, Angle, 30 x 1.5 / 2.0 ml, Sealable	30130872	1279
Rotor, Angle, 12 x 5 ml, Sealable	30130873	1429
Rotor, Angle, 4 x 8-Place PCR Stripes	30130874	1677
Rotor, Hematocrit, 24x Capillaries	30130881	616
Rotor, Angle, 44x1.5 / 2.0ml, ID, v2	30372717	1020

Accessories for FC5513	Item No.	List Price (USD)
Rotor, Angle, 24 x 1.5 / 2.0 ml, Sealable, V2	30472302	508
Rotor, Angle, 18 x 2 ml Spin Column	30472303	404
Rotor, Hematocrit, 24 x Capillaries, V2	30472304	594
Adapter, 1 x 0.5 ml D8 mm, 6/pk	30130885	95
Adapter, 1 x 0.2 / 0.4 ml D6 mm, 6/pk	30130884	95
Rotor, Angle, 24 x 1.5/2.0ml, V2	30472301	378

Frontier™ 5000 Series Multi Pro

Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

- 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 & accessories enable easy access to parameter settings, and quick rotation between applications.
- The performance of these centrifuges is propelled by German engineering, and high-quality components for reliable use.

Application Centrifugal Separation, General Sample Preparation, Cell Pelleting, Protein Separation, Nucleic Acid Separation, Cell Concentrating, Chemical Separation, Diagnostics, Environmental Sample Preparation, Blood Sample Processing

Display Backlit Liquid Crystal Display (LCD)

Operation Designed to be used with a variety of rotors and accessories

Construction Corrosion-resistant stainless steel chamber with Polycarbonate/ABS plastic lid

Design Features Ten acceleration & deceleration rates, selection of running time from 10 s to 99 h 59 min or continuous, quick spin, CFC-free refrigeration system, sample temp. indication (refrigerated models), lid-locking system, over-speed protection, dual imbalance sensing



Model	Speed Range	Temp Range	Max g-force	Capacity	Dimensions (L × W × H)	Item No.	List Price (USD)
FC5714	200 rpm–14,000 rpm	Air Cooled	18,624 g	4 × 100 ml	19.4 × 14.25 × 14.25" (14.25 × 362 × 362 mm)	30314811	3072
FC5718	200 rpm–18,000 rpm	Air Cooled	23,542 g		19.65 × 16.06 × 13.82" (499 × 408 × 351 mm)	30314813	4464
FC5718R		-20° to 40°C			28.78 × 16.02 × 14.13" (731 × 407 × 359 mm)	30314815	6673
FC5816	200 rpm–15,000 rpm	Air Cooled	21,379 g	6 × 250 ml	21.18 × 21.18 × 13.94" (538 × 446 × 354 mm)	30314817	5200
FC5816R	200 rpm–16,000 rpm	-20° to 40°C	24,325 g		21.18 × 28.46 × 28.46" (28.46 × 723 × 354 mm)	30314819	7895

Accessories	Item No.	List Price (USD)
Rotor, Angle, 24 × 1.5 / 2.0 ml, ID, Sealable	30304361	1078
Rotor, Swing out, 4 × 250 ml, ID	30314820	1497
Rotor, Angle, 6 × 250 ml FB, ID	30314821	3692
Rotor, Swing out, 4 × 100 ml, ID	30314822	1242
Rotor, Swing out, 4 × 100 ml, ID, Sealable	30314823	1046
Rotor, Swing out, 2 × 3MTP, ID	30314824	1810
Rotor, Angle, 6 × 85 ml RB, ID, Hi	30314825	2059
Rotor, Angle, 6 × 85 ml RB, ID	30314826	2086
Rotor, Angle, 4 × 85 ml RB, ID, Hi	30314827	2128
Rotor, Swing out, 16 × 50 ml, ID	30314828	2219
Rotor, Angle, 10 × 50 ml FA, ID	30314829	2643

Accessories	Item No.	List Price (USD)
Rotor, Angle, 6 × 50 ml RB/FA, ID	30314830	903
Rotor, Angle, 6 × 50 ml RB, ID, Hi	30314831	1810
Rotor, Angle, 30 × 15 ml RB/FA, ID	30314832	1407
Rotor, Angle, 20 × 10 ml RB, ID, Hi	30314833	1862
Rotor, Angle, 12 × 15 ml RB/FA, ID	30314834	913
Rotor, Angle, 30 × 1.5 / 2.0 ml, ID, Sealable	30314836	1455
Rotor, Angle, 24 × 1.5 / 2.0 ml, ID	30314838	813
Rotor, Angle, 12 × 1.5 / 2.0 ml, ID	30314839	1306
Rotor, Angle, 64 × 0.5 ml, ID	30314840	1322
Rotor, Angle, 4 × 8-w PCR Strip, ID	30314841	1884

Frontier™ 5000 Series Multi

Reliable and Compact Multi-Function Centrifuges For Standard Life Science Separation Applications

- 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 50ml and 15ml tubes, including common blood tubes. When used with accessories, rotors can be adapted for sizes as small as 1.5ml.
- Enclosing all its functionalities within a small footprint, Frontier™ Multi Centrifuges save valuable space on the lab bench.

Application	Centrifugation
Display	LCD, Backlight, 2 lines
Operation	AC Power (Included)
Construction	Brushless quiet motor, small footprint
Design Features	Easy installation design



FC5707



FC5706



Model	Speed Range	Max g-force	Capacity	Dimensions (L x W x H)	Weight	Item No.	List Price (USD)
FC5706 120V	200 rpm–6,000 rpm	4,427 g	6 × 50 ml	15.4 × 11.5 × 10.5" (392 × 291 × 266 mm)	23lbs / 10.5Kg	30130876	1990
FC5707 100-230V*	200 rpm -6,800 rpm	4,445 g	8 × 15 ml RB/ 4 × 15 ml FA	11.0 × 9.4 × 13.8" (280 × 240 × 350 mm)	18lb / 8Kg	30393189	1519

*Includes Rotor, Angle, 8 × 15 ml

Accessories for FC5706	Item No.	List Price (USD)
Rotor, Angle, 6 × 50 mL	30130878	963
30 mL Tube Adapter, 2/pk	30130891	236
16 mL Tube Adapter, 2/pk	30130892	236
15 mL Tube Adapter, 2/pk	30130893	236
15 mL RB/ Falcon Tube Adapter, 2/pk	30130894	164
Rotor, Angle, 12 × 15 mL	30130877	544
7 mL Tube Adapter, 2/pk	30130889	113
5 ml Tube Adapter, 2/pk	30130890	103
1.5 mL/2.0 mL Tube Adapter, 6/pk	30130886	187
Rotor, Swing Out, 6 × 5 mL*	30130880	647
Replaceable Buckets, For Swing Out Rotor, 2/pk	30130895	98

*Includes 6 buckets

Accessories for FC5707	Item No.	List Price (USD)
Rotor, Angle, 8 × 15ml	30472305	393
Adapter, D11mm, 1.5 / 2.0ml Tubes ×6	30130886	187
Adapter, D13.5mm, 7ml Tubes ×2	30130889	113
Adapter, D13.5mm, 5ml Tubes ×2	30130890	103

Frontier™ 5000 Series Mini

Powerful and Convenient Mini Centrifuge for Simple and Quick Life Science Separation Applications

- 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.

Application	Sample preparation
Operation	AC adapter (included)
Construction	Brushless quiet motor, auto shut-off safety switches
Design Features	One-touch operation



Two rotors and adapters are included

Model	Maximum Speed	Max g-force	Capacity	Dimensions (L x W x H)	Item No.	List Price (USD)
FC5306	6,000 rpm	2,000 g	8 x 1.5 ml / 2.0 ml; 4 x 8 place PCR Strips	6.6 x 5.9 x 5" (168 x 150 x 128 mm)	30134157	191

Accessories	Item No.	List Price (USD)
Adapter for 0.2 ml Tube (8PCS/Package)	30129561	48
Adapter for 0.5 ml Tube (8PCS/Package)	30129562	48

Frontier™ 5000 Rotors

Offering Flexibility to Maximize Sample Preparation

- 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.



Application Centrifugation Accessory

Construction Aluminum or polypropylene material

Model	Rotor Style	Capacity	Max g-force	Maximum Speed	Item No.	List Price (USD)
R-A8 × 2/6M	Angle	8 × 1.5 / 2.0 ml	2,560 g	6,000 rpm	30129559	48
R-A4 × PCR/6		4 × 0.2 ml PCR8	2,260 g		30129560	48
R-A24 × 2/15M		24 × 1.5 / 2.0 ml	21,953 g	15,200 rpm	30130870	715
R-A24 × 2/15MS					30130871	953
R-A30 × 2/13MS		30 × 1.5 / 2.0 ml	19,150 g	13,500 rpm	30130872	1279
R-A12 × 5/14MS		12 × 5 ml	19,978 g	14,500 rpm	30130873	1429
R-A4 × PCR/15		4 × 0.2 ml PCR8	15,342 g	15,000 rpm	30130874	1677
R-A12 × 15/6M		12 × 15 ml	4,427 g	6,000 rpm	30130877	544
R-A6 × 50/6M		6 × 50 ml			30130878	963
R-S6 × 5/4	Swing out	6 × 5 ml	1,817 g	4,000 rpm	30130880	647
R-A24 × CAP/12	Angle	24 × Capillaries	14,970 g	12,000 rpm	30130881	616
R-A24 × 2/16MIS		24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	30304361	1078
R-S4 × 250/4MI	Swing out	4 × 250 ml	3,780 g	4,500 rpm	30314820	1497
R-A6 × 250/8MI	Angle	6 × 250 ml	10,016 g	8,000 rpm	30314821	3692
R-S4 × 100/4MI	Swing out	4 × 100 ml	3,350 g	4,500 rpm	30314822	1242
R-S4 × 100/5MIS			3,885 g	5,000 rpm	30314823	1046
R-S6 × MTP/4MI		2 × 3 MTP	2,716 g	4,500 rpm	30314824	1810
R-A6 × 85/14MI	Angle	6 × 85 ml	20,984 g	13,500 rpm	30314825	2059
R-A6 × 85/13MI			21,726 g	13,000 rpm	30314826	2086
R-A4 × 85/12MI		4 × 85 ml	14,809 g	12,000 rpm	30314827	2128
R-S16 × 50/4MI	Swing out	16 × 50 ml	3,735 g	4,500 rpm	30314828	2219
R-A10 × 50/10MI	Angle	10 × 50 ml	16,022 g	10,500 rpm	30314829	2643
R-A6 × 50/6MI		6 × 50 ml	4,427 g	6,000 rpm	30314830	903
R-A6 × 50/13MI			15,869 g	13,000 rpm	30314831	1810
R-A30 × 15/4MI		30 × 15 ml	2,830 g	4,500 rpm	30314832	1407
R-A20 × 10/12MI		20 × 10 ml	15,775 g	12,000 rpm	30314833	1862
R-A12 × 15/6MI		12 × 15 ml	4,427 g	6,000 rpm	30314834	913
R-A30 × 2/14MIS		30 × 1.5 / 2.0 ml	20,595 g	14,000 rpm	30314836	1455
R-A24 × 2/16MI		24 × 1.5 / 2.0 ml	24,325 g	16,000 rpm	30314838	813
R-A12 × 2/18MI		12 × 1.5 / 2.0 ml	23,542 g	18,000 rpm	30314839	1306
R-A64 × 0.5/13I		64 × 0.5 ml	16,298 g	13,500 rpm	30314840	1322
R-A4 × PCR/15I		4 × 8-w PCR Strip	15,343 g	15,000 rpm	30314841	1884

Multi Pro Centrifuge Rotors & Accessories

Frontier rotors extend the functionality of Frontier centrifuges by increasing the number of tubes of varied types and sizes that can be used in conjunction with each of the centrifuge models. Easy to clean and operate, the rotors are durably constructed to withstand demanding centrifugation.

Fixed Angle Rotor 24 × 1.5 / 2.0 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 24 × 1.5 / 2.0 ml, ID, Sealable	30304361	1078

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	14000 rpm	14000 rpm	15000 rpm	15000 rpm	16000 rpm
Max. RCF	18624 xg	18624 xg	21379 xg	21379 xg	24325 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	Price USD
Adapter, 1 × 0.5 ml D8mm, 6/pk	0.5 ml	8mm	Eppendorf tube	24	30130885	95
Adapter, 1 × 0.2 / 0.4 ml D6mm, 6/pk	0.2 / 0.4 ml	6mm	Eppendorf tube	24	30130884	95

Fixed Angle Rotor 6 × 250 ml FB

Description	Item No.	List Price (USD)
Rotor, Angle, 6 × 250 ml FB, ID	30314821	3692

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	–	–	8000 rpm	8000 rpm
Max. RCF	–	–	–	10016 xg	10016 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 50 ml D30 mm FA, 2/pk	50 ml	30 mm	Conical bottom	6	30304374	260
Adapter, 1 × 50 ml D29 mm RB, 2/pk	50 ml	29 mm	Round bottom	6	30304373	260
Adapter, 2 × 30 ml D26 mm RB, 2/pk	30 ml	26 mm	Round bottom	12	30304372	260
Adapter, 4 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	24	30304371	260
Adapter, 5 × 10 ml D16 mm RB, 2/pk	10 ml	16 mm	Round bottom	30	30304370	260
Adapter, 8 × 1.5 ml D11 mm, 2/pk	1.5 ml	11 mm	Eppendorf tube	48	30304369	260

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 6 × 85 ml RB

Description	Item No.	List Price (USD)
Rotor, Angle, 6 × 85 ml RB, ID, Hi	30314825	2059

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	11000 rpm	13500 rpm	–	–
Max. RCF	–	13932 xg	20984 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 50 ml D29 mm RB, 2/pk, v2	50 ml	29 mm	Round bottom	6	30314895	179
Adapter, 1 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	6	30314896	179
Adapter, 1 × 30 ml D25 mm RB, 2/pk	30 ml	25 mm	Round bottom	6	30314894	179
Adapter, 1 × 16 ml D18 mm RB, 2/pk	16 ml	18 mm	Round bottom	6	30314899	179
Adapter, 1 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	6	30314897	179
Adapter, 2 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	12	30314898	179
Adapter, 1 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	6	30314893	179

Fixed Angle Rotor 6 × 85 ml RB

Description	Item No.	List Price (USD)
Rotor, Angle, 6 × 85 ml RB, ID	30314826	2086

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	9000 rpm	9000 rpm	11000 rpm	13000 rpm
Max. RCF	–	10413 xg	10413 xg	15555 xg	21726 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 50 ml D29 mm RB, 2/pk, v2	50 ml	29 mm	Round bottom	6	30314895	179
Adapter, 1 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	6	30314896	179
Adapter, 1 × 30 ml D25 mm RB, 2/pk	30 ml	25 mm	Round bottom	6	30314894	179
Adapter, 1 × 16 ml D18 mm RB, 2/pk	16 ml	18 mm	Round bottom	6	30314899	179
Adapter, 1 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	6	30314897	179
Adapter, 2 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	12	30314898	179
Adapter, 1 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	6	30314893	179

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 4 × 85 ml RB

Description	Item No.	List Price (USD)
Rotor, Angle, 4 × 85 ml RB, ID, Hi	30314827	2128

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	12000 rpm	12000 rpm	12000 rpm	12000 rpm
Max. RCF	–	14809 xg	14809 xg	14809 xg	14809 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 50 ml D29 mm RB, 2/pk, v2	50 ml	29 mm	Round bottom	4	30314895	179
Adapter, 1 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	4	30314896	179
Adapter, 1 × 30 ml D25 mm RB, 2/pk	30 ml	25 mm	Round bottom	4	30314894	179
Adapter, 1 × 16 ml D18 mm RB, 2/pk	16 ml	18 mm	Round bottom	4	30314899	179
Adapter, 1 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	4	30314897	179
Adapter, 2 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	8	30314898	179
Adapter, 1 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	4	30314893	179

Fixed Angle Rotor 10 × 50 ml FA

Description	Item No.	List Price (USD)
Rotor, Angle, 10 × 50 ml FA, ID	30314829	2643

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	7500 rpm	7500 rpm	9000 rpm	10500 rpm
Max. RCF	–	8174 xg	8174 xg	11771 xg	16022 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 15 ml D17 mm FA 2/pk V2	15 mL	17 mm	Conical	10	30472307	103
Adapter, 1 × 15 ml D17 mm RB 2/pk V2	15 mL	17 mm	Round	10	30472300	103
Adapter, 1 × 7 ml D13.5 mm RB, 2/pk	7 ml	13.5 mm	Round bottom	10	30130889	113
Adapter, 1 × 5 ml D13.5 mm, 2/pk	5 ml	13.5 mm	Round bottom	10	30130890	103
Adapter, 1 × 1.5/2.0 ml D11 mm, 6/pk	1.5/2.0 ml	11 mm	Eppendorf tube	10	30130886	187

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 6 × 50 ml RB/FA

Description	Item No.	List Price (USD)
Rotor, Angle, 6 × 50 ml RB/FA, ID	30314830	903

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	6000 rpm	6000 rpm	6000 rpm	–	–
Max. RCF	4427 xg	4427 xg	4427 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 30 ml D26 mm, 2/pk	30 ml	26 mm	Round bottom	6	30130891	236
Adapter, 1 × 16 ml D18 mm, 2/pk	16 ml	18 mm	Round bottom	6	30130892	236
Adapter, 1 × 15 ml D17 mm, 2/pk	15 ml	17 mm	Round bottom	6	30130893	236
Adapter, 1 × 15 ml D17 mm RB, 2/pk, v2	15 ml	17 mm	Round/Conical bottom	6	30130894	164
Adapter, 1 × 7 ml D13.5 mm RB, 2/pk	7 ml	13.5 mm	Round bottom	6	30130889	113
Adapter, 1 × 5 ml D13.5 mm, 2/pk	5 ml	13.5 mm	Round bottom	6	30130890	103
Adapter, 1 × 1.5/2.0 ml D11 mm, 6/pk	1.5/2.0 ml	11 mm	Eppendorf tube	6	30130886	187

Fixed Angle Rotor 6 × 50 ml RB

Description	Item No.	List Price (USD)
Rotor, Angle, 6 × 50 ml RB, ID, Hi	30314831	1810

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	12000 rpm	12000 rpm	13000 rpm	13000 rpm
Max. RCF	–	13522 xg	13522 xg	15869 xg	15869 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 30 ml D26 mm, 2/pk	30 ml	26 mm	Round bottom	6	30130891	236
Adapter, 1 × 16 ml D18 mm, 2/pk	16 ml	18 mm	Round bottom	6	30130892	236
Adapter, 1 × 15 ml D17.5 mm FA, 2/pk	15 ml	17.5 mm	Conical bottom	6	30314892	201
Adapter, 1 × 15 ml D17 mm, 2/pk	15 ml	17 mm	Round bottom	6	30130893	236

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 30 × 15 ml RB/FA

Description	Item No.	List Price (USD)
Rotor, Angle, 30 × 15 ml RB/FA, ID	30314832	1407

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	4500 rpm	4500 rpm	4500 rpm	4500 rpm	4500 rpm
Max. RCF	2830 xg	2830 xg	2830 xg	2830 xg	2830 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 7 ml D13.5 mm RB, 2/pk	7 ml	13.5 mm	Round bottom	30	30130889	113
Adapter, 1 × 5 ml D13.5 mm, 2/pk	5 ml	13.5 mm	Round bottom	30	30130890	103
Adapter, 1 × 1.5 / 2.0 ml D11 mm, 6/pk	1.5/2.0 ml	11 mm	Eppendorf tube	30	30130886	187

Fixed Angle Rotor 20 × 10 ml RB

Description	Item No.	List Price (USD)
Rotor, Angle, 20 × 10 ml RB, ID, Hi	30314833	1862

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	12000 rpm	12000 rpm	12000 rpm	12000 rpm
Max. RCF	–	15775 xg	15775 xg	15775 xg	15775 xg



Fixed Angle Rotor 12 × 15 ml RB/FA

Description	Item No.	List Price (USD)
Rotor, Angle, 12x15ml RB/FA, ID	30314834	913

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	6000 rpm	6000 rpm	6000 rpm	–	–
Max. RCF	4427 xg	4427 xg	4427 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 7 ml D13.5 mm RB, 2/pk	7 ml	13.5 mm	Round bottom	12	30130889	113
Adapter, 1 × 5 ml D13.5 mm, 2/pk	5 ml	13.5 mm	Round bottom	12	30130890	103
Adapter, 1 × 1.5 / 2.0 ml D11 mm, 6/pk	1.5/2.0 ml	11 mm	Eppendorf tube	12	30130886	187

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 44 × 1.5 / 2.0 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 44 × 1.5 / 2.0 ml, ID	30372718	1146

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	15000 rpm	15000 rpm	15000 rpm	16000 rpm
Max. RCF	–	21379 xg	21379 xg	21379 xg	24325 xg



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 0.5 ml D8 mm, 6/pk	0.5 ml	8 mm	Eppendorf tube	44	30130885	95
Adapter, 1 × 0.2 / 0.4 ml D6 mm, 6/pk	0.2 / 0.4 ml	6 mm	Eppendorf tube	44	30130884	95

Fixed Angle Rotor 30 × 1.5/2.0 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 30 × 1.5 / 2.0 ml, ID, Sealable	30314836	1455

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	12000 rpm	13000 rpm	14000 rpm	–	–
Max. RCF	15131 xg	17758 xg	20595 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 0.5 ml D8 mm, 6/pk	0.5 ml	8 mm	Eppendorf tube	30	30130885	95
Adapter, 1 × 0.2 / 0.4 ml D6 mm, 6/pk	0.2 / 0.4 ml	6 mm	Eppendorf tube	30	30130884	95

Fixed Angle Rotor 24 × 1.5/2.0 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 24 × 1.5 / 2.0 ml, ID	30314838	813

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	14000 rpm	14000 rpm	15000 rpm	15000 rpm	16000 rpm
Max. RCF	18624 × g	18624 × g	21379 × g	21379 × g	24325 × g



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 0.5 ml D8 mm, 6/pk	0.5 ml	8 mm	Eppendorf tube	24	30130885	95
Adapter, 1 × 0.2/0.4 ml D6 mm, 6/pk	0.2 / 0.4 ml	6 mm	Eppendorf tube	24	30130884	95

Multi Pro Centrifuge Rotors & Accessories

Fixed Angle Rotor 12 × 1.5 / 2.0 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 12 × 1.5 / 2.0 ml, ID	30314839	1306

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	18000 rpm	18000 rpm	–	–
Max. RCF	–	23542 xg	23542 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Adapter, 1 × 1.5 ml for over 16000 × g, 6/pk	1.5 ml	11 mm	Eppendorf tube	12	30314900	97
Adapter, 1 × 0.5 ml D8 mm, 6/pk	0.5 ml	8 mm	Eppendorf tube	12	30130885	95
Adapter, 1 × 0.2 / 0.4 ml D6 mm, 6/pk	0.2/0.4 ml	6 mm	Eppendorf tube	12	30130884	95

Fixed Angle Rotor 64 × 0.5 ml

Description	Item No.	List Price (USD)
Rotor, Angle, 64 × 0.5 ml, ID	30314840	1322

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	13500 rpm	13500 rpm	–	–
Max. RCF	–	16298 xg	16298 xg	–	–



Fixed Angle Rotor 4 × 8-w PCR Strip

Description	Item No.	List Price (USD)
Rotor, Angle, 4 × 8-w PCR Strip, ID	30314841	1884

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	15000 rpm	15000 rpm	–	–
Max. RCF	–	15343 xg	15343 xg	–	–



Multi Pro Centrifuge Rotors & Accessories

Swing Out Rotors 4 × 250 ml

Description	Item No.	List Price (USD)
Rotor, Swing out, 4 × 250 ml, ID	30314820	1497



Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	–	–	4500 rpm	4500 rpm
Max. RCF	–	–	–	3780 xg	3780 xg

Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Screw Cap, Rack of 250 ml Rotor, 2/pk	–	–	–	–	30314901	124
O-ring, Rack of 250 ml Rotor, 10/pk	–	–	–	–	30314902	64
Rack, 1 × 250 ml D62 mm FB, 2/pk	250 ml	62 mm	Flat bottom	4	30314903	294
Rack, 1 × 100 ml D41 mm RB, 2/pk	100 ml	41 mm	Round bottom	4	30314904	294
Rack, 1 × 50 ml D34 mm RB, 2/pk, v3	50 ml	34 mm	Round bottom	4	30314907	294
Rack, 3 × 50 ml D29 mm RB, 2/pk	50 ml	29 mm	Round bottom	12	30314905	294
Rack, 3 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	12	30314906	294
Rack, 2 × 50 ml D29 mm Rim, 2/pk	50 ml	29 mm	Skirted conical bottom	8	30314908	294
Rack, 1 × 50 ml D29 mm Rim, 2/pk, v3	50 ml	29 mm	Skirted conical bottom	4	30314909	294
Rack, 5 × 25 ml D24.5 mm RB, 2/pk	25 ml	24.5 mm	Round bottom	20	30314910	294
Rack, 3 × 25 ml D24.5 mm Rim, 2/pk	25 ml	24.5 mm	Skirted conical bottom	12	30314911	294
Rack, 9 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	36	30314912	294
Rack, 7 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	28	30314913	294
Rack, 7 × 15 ml D17 mm Rim, 2/pk	15 ml	17 mm	Skirted conical bottom	28	30314914	294
Rack, 8 × 10 ml D16 mm RB, 2/pk	10 ml	16 mm	Round bottom	32	30314915	294
Rack, 8 × 4-10 ml D16 mm Vac, 2/pk	4-10 ml	16 mm	Vacutainer	32	30304367	303
Rack, 14 × 5-7 ml D13 mm RB, 2/pk	5-7 ml	13 mm	Round bottom	56	30314916	294
Rack, 10 × 1.6-7 ml D13 mm Vac, 2/pk	1.6-7 ml	13 mm	Vacutainer	40	30314917	294
Adapter, 9 × 1.5/2.0 ml D11 mm, 2/pk	1.5/2.0 ml	11 mm	Eppendorf tube	36	30304368	279

Multi Pro Centrifuge Rotors & Accessories

Swing Out Rotor 4 × 100 ml

Description	Item No.	List Price (USD)
Rotor, Swing out, 4 × 100 ml, ID	30314822	1242

Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	4500 rpm	4500 rpm	4500 rpm	–	–
Max. RCF	3350 xg	3350 xg	3350 xg	–	–



Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Rack, 1 × 100 ml D46 mm RB, 2/pk	100 ml	46 mm	Round bottom	4	30314842	256
Rack, 1 × 85 ml D38 mm RB, 2/pk	85 ml	38 mm	Round bottom	4	30314843	256
Rack, 1 × 50 ml D34 mm RB, 2/pk	50 ml	34 mm	Round bottom	4	30314844	256
Rack, 1 × 50 ml D29 mm RB, 2/pk	50 ml	29 mm	Round bottom	4	30314845	256
Rack, 1 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	4	30314846	256
Rack, 1 × 50 ml D29 mm Rim, 2/pk	50 ml	29 mm	Skirted conical bottom	4	30314847	256
Rack, 1 × 30 ml D25 mm Rim, 2/pk	30 ml	25 mm	Skirted conical bottom	4	30314848	256
Rack, 1 × 25 ml D25 mm RB, 2/pk	25 ml	25 mm	Round bottom	4	30314849	256
Rack, 7 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	28	30314852	256
Rack, 2 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	8	30314850	256
Rack, 1 × 15 ml D17 mm Rim, 2/pk	15 ml	17 mm	Skirted conical bottom	4	30314851	256
Rack, 5 × 4-10 ml D16 mm Sar, 2/pk	4-10 ml	16 mm	Sarstedt	20	30314858	256
Rack, 9 × 5-7 ml D13 mm RB, 2/pk	5-7 ml	13 mm	Round bottom	36	30314853	256
Rack, 7 × 5-7 ml D13 mm RB, 2/pk	5-7 ml	13 mm	Round bottom	28	30314856	256
Rack, 7 × 5-7 ml D13 mm Vac, 2/pk	5-7 ml	13 mm	Vacutainer	28	30314857	256
Rack, 10 × 1.5 ml D11 mm, 2/pk	1.5 ml	11 mm	Eppendorf tube	40	30314854	256
Rack, 9 × 4.5 ml D12 mm FB, 2/pk	4.5 ml	12 mm	Flat bottom	36	30314855	256

Multi Pro Centrifuge Rotors & Accessories

Swing Out Rotors 4 × 100 ml

Description	Item No.	List Price (USD)
Rotor, Swing out, 4 × 100 ml, ID, Sealable	30314823	1046



Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	4000 rpm	5000 rpm	5000 rpm	–	–
Max. RCF	2486 xg	3885 xg	3885 xg	–	–

Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Bucket, 100 ml w/o Cap, 2/pk	–	–	–	–	30314860	313
Bucket, 100 ml w/ Cap, Sealable, 2/pk	–	–	–	–	30314861	376
Screw Cap, 100 ml Bucket, Sealable, 2/pk	–	–	–	–	30314862	110
O-ring, 100 ml Bucket, Sealable, 10/pk	–	–	–	–	30314863	52
Rack, 1 × 100 ml D40 mm RB, 2/pk	100 ml	40 mm	Round bottom	4	30314864	230
Rack, 1 × 85 ml D38 mm RB, 2/pk, v2	85 ml	38 mm	Round bottom	4	30314865	230
Rack, 1 × 50 ml D34 mm RB, 2/pk, v2	50 ml	34 mm	Round bottom	4	30314866	230
Rack, 1 × 50 ml D29 mm RB, 2/pk, v2	50 ml	29 mm	Round bottom	4	30314867	230
Rack, 1 × 50 ml D29 mm FA, 2/pk, v2	50 ml	29 mm	Conical bottom	4	30314868	230
Bucket, 2 × 50 ml D29 mm FA, w/ Rack, 2/pk	50 ml	29 mm	Conical bottom	8	30314881	487
Rack, 1 × 50 ml D29 mm Rim, 2/pk, v2	50 ml	29 mm	Skirted conical bottom	4	30314869	230
Rack, 1 × 30 ml D25 mm Rim, 2/pk, v2	30 ml	25 mm	Skirted conical bottom	4	30314870	230
Rack, 1 × 25 ml D25 mm RB, 2/pk, v2	25 ml	25 mm	Round bottom	4	30314871	236
Rack, 1 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	4	30314872	236
Rack, 2 × 15 ml D17 mm FA, 2/pk, v2	15 ml	17 mm	Conical bottom	8	30314873	236
Rack, 2 × 15 ml D17 mm Rim, 2/pk	15 ml	17 mm	Skirted conical bottom	8	30314874	236
Rack, 4 × 15 ml D17 mm RB, 2/pk	15 ml	17 mm	Round bottom	16	30314875	236
Bucket, 3 × 15 ml D17 mm FA, w/ Rack, 2/pk	15 ml	17 mm	Conical bottom	12	30314882	489
Rack, 3 × 10 ml D17 mm Sar, 2/pk	10 ml	17 mm	Sarstedt	12	30314878	236
Rack, 4 × 10 ml D17 mm Vac, 2/pk	10 ml	17 mm	Vacutainer	16	30314880	230
Rack, 7 × 5-7 ml D13 mm RB, 2/pk, v2	5-7 ml	13 mm	Round bottom	28	30314876	236
Rack, 4 × 5-7 ml D13 mm RB, 2/pk	5-7 ml	13 mm	Round bottom	16	30314879	236
Rack, 5 × 1.5 ml D11 mm, 2/pk	1.5 ml	11 mm	Eppendorf tube	20	30314877	236

Multi Pro Centrifuge Rotors & Accessories

Swing Out Rotors 2 × 3 MTP

Description	Item No.	List Price (USD)
Rotor, Swing out, 2 × 3MTP, ID	30314824	1810



Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	4500 rpm	4500 rpm	4500 rpm	4500 rpm	4500 rpm
Max. RCF	2716 xg	2716 xg	2716 xg	2716 xg	2716 xg

Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Bucket, 3 × MTP, 2/pk	MTP	–	–	6	30314890	3001
Adapter, 48 × 1.5/2.0 ml D11 mm, 2/pk	1.5/2.0 ml	11mm	Eppendorf tube	96	30314891	792

Swing Out Rotors 16 × 50 ml

Description	Item No.	List Price (USD)
Rotor, Swing out, 16 × 50 ml, ID	30314828	2219



Compatible to	FC5714	FC5718	FC5718R	FC5816	FC5816R
Max. Speed	–	–	–	4500 rpm	4500 rpm
Max. RCF	–	–	–	3735 xg	3735 xg

Accessories	Vol./Tube	Diameter	Tube type	No.of tubes/rotor	Item No.	List Price (USD)
Rack, 4 × 50 ml D29 mm FA, 2/pk	50 ml	29 mm	Conical bottom	16	30304375	410
Rack, 10 × 15 ml D17 mm FA, 2/pk	15 ml	17 mm	Conical bottom	40	30314583	410
Rack, 12 × 4-10 ml D16 mm Vac/Sar, 2/pk	4-10 ml	16 mm	Vacutainer/Sarstedt	48	30314585	410
Rack, 14 × 5-7 ml D13 mm Vac/Sar, 2/pk	5-7 ml	13 mm	Vacutainer/Sarstedt	56	30314584	410

Open Air Shakers Selector Guide



Product Family	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



Product Family	Extreme Environment Shakers	Heavy Duty Shaker	Heavy Duty Shaker	Heavy Duty Shaker
Model	SHEX1619DG	SHHD1619AL	SHHD1619DG	SHHD2325AL
Speed Range	15 to 500 rpm	25 to 500 rpm	15 to 500 rpm	25 to 500 rpm
Timer	1 second to 160 hours	1 to 120 minutes	1 second to 160 hours	1 to 120 minutes
Motion	Orbital	Orbital	Orbital	Orbital
Orbit	19 mm	19 mm	19 mm	25 mm
Max Weight Capacity	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
CO ₂ Environment	●	●	●	●
Overload Protection	●	—	●	—
User Calibration (Speed)	●	—	●	—
RS232 Interface	●	—	●	—
Included Tray (L × W)	11 × 13"	11 × 13"	11 × 13"	18 × 24"
Tray / Platform Options (L × W)	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

Open Air Shakers Selector Guide *Open Air Shakers*



Product Family	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



Product Family	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

- 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.

The OHAUS Light Duty Analog Shaker is an economical shaker designed for educational labs or basic shaking applications.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

Adjustment Knob: Basic speed knob with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Blotting techniques, staining/destaining, and general shaking procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.



Model	Speed Range	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHLD0415AL	40 to 300 rpm	15 mm (0.6")	8 lbs (3.6 kg)	Aluminum	11.75 × 8.75" (29.9 × 22.2 cm)	30391891	1055

Light Duty Orbital Shakers

- 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.

The OHAUS Digital Light Duty Orbital Shaker is ideal for a wide variety of shaking applications. Tray includes a non-skid rubber mat. Remove the mat to mount a variety of optional flask clamps or test tube racks directly onto the tray.



Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO₂ environments.

SHLD0403DG: -10 to 60°C (14 to 140°F)

SHLD0415DG: -10 to 40°C (14 to 104°F)

Maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, immunoassays, and protein studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHLD0403DG	100 to 1200 rpm	+/-2% above 100 rpm	1 second to 160 hours	3 mm (0.12")	8 lbs (3.6 kg)	Aluminum	11.75 × 8.75" (29.9 × 22.2 cm)	30391898	1400
SHLD0415DG	40 to 300 rpm	+/-2 rpm below 100 rpm	1 second to 160 hours	15 mm (0.6")	8 lbs (3.6 kg)	Aluminum	11.75 × 8.75" (29.9 × 22.2 cm)	30391912	1350

Light Duty Orbital Shakers

- 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.

The OHAUS Microplate Shaker is ideal for immunoassays and general microplate shaking, and is designed to be used in a variety of environmental conditions.



Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Base offers durability and added stability.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

ELISA assays and DNA studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug.

Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L x W)	Item No.	List Price (USD)
SHLDMP03DG	100 to 1200 rpm	± 2%	1 second to 160 hours	3 mm (0.12")	4 microplates or 2 micro-tube racks	Aluminum	11 x 7.75" (27.9 x 19.7 cm)	30391905	1100

Extreme Environment Shakers

- 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.

The OHAUS Extreme Environment Orbital Shaker is designed for a wide range of applications including cell cultures that require CO₂ and humidity for optimal cell growth. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

Remote Controller: The control module is designed to sit outside of the incubator. Settings can be easily viewed or changed from outside of the incubator without disturbing the incubator's atmosphere. The thin ribbon cable is 5.5 feet long and easily passes underneath an incubator door via incubator's utility port. Controller magnetically attaches to most incubator doors or can sit on a lab bench.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), up to 100% humidity.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.



Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHEX1619DG	15 to 500 rpm	above 100 rpm $\pm 1\%$ of set speed below 100 rpm ± 1 rpm	1 second to 160 hours	0.75" (19 mm)	35 lbs (16 kg)	Aluminum	11 × 13" (27.9 × 33 cm)	30391809	3463

Heavy Duty Orbital Shakers

- 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.

The OHAUS 16 kg Capacity Analog Heavy Duty Orbital Shaker is designed for a wide range of applications that require basic shaking control. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

Adjustment Knobs: Basic speed and time knobs with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Bacterial suspensions, staining/destaining, and general mixing.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.



Model	Speed Range	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD1619AL	25 to 500 rpm	1 minute to 120 minutes	19 mm (0.75")	35 lbs (16 kg)	Aluminum	11 × 13" (27.9 × 33 cm)	30391307	2097

Heavy Duty Orbital Shakers

- 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.

The OHAUS 16 kg Capacity Digital Heavy Duty Orbital Shaker is designed for a wide range of applications, including cell cultures, that require accurate and repeatable results. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.



Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Timer	Motion	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD1619DG	15 to 500 rpm	above 100 rpm $\pm 1\%$ of set speed below 100 rpm ± 1 rpm	1 second to 160 hours	19 mm (0.75") orbit 19 mm (0.75") stroke	35 lbs (16 kg)	Aluminum	11 × 13" (27.9 × 33 cm)	30391807	2499

Heavy Duty Orbital Shakers

- 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.



The OHAUS Analog 23 kg Capacity Heavy Duty Orbital Shaker is designed for applications with heavy duty loads. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

Adjustment Knobs: Basic speed and time knobs with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Bacterial suspensions, staining/destaining, and general mixing.

Ordering Information:

Units include a 3-wire cord and plug. Units are also supplied with an 18 × 24" (45.7 × 61 cm) non-skid rubber mat.

Model	Speed Range	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD2325AL	25 to 500 rpm	1 minute to 120 minutes	25 mm (1")	50 lbs (22.7 kg)	Aluminum	18 × 24" (45.7 × 61 cm)	30391835	4621

Heavy Duty Orbital Shakers

- 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.

The OHAUS Digital 23 kg Capacity Heavy Duty Orbital Shaker is designed for a wide range of applications with larger or heavier loads that require accurate and repeatable results.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 18 × 24" (45.7 × 61 cm) non-skid rubber mat.



Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD2325DG	20 to 500 rpm	above 100 rpm $\pm 1\%$ of set speed below 100 rpm ± 1 rpm	1 second to 160 hours	25 mm (1")	50 lbs (22.7 kg)	Aluminum	18 × 24" (45.7 × 61 cm)	30391842	4896

Heavy Duty Orbital Shakers

- 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.



The OHAUS Digital 45 kg Capacity Orbital Shaker is a large capacity shaker. They have a more powerful drive mechanism and larger orbits for optimal shaking of large vessels.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 × 24" (61 × 61 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD4525DG	15 to 500 rpm	above 100 rpm \pm 1% of set speed	1 second to 160 hours	25 mm (1")	100 lbs (45.4 kg)	Aluminum	24 × 24" (61 × 61 cm)	30391863	6962
SHHD4550DG	15 to 300 rpm	below 100 rpm \pm 1 rpm		51 mm (2")				30391870	7191

Heavy Duty Orbital Shakers

- 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.

The OHAUS Digital 68 kg Capacity Orbital Shakers is the largest capacity shakers designed for the heaviest of loads. They have the most powerful drive mechanism of all the shakers and large orbits for optimal shaking of larger vessels.



Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 × 36" (61 × 91 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHHD6825DG	15 to 500 rpm	above 100 rpm \pm 1% of set speed	1 second to 160 hours	25 mm (1")	150 lbs (68 kg)	Aluminum	24 × 36" (61 × 91 cm)	30391877	7854
SHHD6850DG	15 to 300 rpm	below 100 rpm \pm 1 rpm		51 mm (2")				30391884	8742

Rocking & Waving Shakers

- 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.

The OHAUS Analog Rocking Shaker is an easy and economical option for all of your rocking needs. The Rocking Shaker is ideal for cell culture and blotting applications and is designed to be used in a variety of environmental conditions. Rocker is supplied with an 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat.

Operating Features:

Low Profile Design: Takes up less bench space and fits into most hoods and incubators. Two-tier option increases the capacity with the same footprint and provides a 3.5" (8.9 cm) clearance between platforms. Cast aluminum base offers durability and added stability

Microprocessor Control: The microprocessor control provides tilt adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Smooth speed control with low speed rocking motion.

Independent Control Knobs: Independent control knobs for speed, tilt, and time, allow for easy adjustments.

Safety Features:

Overload Protection: Audible signal will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Timer: Timer will automatically stop rocking motion when timer reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

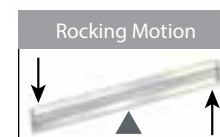
Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat. Two-tier models include a 2nd tray, non-skid mat and hardware.



Model	Speed Range	Tilt Angle	Timer	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHRK07AL1	1 to 75 rpm*	0 to 15°**	1 minute to 120 minutes	16 lbs (7.3 kg)**	Aluminum	14 × 11" (35.6 × 27.9 cm)	30391959	950
SHRK07AL2							30391966	1050

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Rocking & Waving Shakers

- 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.

The OHAUS Digital Rocking Shaker is ideal for cell culture work and is designed to be used in a variety of environmental conditions.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 12.75 × 10" (32.4 × 25.4 cm) non-skid rubber mat.



Model	Speed Range	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHRK04DG	1 to 50 rpm*	± 1 rpm	0 to 15°*	1 second to 160 hours	10 lbs (4.5 kg)**	Aluminum	12.75 × 10" (32.4 × 25.4 cm)	30391994	1155

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Rocking & Waving Shakers

- 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.

The OHAUS Analog Waving Shakers are an easy and economical option for all of your waving needs. Ideal for cell culture and blotting applications, and is designed to be used in a variety of environmental conditions.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.

Microprocessor Control: Provides tilt adjustment which allows user to easily adjust waving angle from 0 to 16° while unit is operating. Smooth speed control with low speed waving motion.

Independent Control Knobs: Independent control knobs for speed, tilt and time allow for easy adjustments.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Timer: Timer, if engaged, will automatically stop waving motion when timer reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat.



Model	Speed Range	Tilt Angle	Timer	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHWV02AL	1 to 75 rpm*	0 to 16°**	1 minute to 120 minutes	5 lbs (2.3 kg)**	Aluminum	14 × 11" (35.6 × 27.9 cm)	30391973	1360

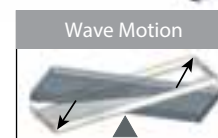
* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Rocking & Waving Shakers

- 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.

The OHAUS Digital Waving Shaker provides precise speed control and a smooth, low foaming, three dimensional, "wave" motion. Ideal for use in a wide range of laboratory applications and designed to be used in a variety of environmental conditions. Tray includes a non-skid rubber mat that is suitable for holding Petri dishes.



Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust waving angle from 0 to 20° while unit is operating. Precise speed control provides smooth, low-speed waving motion down to 1 rpm.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Blood samples, DNA extractions, blotting techniques, and general mixing of various size tubes.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHWV02DG	1 to 30 rpm*	± 1 rpm	0 to 20°*	1 second to 160 hours	5 lbs (2.3 kg)**	Aluminum	11.75 × 8.75" (29.9 × 22.2 cm)	30391947	1715

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Reciprocating Shakers

- 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.

The OHAUS Digital Reciprocating Shakers are designed for a wide range of applications, including cell cultures, that require accurate and repeatable results. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.



Operating Features:

The shaking system in both models continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is $\pm 1\%$ of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Single Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO₂ environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Model	Speed Range	Speed Accuracy	Timer	Stroke	Maximum Weight Capacity	Tray Material	Tray Dimensions (L × W)	Item No.	List Price (USD)
SHRC0719DG	20 to 300 rpm	above 100 rpm $\pm 1\%$ of set speed below 100 rpm ± 1 rpm	1 second to 160 hours	19 mm (0.75")	15 lbs (6.8 kg)	Aluminum	11 × 13" (27.9 × 33 cm)	30391828	2215

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Incubating & Incubating Cooling Selector Guide



Product Family	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 & Incubating Cooling Selector Guide



Product Family	Incubating Cooling Light Duty Orbital Shaker	Incubating Rocking Shaker	Incubating Waving Shaker
Model	ISICMBCDG	ISRK04HDG	ISWV02HDG
Temperature Range	10°C Below Ambient to 65°C	Ambient +5° to 65°C	Ambient +5° to 65°C
Speed Range	100 to 1200 rpm	1 to 50 rpm	1 to 30 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Rocking	Waving
Orbit	3 mm	Tilt Angle: 0 to 15° *	Tilt Angle: 0 to 20° *
Max Weight Capacity	2 Microplates 2 Modular Blocks	10 lbs**	5 lbs**
Audible Alarm	●	●	—
Load Sensor	—	—	—
Drive System	Triple Eccentric	Cable	Cable
Motor Type	Brushless DC Motor	Stepper Motor	Stepper 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	—	—	—
Overall Dimensions (L × W × H)	16.49 × 10.11 × 10.98"	17 × 11 × 10.5"	17 × 11 × 10.5"
Included Tray (L × W)	N/A	10 × 7.5"	9.25 × 7.25"
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 Thermal Shakers

- 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.



The OHAUS Thermal Shakers and Cooling Thermal Shakers are designed for applications that require consistent and precise results. With heating, cooling and shaking capabilities. These shakers use interchangeable blocks to accommodate a wide variety of tubes and microplates. The easy-to-use, 4.3", color, LCD touchscreen allows the user to save and visibly track progress through the live status bar for five user defined programs, each with five individual steps. The unit's enhanced electronics and dual temperature sensors provide accurate, dependable temperature settings across the operating range.

Operating Features:

Low Profile Design: The low profile design minimizes the unit's footprint on the bench.

LCD Touchscreen: Enables faster setting of temperature, speed, and time which can all be viewed at once. Display features on-screen help topics with operational tips available in six languages. Touchscreen is compatible with rubber gloves used in labs. USB port can transfer information to a flash drive for data logging, program storage and software updates.

Program Control: Program control capabilities allow user programmable operation for automated use and memory. Storage for five separate 5-step programs, or unlimited number of programs with the use of the USB.

Temperature ramp rate: Adjustable temperature ramp rate feature separately defines the heating and cooling rate in increments of 0.5°C/min.

Single Point Calibration Mode: For maximum temperature accuracy, the single point calibration procedure allows the user to calibrate up to 6 different user defined temperatures.

Pulse Mode Feature: The unit is equipped with a pulse mode feature for quick vortex applications.

Safety Features:

Cool Touch Housing: Constructed from a high-quality, heat and chemical resistant polymer. The unit's housing remains cool to the touch throughout normal operating temperatures.

Maximum Temperature Limiting Function: Ensures the temperature will not exceed preset limits, allowing the user control of temperature sensitive samples.

Hot Top Indicator: A hot top warning light will illuminate when the temperature reaches 40°C, and will remain lit until the unit is sufficiently cooled.

Audible Alarm: In timed mode, an alarm will sound when the time reaches zero or set-point temperature is reached. Additionally, the heat function will automatically shut off if the unit recognizes an internal issue.

Automatic Block Recognition:

The unit will read the specific block being used and prevents potential over-speed programming.

Operating Conditions:

Unit can operate in conditions from 5 to 35°C (41 to 95°F), max. 80% relative humidity, non-condensing.

Applications:

Cell cultures, DNA, RNA, and protein studies.

Ordering Information

Unit includes a detachable, 3-wire cord and plug, 1.5 mL block, clear rack, and cover.

Model	Temperature Range	Temperature Accuracy	Speed Range	Speed Accuracy	Timer	Orbit	Cooling Rate	Heating Rate	Item No.	List Price (USD)
ISTHBLHTS	4°C above ambient to 100°C	± 1°C between 20°C and 45°C ± 2°C above 45°C	300 to 3000 rpm	± 2%	1 minute to 99 hours, 59 minutes	3 mm (0.12")	above ambient 2-3°C/min	5°C/min	30392003	2405
ISTHBLCTS	17°C below ambient to 100°C	± 0.5°C between 20°C and 45°C ± 2°C below 20°C and above 45°C					below ambient 0.5-1.0°C/min		30391996	3200

Incubating Cooling Thermal Shakers Modular Blocks



Microplate Block

Sample Type	Well Size	Well Depth	Dimensions (L × W × H)	Item No.	List Price (USD)
Microplate Thermal Block with Lid	4.21 × 2.81 × 0.1" (10.7 × 7.1 × 0.25 cm)	0.9" (2.30 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400126	1089

Sample Type	Well Diameter	Well Depth	Dimensions (L × W × H)	Item No.	List Price (USD)
384 Well Plate Thermal Block with Lid	0.16" (0.40 cm)	0.32" (0.81 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400127	1089
0.2 mL PCR Plate Thermal Block with Lid	0.25" (0.64 cm)	0.50" (1.27 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400128	1089

Tube Blocks

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item No.	List Price (USD)
0.5 mL Microtubes*	30	0.31" (0.79 cm)	0.97" (2.46 cm)	4.0 × 5.6 × 1.8" (10.2 × 14.2 × 4.6 cm)	30400129	829
1.5 mL Microtubes*	24	0.44" (1.11 cm)	1.39" (3.53 cm)	4.0 × 5.6 × 2.1" (10.2 × 14.2 × 5.3 cm)	30400130	829
2.0 mL Microtubes*	24	0.45" (1.15 cm)	1.39" (3.53 cm)	4.0 × 5.6 × 2.1" (10.2 × 14.2 × 5.3 cm)	30400131	829
12 mm Tubes	24	0.47" (1.20 cm)	1.42" (3.61 cm)	4.0 × 5.6 × 2.2" (10.2 × 14.2 × 5.6 cm)	30400132	829

* Supplied with clear rack and cover

Racks and Covers

Description	Item No.	List Price (USD)
Rack For 30 × 0.5 mL Tube Block	30400250	42
Rack For 24 × 1.5 / 24 × 2.0 mL Tube Blocks	30400251	42
Cover For 0.5mL / 1.5mL / 2.0mL Tube Blocks	30400252	29

Cryotube Block

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item No.	List Price (USD)
2.0 mL Cryotubes	24	0.50" (1.26 cm)	1.42" (3.6 cm)	4.0 × 5.6 × 2.2" (10.2 × 14.2 × 5.6 cm)	30400133	829

Conical Tube Blocks

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item No.	List Price (USD)
5 mL Eppendorf Tube Block	9	0.66" (1.68 cm)	1.93" (4.9 cm)	4.1 × 5.7 × 2.8" (10.4 × 14.5 × 7.1 cm)	30400134	829
15 mL Conical Tubes	9	0.68" (1.73 cm)	4.11" (10.44 cm)	4.2 × 5.7 × 5.0" (10.7 × 14.7 × 12.7 cm)	30400135	829
50 mL Conical Tubes	4	1.18" (3.0 cm)	3.97" (10.09 cm)	4.0 × 5.7 × 4.8" (10.2 × 14.5 × 12.2 cm)	30400136	829



Incubating Light Duty Orbital Shakers

- 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.

The OHAUS Incubating Light Duty Orbital Shakers are designed to heat and shake a variety of samples.



Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, speed and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, bacterial suspensions, and hybridizations.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.

Model	Temp. Range	Temp. Uniformity	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions (L x W)	Interior Dimensions (L x W x H)	Item No.	List Price (USD)
ISLD04HDG	Ambient +5°C to 65°C	± 0.5°C at 37°C	100 to 1200 rpm	± 2% of set speed	1 second to 160 hours	3 mm (0.12")	8 lbs (3.6 kg)	11 x 7.75" (27.9 x 19.7 cm)	11.3 x 8.3 x 5.7" (28.7 x 21.1 x 14.5 cm)	30391924	2924

Incubating Light Duty Orbital Shakers

- Designed to provide flexibility in your applications, these shakers with a 4 kg capacity include the ready-to-use tray to customize with over ten 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.

The OHAUS Incubating Microplate Shakers are optimized for shaking microplates, deep-well plates, or micro-tubes.



Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, speed, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Clear lid permits viewing of samples without disturbing internal temperature.

Opaque lid prohibits light exposure to light sensitive samples.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Immunoassays and hybridizations.

Ordering Information:

Units include a detachable, 3-wire cord and plug.

Model	Temp. Range	Temp. Uniformity	Speed Range	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Tray Dimensions (L x W)	Item No.	List Price (USD)
ISLDMPHDG	Ambient +5°C to 65°C	± 0.5°C at 37°C	100 to 1200 rpm	± 2%	1 second to 160 hours	3 mm (0.12")	4 microplates or 2 micro-tube racks	11 × 7.75" (27.9 × 19.7 cm)	30391938	2677
ISLDMPHDGL*									30391931	2677

*Unit includes opaque lid

Incubating Cooling Orbital Shakers

- 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.

The OHAUS Incubating/Cooling Orbital Shaker is microplate ready without the need for any additional accessories. Optional modular blocks can accommodate micro-tubes, centrifuge tubes, vials, or culture tubes. Unit holds microplates or modular blocks with a 5" (12.7 cm) tall interior capacity. Ideal for analyses that require a stable, controlled temperature.



Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

PID Temperature Controller: Maintains precise temperature control from 10°C below ambient to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.

Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, speed, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the Touchpad control.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell and bacterial cultures, hybridizations, and enzyme reactions.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Units are also supplied with an adapter bracket to hold optional modular blocks. See page 146-147 for block options.

Model	Temp. Range	Temp. Uniformity	Speed Range using Microplates	Speed Range using Modular Blocks	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Item No.	List Price (USD)
ISICMBCDG	10°C below ambient to 65°C	± 0.5°C at 37°C	100 to 1200 rpm	100 to 600 rpm	± 2%	1 second to 160 hours	3 mm (0.12")	2 microplates or 2 modular blocks	30391945	4450

Incubating Light Duty Orbital Shakers Modular Blocks



Modular Blocks

Modular Blocks are constructed from a solid anodized aluminum block. The close contact of tubes to block walls allow for maximum temperature transfer.

Block dimensions (L × W × H): 3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)

Applications: Cell cultures, hybridizations, and extraction procedures

OHAUS modular blocks also fit in the OHAUS Dry Block Heaters.

Constructed of anodized aluminum, this material is ideal for its temperature conducting and corrosion resistant properties.

Microcentrifuge Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item No.	List Price (USD)
0.5 mL tube	30	7.9 mm	27.6 mm	30400157	145
1.5 mL tube	20	11.1 mm	39.1 mm	30400159	145
2 mL tube	20	11.5 mm	38.1 mm	30400191	145



Conical-Bottom Centrifuge Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item No.	List Price (USD)
15 mL tube	12	17.1 mm	44.5 mm	30400172	145
50 mL tube	5	29.0 mm	47.6 mm	30400168	145



Incubating Light Duty Orbital Shakers Modular Blocks

Standard Test Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item No.	List Price (USD)
6 mm tube	30	8.3 mm	48.4 mm	30400158	145
10 mm tube	24	10.7 mm	48.4 mm	30400151	145
12/13 mm tube	20	13.9 mm	48.4 mm	30400152	145



Centrifuge Tube Combination Block

Single block

These blocks have been designed for variable sized samples.

Sample Type	No. of Wells	Well Diameter	Well Depth	Item No.	List Price (USD)
Test Tube Combination					
6 mm	6	8.3 mm	48.4 mm	30400156	145
12/13 mm	5	13.8 mm	48.4 mm		
25 mm	3	26.2 mm	48.4 mm		
Centrifuge Tube Combination					
1.5 mL	4	11.1 mm	39.1 mm	30400193	145
15 mL	3	17.1 mm	44.5 mm		
50 mL	2	29.0 mm	47.6 mm		
Micro-Tube Combination					
0.5 mL	6	7.9 mm	27.6 mm	30400194	145
1.5 mL	10	11.1 mm	39.1 mm		
2 mL	5	11.5 mm	38.1 mm		



Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

Sample Type	No. of Wells	Well Diameter	Well Depth	Item No.	List Price (USD)
12 mm vial	20	12.7 mm	30 mm	30400182	145
15 mm vial	20	15.8 mm	35 mm	30400183	145
16 mm vial	15	16.4 mm	45 mm	30400190	145
17 mm vial	12	17.8 mm	45 mm	30400184	145
19 mm vial	12	19.7 mm	45 mm	30400185	145
21 mm vial	9	21.7 mm	45 mm	30400186	145
23 mm vial	8	23.8 mm	45 mm	30400187	145
25 mm vial	8	25.8 mm	45 mm	30400188	145
28 mm vial	6	28.8 mm	45 mm	30400189	145



Incubating Rocking & Waving Shakers

- 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.

The OHAUS Incubating Rocking Shaker combines smooth rocking motion and general purpose incubation in one compact bench top unit.

Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, staining and destaining gels, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.



Model	Temp. Range	Temp. Uniformity	Speed Range	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Dimensions (L x W)	Interior Dimensions (L x W x H)	Item No.	List Price (USD)
ISRK04HDG	Ambient +5°C to 65°C	± 0.5°C at 37°C	1 to 50 rpm *	± 1 rpm	0 to 15° *	1 second to 160 hours	10 lbs (4.5 kg) **	10 x 7.5" (25.4 x 19.1 cm)	10.75 x 7.75 x 3.8" (27.3 x 19.7 x 9.7 cm)	30391980	3070

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Incubating Rocking & Waving Shakers

- 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.

The OHAUS Incubating Waving Shaker combines the unique vertical and horizontal “wave” motion with general purpose incubation in one compact bench top unit.

Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust waving angle from 0 to 20° while unit is operating. Precise speed control provides smooth, low-speed waving motion down to 1 rpm.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments..

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

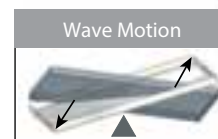
Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.



Model	Temp. Range	Temp. Uniformity	Speed Range	Speed Accuracy	Tilt Angle	Timer	Maximum Weight Capacity	Tray Dimensions (L x W)	Interior Dimensions (L x W x H)	Item No.	List Price (USD)
ISWV02HDG	Ambient +5°C to 65°C	± 0.5°C at 37°C	1 to 30 rpm *	± 1 rpm	0 to 20° *	1 second to 160 hours	5 lbs (2.3 kg) **	9.25 x 7.25" (23.5 x 18.4 cm)	10.75 x 7.75 x 3.4" (27.3 x 19.7 x 8.6 cm)	30391987	3003

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

Open Air , Incubating , Incubating Cooling Shakers

Accessories

Universal Platforms

Allows for mounting of flask clamps, test tube racks, and bottle clamps. Platform slides over top of included tray and is tightened with adjustment screws. Optional accessories screw directly into mounting point openings. The two-tier braces allow stacking of platforms with a 10" clearance (available for select sizes). An optional non-skid rubber mat can be placed on the platform for an added non-slip surface. The platform is constructed of type 304 stainless steel.



Description	Used on Shakers	Item No.	List Price (USD)
11 × 13" (27.9 × 33 cm) Universal Platform	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400052	214
13 × 13" (33 × 33 cm) Universal Platform	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400053	305
18 × 18" (45.7 × 45.7 cm) Universal Platform*	Analog/Digital 16 kg Shakers and Reciprocating Shakers**	30400054	365
18 × 24" (45.7 × 61 cm) Universal Platform*	Analog/Digital 16 kg & 23 kg Shakers and Reciprocating Shakers**	30400056	411
24 × 24" (61 × 61 cm) Universal Platform	Digital 45 kg Shakers	30400057	975
18 × 30" (45.7 × 76.2 cm) Universal Platform*	Analog/Digital 23 kg Shakers	30400058	933
24 × 36" (61 × 91.4 cm) Universal Platform	Digital 68 kg Shakers	30400059	1246
Two-Tier Braces (set of 4)	Analog/Digital 16 kg & 23 kg Shakers	30400051	116

Rubber Mats

Description	Used on Shakers	Item No.	List Price (USD)
11 × 13" (27.9 × 33 cm) Rubber Mat	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400060	61
13 × 13" (33 × 33 cm) Rubber Mat	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400061	74
18 × 18" (45.7 × 45.7 cm) Rubber Mat	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400062	106
18 × 24" (45.7 × 61 cm) Rubber Mat	Analog/Digital 16 kg Shakers, Reciprocating Shakers and Analog Digital 23kg Shakers	30400063	117
24 × 24" (61 × 61 cm) Rubber Mat	Digital 45 kg Shakers	30400064	138
24 × 36" (61 × 91.4 cm) Rubber Mat	Digital 68 kg Shakers	30400065	153

Culture Platforms

Ideal for slow speed applications; Petri dishes, culture flasks, and other flat bottom, low profile vessels. The two-tier braces (available for both sizes) allow stacking of platforms with a 10" clearance. The platform is constructed of type 304 stainless steel. The platform has a non-skid rubber surface.



Description	Used on Shakers	Item No.	List Price (USD)
18 × 18" (45.7 × 45.7 cm) Culture Platform*	Analog/ Digital 16 kg Shakers* and Reciprocating Shakers**	30400066	364
18 × 24" (45.7 × 61 cm) Culture Platform*	Analog/ Digital 16 kg* & 23 kg Shakers and Reciprocating Shakers**	30400067	380
Two-Tier Braces (set of 4)	Analog/ Digital 16 kg & 23 kg shakers	30400051	116

*Two-tier ready

**Stacking of platforms is not recommended for Reciprocating Shaker

Open Air , Incubating , Incubating Cooling Shakers

Accessories

Dedicated Platforms

Pre-mounted flask clamps for maximum utilization of platform space for flasks of all one size. The two-tier braces allow stacking of platforms with a clearance (available for select sizes). Platform is constructed of type 304 stainless steel. Flask clamps are constructed of PVC. Ideal for polycarbonate flasks.



Description	Flask Capacity	Used on Shakers	Item No.	List Price (USD)
13 × 13" (33 × 33 cm) Dedicated Platform / 125 mL Flask Clamp	16	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400075	574
13 × 13" (33 × 33 cm) Dedicated Platform / 250 mL Flask Clamp	12	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400076	574
13 × 13" (33 × 33 cm) Dedicated Platform / 500 mL Flask Clamp	8	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400077	574
13 × 13" (33 × 33 cm) Dedicated Platform / 1 L Flask Clamp	4	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400078	574
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 125 mL Flask Clamp*	27	Analog/Digital 16 kg Shakers and Reciprocating Shakers**	30400079	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 250 mL Flask Clamp*	20	Analog/Digital 16 kg Shakers and Reciprocating Shakers**	30400080	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 500 mL Flask Clamp*	13	Analog/Digital 16 kg Shakers and Reciprocating Shakers**	30400081	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 1 L Flask Clamp	9	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400082	631
Two-Tier Braces (set of 4)		Analog/Digital 16 kg Shakers	30400051	116

Adjustable Platforms

Adjustable clamping bars accommodate various vessel types. Constructed of stainless steel. The base tray has a non-skid rubber surface.

Upper slot distance – 4.5" from platform

Lower slot distance – 2 ¼" from platform



Description	Bar Size	Overall Dimensions	Used on Shakers	Item No.	List Price (USD)
2-bar Adjustable Platform	8.6" (21.8 cm)	8.6 × 11.7" (21.8 × 29.7 cm)	Digital 4 kg Shakers	30400121	519
4-bar Adjustable Platform	18" (45.7 cm)	18 × 18" (45.7 × 45.7 cm)	Analog/Digital 16 kg Shakers	30400068	553
4-bar Adjustable Platform	18" (45.7 cm)	18 × 24" (45.7 × 61 cm)	Analog/Digital 23 kg Shakers	30400069	792

Replacement Parts

Description	Used with Platforms	Item No.	List Price (USD)
8.6" (21.8 cm) Adjustable Bar (with Mounting Hardware)	30400121	30400122	47
18" (45.7 cm) Adjustable Bar (with Mounting Hardware)	30400068 & 3040069	30400073	63

*Two-tier ready

**Stacking of platforms is not recommended for Reciprocating Shaker

Open Air , Incubating , Incubating Cooling Shakers

Accessories

Large Vessel Carrier Platforms

Ideal for large sample containers like carboys, jugs and bottles. The platform's high side walls secure samples, has a heavy-duty design and is constructed of stainless steel. The base tray has a non-skid rubber surface.

Large Vessel Carrier Platforms



Description	Bar Size	Overall Dimensions (L × W × H)	Used on Shakers	Item No.	List Price (USD)
4-bar Large Vessel Carrier Platform	18" (45.7 cm)	30.1 × 18.1 × 13.9" (76.4 × 45.9 × 35.3 cm)	Analog/Digital 23 kg Shakers	30400070	1324
4-bar Large Vessel Carrier Platform	24" (61 cm)	24.4 × 24.3 × 14.2" (61.9 × 61.7 × 36.0 cm)	Digital 45 kg Shakers	30400071	1386
5-bar Large Vessel Carrier Platform	24" (61 cm)	36.9 × 24.3 × 14.2" (93.7 × 61.7 × 36.0 cm)	Digital 68 kg Shakers	30400072	1777

Replacement Part	Used with Carrier	Item No.	List Price (USD)
18" (45.7 cm) Adjustable Bar (with Mounting Hardware)	30400070	30400073	63
24" (61 cm) Adjustable Bar (with Mounting Hardware)	30400071 & 30400072	30400074	79

Separatory Funnel Platform

Holds 3 funnels at once on an 18 × 18" (45.7 × 45.7 cm) platform. Platform can accommodate 500 mL to 2 L separatory funnels and is constructed of stainless steel. Includes platform, clamps and hardware to secure 3 funnels.

Separatory Funnel Platform



Description	Used on Shakers	Item No.	List Price (USD)
Separatory Funnel Platform 46 × 46 cm	Analog/Digital 16 kg Shakers and Reciprocating Shakers	30400083	610

Microplate Clamp

Can hold one standard microplate or deep-well plate. Constructed of type 304 stainless steel.

Microplate Clamp



Platform Capacities for Microplate Clamps			
Platform Size	Microplate Clamps	Platform Item No.	List Price (USD)
11 × 13	4	30400052	214
13 × 13	6	30400053	305
18 × 18	12	30400054	365
18 × 24	18	30400056	411
18 × 30	21	30400057	975
24 × 24	24	30400058	933
24 × 36	36	30400059	1246

Description	Used on Shakers	Item No.	List Price (USD)
Microplate Clamp	Analog/Digital 16 kg, 23 kg, 45 kg, & 68 kg Shakers	30400104	62

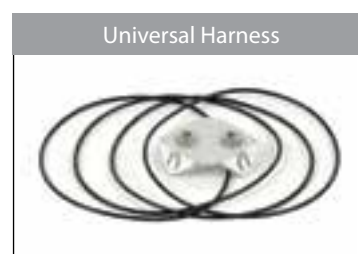
Open Air , Incubating , Incubating Cooling Shakers

Accessories

Universal Harness

Attaches to tray to secure low-profile plates.

Description	Used on Shakers	Item No.	List Price (USD)
Universal Harness	Digital 4 kg Open Air Orbital Shakers	30400123	42



Dimpled Mat

Designed to hold centrifuge tubes, vials, culture tubes, and micro-tubes securely in place.

Mat can easily be removed for cleaning and transporting of tubes from bench to tray.

Description	Used on Shakers	Item No.	List Price (USD)
Dimpled Mat, 12.75 × 10" (32.4 × 25.4 cm)	Digital Rocking Shaker	30400140	57
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	Digital Waving Shaker	30400142	57
Dimpled Mat, 10 × 7.5" (25.4 × 19.1 cm)	Incubating Rocking Shaker	30400141	57
Dimpled Mat, 9.25 × 7.25" (23.5 × 18.4 cm)	Incubating Waving Shaker	30400143	57
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	Open Air 4 kg Orbital Shaker	30400124	54
Dimpled Mat, 14 × 11" (35.6 × 27.9 cm)	Analog Rocking & Waving Shaker	30400144	66



Stacking Tray

Easily attaches to the units' included tray to add a second tier for higher capacity applications.

Second tier tray mounts 3.5" (8.9 cm) above lower tray. The tray includes hardware and a rubber mat.

Description	Used on Shakers	Item No.	List Price (USD)
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	Digital Rocking Shaker	30400137	137
Stacking Tray, 11.75 × 8.75" (29.9 × 22.2 cm)	Digital Waving Shaker	30400138	167
Stacking Tray, 14 × 11" (35.6 × 27.9 cm)	Analog Rocking Shaker	30400139	121



Dilution Cup Tray

Constructed of type 304 stainless steel. Holds 24 × 28 mm dilution vials.

Description	Used on Unit	Item No.	List Price (USD)
1.5 to 2 mL Micro-Tube Rack	Digital 4 kg Open Air Orbital Shakers	30400125	234



Micro-Tube Rack

Optional 1.5 to 2 mL Micro-Tube Rack attaches to tray to hold up to 70 × 1.5 mL or 2 mL micro-tubes.

Tray can accommodate up to 2 micro-tube racks.

Description	Used on Unit	Item No.	List Price (USD)
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	Digital Open Air and Incubating Microplate Shaker	30400114	165

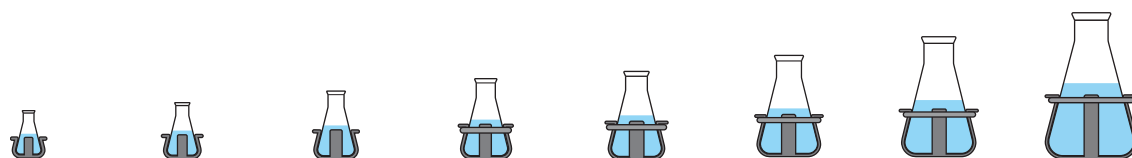


Open Air , Incubating , Incubating Cooling Shakers

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.



Clamp Style	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

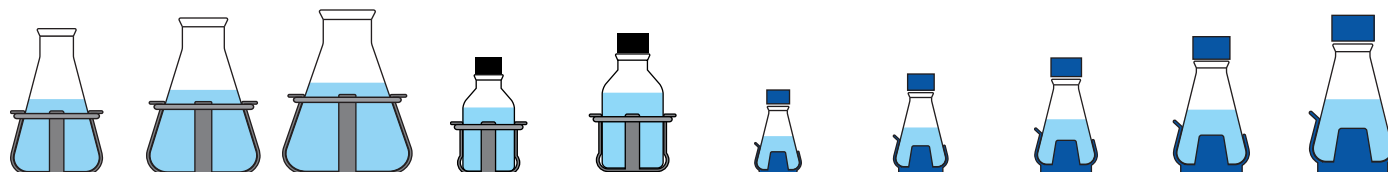
*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers

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 N/A	N/A N/A	5 5	2 2	10 10	8 8	5 5	2 2	N/A N/A
1 1	1 1	1 1	6 6	5 5	12 12	10 10	6 6	4 4	3 3
2 2	4 4	2 2	16 16	10 10	20 20	18 18	12 12	8 8	4 4
3 3 3	4 4 4	3 3 3	20 20 20	13 13 13	28 28 28	25 25 25	16 16 16	10 10 10	6 6 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 × 7 W × 4" H (12.7 × 17.8 × 10.2 cm) / Micro-Tube Rack: 1.7" H (4.3 cm).

Test Tube Racks
Half-Size, Stationary



Test Tube Style	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 × 8.75" (29.9 × 22.2 cm) Digital Open Air 4 kg Shakers	2	2	2	2	2	2	2
11 × 7.75" (27.9 × 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 × 13" (27.9 × 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 × 13" (33 cm × 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 × 18" (45.7 × 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 × 24" (45.7 × 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 × 30" (45.7 × 76.2 cm)							
Analog/Digital 23 kg Shakers	8	8	8	8	8	8	8
24 × 24" (61 × 61 cm)							
Digital 45 kg Shakers	8	8	8	8	8	8	8
24 × 36" (61 × 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)

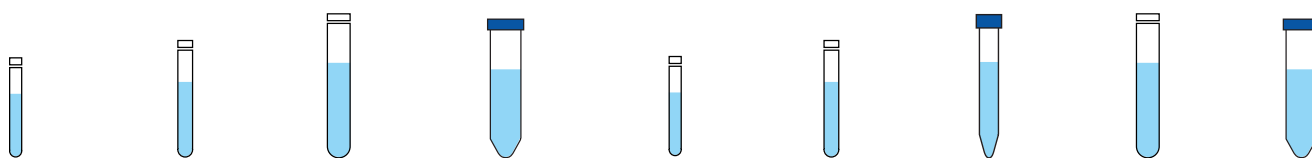
Outside stationary rack dimensions:

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	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
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

Fixed Speed Vortex Mixers

- 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.

Built sturdy to provide stable and reliable vortexing action. Starts mixing when the cup head is pressed down. Speed is fixed at full rpm to provide vigorous vortexing of samples.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug. Includes both cup head and 3" head with cover.



Model	Speed Range 120V	Orbit	Controls	Duty Rating	Item No.	List Price (USD)
VXMNFS	3200 rpm	4.9 mm (0.19")	None	Intermittent duty	30392108	280

Analog Mini Vortex Mixers

- 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.

Built sturdy to provide stable and reliable vortexing action. Control allows low rpm startup for gentle shaking or high speed mixing for vigorous vortexing of samples. Two modes of operation; continuous mode when using accessory attachments or touch mode which activates mixing when depressing the cup head.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug. Includes both cup head and 3" head with cover. Additional accessories can be found on pages 160-161.



Model	Speed Range* 120V	Orbit	Controls	Duty Rating	Item No.	List Price (USD)
VXMNAL	300 to 3200 rpm	4.9 mm (0.19")	Auto/Off/On Rocker Switch, Speed Knob: Variable 1 to 10 Dial Marks	Intermittent duty	30392115	319

* Maximum speed will vary depending on accessory used.

Digital Mini Vortex Mixers

- 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.

Built sturdy to provide stable and reliable vortexing action. Ideal for applications that demand repeatable results. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to user defined time limit, the unit will shut off when time reaches zero. Two modes of operation; continuous mode when using accessory attachments or touch mode which activates mixing when depressing the cup head.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug. Includes both cup head and 3" head with cover. Additional accessories can be found on pages 160-161.



Model	Speed Range* 120V	Timer	Orbit	Controls	Duty Rating	Item No.	List Price (USD)
VXMNDG	500 to 3000 rpm	1 second to 160 hours	4.9 mm (0.19")	Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control	Intermittent duty	30392122	409

* Maximum speed will vary depending on accessory used.

Pulsing Mini Vortex Mixers

- 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.

Built sturdy to provide stable and reliable vortexing action. Powerful pulsing vortex action produces excellent cell disruption for glass bead procedures. Capable of complete cell disruption of samples in only minutes. Unique pulsing action reduces heat generation while providing more effective mixing and disruption. Displayed time counts up during continuous operation and counts down during timed runs.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug. Includes cup head, 3" head with cover, and an easy-to-load 1.5 mL to 2 mL Micro-Tube Holder. Holder has a built-in cup head. Additional accessories can be found on pages 160-161.



Model	Speed Range* 120V	Timer	Orbit	Controls	Duty Rating	Item No.	List Price (USD)
VXMNPS	500 to 3000 rpm	1 second to 160 hours	2.5 mm (0.098")	Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control Pulse Button	Intermittent duty	30392129	498

* Maximum speed will vary depending on accessory used.

Mini Vortex Mixer Accessories

Micro-Tube Holder

Mixes (48) 0.25 to 2 mL micro-tubes.

Requires Insert Retainer.

Description	Item No.	List Price (USD)
Micro-Tube Holder (2 pack)	30400232	71
Insert Retainer	30400227	138

9 to 13 mm Tube Holder

Ideal for mixing 5 mL culture tubes and micro-vials.

Requires Insert Retainer.

Description	Item No.	List Price (USD)
9 to 13 mm Tube Holder (2 pack)	30400229	34
Insert Retainer	30400227	138

14 to 19 mm Tube Holder

Ideal for mixing up to (8) 15 mL centrifuge tubes.

Requires Insert Retainer.

Description	Item No.	List Price (USD)
14 to 19 mm Tube Holder (2 pack)	30400230	34
Insert Retainer	30400227	138

20 to 25 mm Tube Holder

Ideal for mixing up to (8) 50 mL centrifuge tubes.

Requires Insert Retainer

Description	Item No.	List Price (USD)
20 to 25 mm Tube Holder (2 pack)	30400231	34
Insert Retainer	30400227	138

Vessel Harness

Mixes Erlenmeyer flasks and media bottles.

Requires Insert Retainer.

Description	Item No.	List Price (USD)
Vessel Harness (2 pack)	30400228	11
Insert Retainer	30400227	138

Cup Head

Designed for mixing 1 tube at a time.

Description	Item No.	List Price (USD)
Cup Head	30400235	41

3" Rubber Head Cover and 3" Head

Designed for mixing irregular shaped objects.

Description	Item No.	List Price (USD)
3" (7.6 cm) Rubber Head Cover	30400196	57
3" (7.6 cm) Head	30400236	41
3" (7.6 cm) Head with Rubber Cover	30400237	41

Microplate Holder

Ideal for mixing 96-well plates or deep well blocks.

Requires Insert Retainer.

Description	Item No.	List Price (USD)
Microplate Holder (2 pack)	30400233	71
Insert Retainer	30400227	138

Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit your

specifications. Requires Insert Retainer.

Description	Item No.	List Price (USD)
Flat Foam Insert (2 pack)	30400234	32
Insert Retainer	30400227	138

Microwell Kit with Retainer

Includes:

- 2 Microplate Holders
- 1 Insert Retainer

Description	Item No.	List Price (USD)
Microwell Kit with Retainer	30400199	122

Microtube Kit with /Retainer

Includes:

- 2 Micro-Tube Holders
- 1 Insert Retainer

Description	Item No.	List Price (USD)
Microtube Kit with /Retainer	30400200	122

Foam Insert Variety Pack

Includes:

- (1) 9 to 13 mm Tube Holder
- (1) 14 to 19 mm Tube Holder
- (1) 20 to 25 mm Tube Holder
- 1 Flat Foam Insert

Description	Item No.	List Price (USD)
Foam Insert Variety Pack	30400201	62

Micro-Tube and Microplate Holder Kit

Includes:

- 1 Micro-Tube Holder
- 1 Microplate Holder
- 1 Insert Retainer

Description	Item No.	List Price (USD)
Micro-Tube & Microplate Holder Kit	30400198	122

Tube Holder Kit

Includes:

- (1) 9 to 13 mm Tube Holder
- (1) 14 to 19 mm Tube Holder
- (1) 20 to 25 mm Tube Holder
- 1 Flat Foam Insert
- 2 Vessel Harnesses
- 1 Insert Retainer

Description	Item No.	List Price (USD)
Tube Holder Kit	30400197	209

OHAUS Vortex Mixer accessories are interchangeable with other manufacturers' models. Call 1-800-672-7722 for assistance.

Mini Vortex Mixer Accessories

Single Tube Holder

Single tube, hands free mixing. Easily attaches to the top of any Vortex Mixer with the use of a strong magnetic base. Accepts tubes from 2.5 to 4.5" (6.4 to 11.4 cm) in length. Minimum tube diameter of 0.75" (19 mm).

Description	Item No.	List Price (USD)
Single Tube Holder	30400202	179

Adapter for

Vortex-Genie® Mixer*

Adapter plate easily adheres to the Vortex-Genie® Mixer housing so Single Tube Holder (sold separately) can be attached.

Description	Item No.	List Price (USD)
Adapter plate	30400203	91

* The Vortex-Genie® Mixer is a registered trademark of Scientific Industries, Inc.

Single Tube Holder Accessories

(requires Single Tube Holder)

0.5 mL Micro-Tube Holder

Mixes (24) 0.5 mL micro-tubes.
For use with Single Tube Holder.

Description	Item No.	List Price (USD)
Micro-Tube Holder (0.5 mL)	30400204	78

1.5 mL to 2.0 mL Micro-Tube Holder

Mixes (18) 1.5 to 2 mL micro-tubes.
For use with Single Tube Holder.

Description	Item No.	List Price (USD)
Microtube Holder (1.5 mL to 2.0 mL)	30400205	78

Ampule Tube Holder

Mixes up to 4 storage vials and test tubes.

Description	Item No.	List Price (USD)
15 to 17 mm Ampule Tube Holder	30400207	132
10 to 17 mm Ampule Tube Holder	30400208	186

Stainless Steel Microtube Holder

Mixes up to (12) 1.5 to 5 mL tubes.
Stainless steel construction.

Description	Item No.	List Price (USD)
Microtube Holder	30400206	284

Heavy-Duty Vortex Mixers

- 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.

The OHAUS Digital Heavy-Duty Vortex Mixer is ideal for applications that demand repeatable results. Mixer features touchpad controls and LED displays for accurate speed (rpm) and time (minutes and seconds) results. The heavy-duty design and efficient motor allow this mixer to operate in continuous duty and handle all accessories over the entire speed range. Choose from two modes of operation: "Touch" mode for mixing tubes when cup head or Universal Holder with cover is depressed, or "On" mode when using any of the accessory attachments for continuous operation. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to user defined time limits, the unit will shut off when time reaches zero.



Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, universal holder with cover, foam microtube insert for (38) 1.5 to 2.0 mL microtubes, and a detachable, 3-wire cord and specified plug. Additional accessories can be found on page 166.

Model	Speed Range	Timer	Orbit	Controls	Capacity	Duty Rating	Dimensions (L × W × H)	Item No.	List Price (USD)
VXHDDG	On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm	1 second to 160 hours	4.9 mm (0.19")	Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control	2.5 lbs (1.1 kg)	Continuous duty	9.5 × 6.6 × 6.1" (24.1 × 16.8 × 16.5 cm)	30392146	1139

Heavy-Duty Vortex Mixers

- 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.

The OHAUS Analog Heavy-Duty Vortex Mixer is a variable speed analog mixer that is designed for continuous duty. The heavy-duty design and efficient motor allow this mixer to operate in continuous duty and handle all accessories over the entire speed range. Choose from two modes of operation: "Touch" mode for mixing tubes when cup head or Universal Holder with cover is depressed, or "On" mode when using any of the accessory attachments for continuous operation.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, universal holder with cover, foam microtube insert for (38) 1.5 to 2.0 mL microtubes, and a detachable, 3-wire cord and specified plug. Additional accessories can be found on page 166.



Model	Speed Range	Orbit	Controls	Capacity	Duty Rating	Dimensions (L x W x H)	Item No.	List Price (USD)
VXHDAL	On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm	4.9 mm (0.19")	Analog	2.5 lbs (1.1 kg)	Continuous duty	9.5 x 6.6 x 6.1" (24.1 x 16.8 x 16.5 cm)	30392148	979

Microplate Vortex Mixers

- 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.

The OHAUS Digital Microplate Vortex Mixer is ideal for applications that demand repeatable results. Mixer features touchpad controls and LED displays for accurate speed (rpm) and time (minutes and seconds) results. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to a user defined time limit, the unit will shut off when time reaches zero. Choose from two modes of operation: "Touch" mode which activates mixing when cup head is depressed, or "On" mode when using the microplate attachments for continuous operation.



Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, single microplate holder, and a detachable, 3-wire cord and specified plug. Accessories that can be used on the Microplate Vortex Mixer are cup head, single microplate holder and double microplate holder. Additional accessories can be found on page 166.

Model	Speed Range	Timer	Orbit	Controls	Capacity	Duty Rating	Dimensions (L × W × H)	Item No.	List Price (USD)
VXMPDG	On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm	1 second to 160 hours	3.5 mm (0.13")	Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control	2 microplates	Continuous duty	10.5 × 5.4 × 4.5" (26.7 × 13.7 × 11.4 cm)	30392160	531

Microplate Vortex Mixers

- 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.

The OHAUS Analog Microplate Vortex Mixer is a variable speed analog mixer that is designed for continuous duty. The high speed and small orbit is optimal for effectively mixing microplates. Choose from two modes of operation: "Touch" mode which activates mixing when cup head is depressed, or "On" mode when using the microplate attachments for continuous operation.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, single microplate holder, and a detachable, 3-wire cord and specified plug. Accessories that can be used on the Microplate Vortex Mixer are cup head, single microplate holder and double microplate holder. Additional accessories can be found on page 166.



Model	Speed Range	Orbit	Controls	Capacity	Duty Rating	Dimensions (L x W x H)	Item No.	List Price (USD)
VXMPAL	On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm	3.5 mm (0.13")	Analog	2 microplates	Continuous duty	10.5 × 5.4 × 4.5" (26.7 × 13.7 × 11.4 cm)	30392162	457

Heavy Duty and Microplate Vortex Mixer Accessories

Foam Insert for 0.5 mL Microtubes

Foam insert holds (52) 0.5 mL microtubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
0.5 mL microtubes	30400216	42
Universal Holder	30400226	63

Foam Insert for 1.5 to 2.0 mL Microtubes

Foam insert holds (38) 1.5 to 2.0 mL microtubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
1.5 to 2.0 mL microtubes	30400217	42
Universal Holder	30400226	63

Foam Insert for 12-13 mm Test Tubes

Foam insert holds (34) 12-13 mm diameter test tubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
12-13 mm test tubes	30400220	42
Universal Holder	30400226	63

Foam Insert for 15-18 mm Test Tubes

Foam insert holds (20) 15-18 mm diameter test tubes.

Ideal for 15 mL centrifuge tubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
15-18 mm test tubes	30400221	42
Universal Holder	30400226	63

Foam Insert for 19-21 mm Test Tubes

Foam insert holds (18) 19-21 mm diameter test tubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
19-21 mm test tubes	30400222	42
Universal Holder	30400226	63

Foam Insert for 22-25 mm Test Tubes

Foam insert holds (13) 22-25 mm diameter test tubes.

Requires Universal Holder.

Description	Item No.	List Price (USD)
22-25 mm test tubes	30400223	42
Universal Holder	30400226	63

Foam Insert for 26-29 mm Test Tubes

Foam insert holds (4) 26-29 mm diameter test tubes. Ideal

for 50 mL centrifuge tubes. Requires Universal Holder.

Description	Item No.	List Price (USD)
26-29 mm test tubes	30400224	42
Universal Holder	30400226	63

Cup Head*

Designed for mixing 1 tube at a time.

Description	Item No.	List Price (USD)
Cup Head	30400210	41

Small Vessel Holder

Rubber holder secures 125 and 250 mL Erlenmeyer flasks.

Vessel holder also includes a grip mat.

Requires Universal Holder.

Description	Item No.	List Price (USD)
Small Vessel Holder	30400218	51
Universal Holder	30400226	63

Large Vessel Holder

Rubber holder secures 500 and 1000 mL Erlenmeyer flasks.

Vessel holder also includes a grip mat.

Requires Universal Holder.

Description	Item No.	List Price (USD)
Large Vessel Holder	30400211	51
Universal Holder	30400226	63

Microplate Holder (Single)*

Designed to hold one standard microplate.

Description	Item No.	List Price (USD)
Single Holder	30400215	61

Microplate Holder (Double)*

Designed to hold two standard microplates.

Description	Item No.	List Price (USD)
Double Holder	30400213	69

Microplate Holder (Quad)

Designed to hold four standard microplates.

Description	Item No.	List Price (USD)
Quad Holder	30400214	139

Stackable Microplate Holder Four

Designed to maximize the capacity of the Heavy-Duty

Vortex Mixer to eight microplates by stacking the tray on

top of the four plate holder.

Description	Item No.	List Price (USD)
Stackable Holder	30400212	130

Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit

your specifications. Requires Universal Holder.

Description	Item No.	List Price (USD)
Flat Foam Insert	30400209	42
Universal Holder	30400226	63

Universal Holder & Cover

Replacement for items supplied with Heavy-Duty Vortex

Mixer. Cover allows for mixing irregularly shaped objects.

Description	Item No.	List Price (USD)
Universal Holder	30400226	63
Universal Holder Cover	30400225	22

Unless noted with an asterisk (), for use on Heavy-Duty Vortex only.

Multi-Tube Vortex Mixers

- 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 an easy to clean one-piece stainless steel housing that is perfect to use in all environments—especially clean rooms.
- 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.

Conveniently angled front panel features rocker switch for run, time and standby modes.

Operating Features:

One piece, stainless steel housing design optimizes clean-ups. Ideal for applications requiring accuracy and repeatability. The stainless steel one piece housing design is conducive to keeping your vortexer clean and free from contaminants.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

Adjustment Knobs: Basic speed and time knobs with 1 to 10 dial markings.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Applications:

Suspensions, high throughput testing in clinical, environmental, and chemistry labs.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with a Tray Pad Set for support and one 12 mm Test Tube Foam Rack (30400239). Additional accessories can be found on page 169.



Model	Speed Range*	Timer	Orbit	Maximum Weight Capacity	Duty Rating	Tray Dimensions (L × W)	Item No.	List Price (USD)
VXMTAL	1200 to 2400 rpm	0 to 60 seconds	3.6 mm (0.14")	10 lbs (4.5 kg)	Continuous duty	7.25 × 12.25" (18.4 × 31.1 cm)	30392164	2900

* Maximum speed will vary depending on load.

Multi-Tube Vortex Mixers

- 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 an easy to clean one-piece stainless steel housing that is perfect to use in all environments—especially clean rooms.
- 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.

Ideal for applications requiring accuracy and repeatability.

Operating Features:

One piece, stainless steel housing design optimizes clean-ups. Ideal for applications requiring accuracy and repeatability. The stainless steel one piece housing design is conducive to keeping your vortexer clean and free from contaminants.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

LED Display: Touchpad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Pulsing Mode: Programmable pulsing mode allows user to adjust the pulse-on and pulse-off times between 1 and 59 seconds in 1 second intervals. This feature enhances the vortex action by creating a more vigorous mix.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Applications:

Suspensions, high throughput testing in clinical, environmental, and chemistry labs.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with a Tray Pad Set for support and one 12 mm Test Tube Foam Rack (30400239). Additional accessories can be found on page 169.

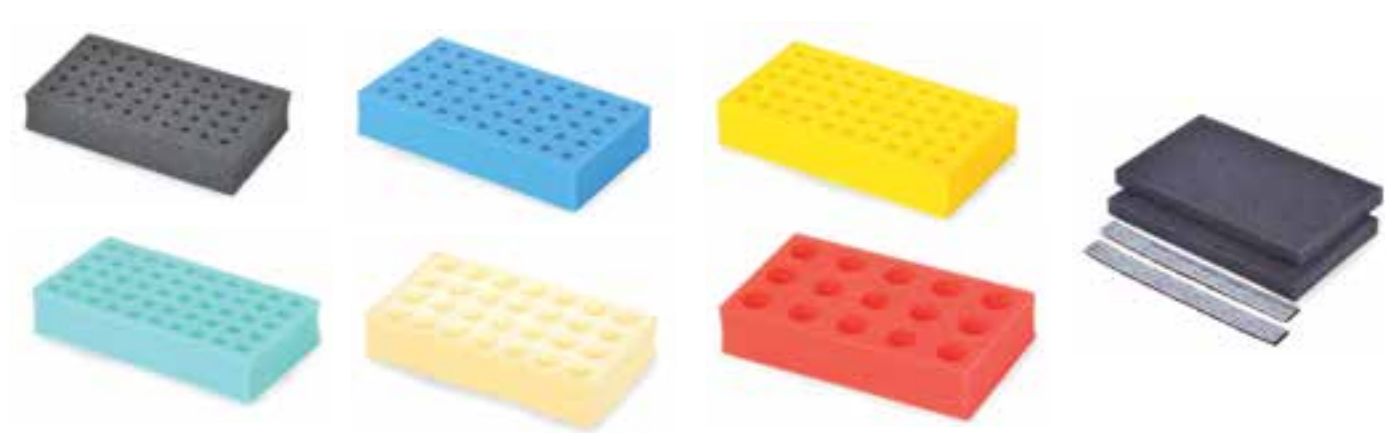


Model	Speed Range*	Speed Accuracy	Timer	Orbit	Maximum Weight Capacity	Duty Rating	Tray Dimensions (L x W)	Item No.	List Price (USD)
VXMTDG	500 to 2500 rpm	± 25 rpm	1 second to 160 hours	3.6 mm (0.14")	10 lbs (4.5 kg)	Continuous duty	7.25 x 12.25" (18.4 x 31.1 cm)	30392171	3400

* Maximum speed will vary depending on load.

Multi-Tube Vortexer Accessories

Foam Test Tube Racks



Description	Tube Capacity	Color	Dimensions (L x W x H)	Item No.	List Price (USD)
10 mm Test Tube Foam Rack	50	Gray	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400238	38
12 mm Test Tube Foam Rack	50	Blue	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400239	37
13 mm Test Tube Foam Rack	50	Yellow	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400240	37
16 mm Test Tube Foam Rack (for 15 mL centrifuge tubes)	50	Green	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400241	48
25 mm Test Tube Foam Rack	28	White	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400243	48
29 mm Test Tube Foam Rack (for 50 mL centrifuge tubes)	15	Red	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400242	48
Replacement Tray Pad Set (upper & lower)	N/A	Gray	7 × 12 × 1" (17.8 × 30.5 × 2.5 cm)	30400245	54

Post Extension Kit

Adds 6" (15.2 cm) to the post of the Multi-Tube Vortex Mixer to accommodate tubes up to 10" (25.4 cm) tall.

Description	Item No.	List Price (USD)
Post Extension Kit	30400244	190



Dry Block Heaters

- 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.

Designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points, and a wide variety of other laboratory procedures. Integral support rod holder with locking knob accepts optional External Temperature Probe Kit. Optional External Temperature Probe Kit monitors actual block or sample temperature. Each of the five models accepts separate interchangeable modular blocks, accommodating various tube sizes from 0.2 mL micro-tubes to 50 mL centrifuge tubes. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact for maximum heat retention. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 178 -180).

Operating Features:

Microprocessor Control: PID temperature control, with optional external RTD probe, offers a temperature stability as low as $\pm 0.1^{\circ}\text{C}$ with a temperature uniformity as low as $\pm 0.1^{\circ}\text{C}$. Samples are heated to temperature quickly and accurately. Temperature is adjusted in $\pm 0.1^{\circ}\text{C}$ increments.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, and time. Provides repeatable and accurate results every time and is easily visible across lab benches. Shows set-point and actual temperature. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Caution Hot Indicator: Hot warning symbol light is illuminated when the temperature is above 40°C .

Overshoot Protection: If the unit exceeds the set temperature by 10°C the unit will automatically stop heating.

Audible Alarm: In timed mode, alarm will sound when time reaches zero and when unit reaches set-point temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in conditions from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Denaturing proteins, DNA applications, ELISA and other immunoassay studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Modular blocks are sold separately (see pages 173-175).

Size	Temperature Range	Temperature Stability @ 37°C	Uniformity Within the Block @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C	Model	Item No.	List Price (USD)
1 block	Ambient $+5^{\circ}\text{C}$ to 120°C	120 volt units: $\pm 0.1^{\circ}\text{C}$	120 volt units: $\pm 0.1^{\circ}\text{C}$	N/A	≤ 16 minutes	HB1DG	30392059	449
2 block				$\pm 0.1^{\circ}\text{C}$	≤ 16 minutes	HB2DG	30392080	540
4 block				$\pm 0.2^{\circ}\text{C}$	≤ 23 minutes	HB4DG	30392087	700
6 block				$\pm 0.3^{\circ}\text{C}$	≤ 30 minutes	HB6DG	30392094	1,055

External Temperature Probe Kit

Enables the unit to read actual block or sample temperature and display that temperature on the control panel. The optional External Temperature Probe Kit includes a stainless steel RTD PT100 probe, 18" (45.7 cm) stainless steel support rod, thermometer/temperature probe extension clamp and hook connector. The PT100 RTD probe is designed to fit perfectly into the thermometer well of each modular block.



Description	Item No.	List Price (USD)
Optional External Temperature Probe Kit	30400246	326

Dry Block Heaters

- 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.



High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact. These multi-purpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points and a wide variety of other laboratory procedures. Each of the five models accept separate interchangeable modular blocks, accommodating various sample enclosures such as microtubes, centrifuge tubes, vials, microplates, and PCR strips or tubes. Each block has a thermometer well for measuring block temperature. Anodized aluminum modular blocks provide superior temperature stability and heat transfer. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 178 -180).

Operating Features:

High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact.

Microprocessor Control: PID temperature controller maintains precise temperature control. Samples are heated to temperature quickly and accurately.

Adjustment Knobs: Dual temperature control knobs with dial markings from 1 to 10 for low temperature and high temperature adjustments. Low range knob adjusts from ambient to 100°C and high range knob adjusts from 75°C to 150°C.

CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in conditions from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Coagulation and RH Studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Modular blocks are sold separately (see pages 173-175).

Size	Temperature Range	Uniformity Within the Block @ 37°C	Temperature Stability @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C	Model	Item No.	List Price (USD)
1 block	Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C	120 volt units: ± 0.1°C	120 volt units: ± 1.0°C	N/A	≤ 16 minutes	HB1AL	30392045	336
2 block			120 volt units: ± 1.5°C	± 0.1°C	≤ 16 minutes	HB2AL	30392052	436
4 block			120 volt units: ± 2.0°C	± 0.2°C	≤ 23 minutes	HB4AL	30392066	635
6 block				± 0.3°C	≤ 30 minutes	HB6AL	30392073	950

2 Block Dry Block Heater with Lid

- 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.

OHAUS Digital Dry Block Heater with Heated Lid are designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for isothermal incubation, enzyme reactions, immunoassays, nucleic acid denaturation and a wide variety of other laboratory procedures. Integral support rod holder with locking knob accepts optional External Temperature Probe Kit. Optional External Temperature Probe Kit monitors actual block or sample temperature. Block heater accepts one microplate block or two separate interchangeable modular blocks, accommodating various tube sizes from 0.2 mL micro-tubes to test tubes or vials up to 85 mm in height. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact with a low density design for exceptional temperature uniformity. The heated lid helps to regulate the temperature and reduce the amount of condensation on sample lids. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 178 -180).

Operating Features:

Microprocessor Control: PID temperature control, with optional external RTD probe, offers a temperature stability as low as $\pm 0.1^{\circ}\text{C}$ with a temperature uniformity as low as $\pm 0.1^{\circ}\text{C}$. Samples are heated to temperature quickly and accurately. Temperature is adjusted in $\pm 0.1^{\circ}\text{C}$ increments.

LED Display: Touchpad controls with easy-to-read, independent LED displays for temperature, and time. Provides repeatable and accurate results every time and is easily visible across lab benches. Shows set-point and actual temperature. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Caution Hot Indicator: Hot warning symbol light is illuminated when the temperature is above 40°C .

Overshoot Protection: If the unit exceeds the set temperature by 10°C the unit will automatically stop heating.

Audible Alarm: In timed mode, alarm will sound when time reaches zero and when unit reaches set-point temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in environments from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Isothermal incubation, enzyme reactions, immunoassays and nucleic acid denaturation and a wide variety of other laboratory procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. For optional temperature probe kits see page 168. Modular blocks sold separately (see pages 173-175).



Model	Size	Temperature Range	Temperature Stability @ 37°C	Uniformity Within the Block @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C	Item No.	List Price (USD)
HB2DGHL	2 block	Ambient $+5^{\circ}\text{C}$ to 100°C	120 volt units: $\pm 0.1^{\circ}\text{C}$	120 volt units: $\pm 1.0^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	≤ 30 minutes	30392101	1150

Modular Blocks & Accessories

Modular blocks are constructed from a solid anodized aluminum block*. The close contact of tubes-to-block walls allow for maximum heat retention. Each block has a thermometer well for measuring block temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block with water or other fluids. Units are designed as a dry bath/incubator.

Single block dimensions (L × W × H): 3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)

Double block dimensions (L × W × H): 6 × 3.75 × 2.25" (15.2 × 9.5 × 5.7 cm)



Microcentrifuge Tube Blocks

Single block

Brand/Sample Type	No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
0.5 mL Tube	30	7.9 mm	27.6 mm	30400157	145
1.5 mL Tube	20	11.1 mm	39.1 mm	30400159	145
1.5 mL Eppendorf™ Tube	20	11.5 mm	36.9 mm	30400162	145
2 mL Eppendorf™ Tube	20	11.5 mm	38.1 mm	30400191	145
2 mL Corning™ Tube	20	10.9 mm	38.1 mm	30400192	145

Titer Plate Block

Double block

Fits 2/4/6 block Dry Block Heaters. Ideal for 96-well or 384-well titer plates. Recessed well for better stability, flat surface good for flat and round bottom plates.

Sample Type	Well Depth	Item No.	List Price (USD)
Titer Plate	13.5 mm	30400164	298

Conical-Bottom Centrifuge Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
15 mL Tube	12	17.1 mm	44.5 mm	30400172	145
50 mL Tube	5	29.0 mm	47.6 mm	30400168	145

Standard Test Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
6 mm Tube	30	8.3 mm	48.4 mm	30400158	145
10 mm Tube	24	10.7 mm	48.4 mm	30400151	145
12/13 mm Tube	20	13.9 mm	48.4 mm	30400152	145
12/13 mm Tube	16	13.9 mm	48.4 mm	30400165	145
15/16 mm Tube	12	17.5 mm	48.4 mm	30400153	145
17/18 mm Tube	12	19.1 mm	48.4 mm	30400195	145
20 mm Tube	8	21.0 mm	48.4 mm	30400154	145
25 mm Tube	6	26.2 mm	48.4 mm	30400155	145
35 mm Tube	4	35.0 mm	47.6 mm	30400167	145

* Block color subject to change

Modular Blocks* & Accessories

Combination Blocks

Single block

These blocks have been designed for variable sized samples.

Sample Type		No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
Test Tube Combination	6 mm	6	8.3 mm	48.4 mm	30400156	145
	12/13 mm	5	13.8 mm	48.4 mm		
	25 mm	3	26.2 mm	48.4 mm		
Centrifuge Tube Combination	1.5 mL	4	11.1 mm	39.1 mm	30400193	145
	15 mL	3	17.1 mm	44.5 mm		
	50 mL	2	29.0 mm	47.6 mm		
Micro-Tube Combination	0.5 mL	6	7.9 mm	27.6 mm	30400194	145
	1.5 mL	10	11.1 mm	39.1 mm		
	2 mL	5	11.5 mm	38.1 mm		



Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

Sample Type	No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
12 mm Vial	20	12.7 mm	30 mm	30400182	145
15 mm Vial	20	15.8 mm	35 mm	30400183	145
16 mm Vial	15	16.4 mm	45 mm	30400190	145
17 mm Vial	12	17.8 mm	45 mm	30400184	145
19 mm Vial	12	19.7 mm	45 mm	30400185	145
21 mm Vial	9	21.7 mm	45 mm	30400186	145
23 mm Vial	8	23.8 mm	45 mm	30400187	145
25 mm Vial	8	25.8 mm	45 mm	30400188	145
28 mm Vial	6	28.8 mm	45 mm	30400189	145



PCR—Plate, Tube, Strip Blocks

Single and double block

Tapered tube wells for 0.2 mL tubes. Spaced for easy access and removal.

Sample Type	Block Size	No. of Wells	Well Dia.	Well Depth	Item No.	List Price (USD)
96-well PCR Plate	Double	96	6.4 mm	15.5 mm	30400171	326
10 × 8 Tube Strips	Single	80	6.4 mm	15.5 mm	30400169	161
Individual Tubes	Single	64	6.4 mm	20.2 mm	30400170	161



Cuvette Block

Single block

Two parallel slots fit 6 cuvettes in each slot, side-by-side.

Sample Type	No. of Wells	Well Depth	Item No.	List Price (USD)
(12) 12.5 mm Cuvettes	2	25.4 mm	30400161	174



* Block color subject to change

Modular Blocks* & Accessories

Solid Blocks

Single and double block

For use as a low-temperature hotplate, slide drying, or for custom drilling to make a custom block.

Block Size	Dimensions (L × W × H)	Item No.	List Price (USD)
Single	3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)	30400160	145
Double	6 × 3.75 × 2.25" (15.2 × 9.5 × 5.7 cm)	30400166	212



Stainless Steel Sand Baths

Ideal for irregular vessels. Stainless steel construction for superior corrosion resistance. Designed to hold sand, stainless steel shot or non-volatile fluids.

For Unit	Dimensions (L × W × H)	Item No.	List Price (USD)
1 Block Dry Block Heater	3.8 × 3.0 × 2.5" (9.5 × 7.6 × 6.4 cm)	30400173	312
2 Block Dry Block Heater	3.8 × 5.9 × 2.5" (9.5 × 14.9 × 6.4 cm)	30400174	325
4 Block Dry Block Heater	5.8 × 7.5 × 2.5" (14.7 × 19.1 × 6.4 cm)	30400175	348
6 Block Dry Block Heater	5.8 × 11.3 × 2.5" (14.7 × 28.7 × 6.4 cm)	30400176	361



Accessories	Item No.	List Price (USD)
Sand, 1 lb (0.45 kg)	30400177	89
Stainless Steel Shot, 1 lb (0.45 kg)	30400178	108

Low Temperature Covers

Plexiglass cover reduces air flow for additional temperature stability in low-temperature applications. Two sides are open 0.25" (6.4 mm).

Block Size	Dimensions (L × W × H)	Item No.	List Price (USD)
2 Block Cover	6.5 × 6.5 × 1.6" (16.5 × 16.5 × 4.1 cm)	30400179	129
4 Block Cover	8.5 × 8.5 × 1.6" (21.6 × 21.6 × 4.1 cm)	30400180	125
6 Block Cover	12.5 × 8.5 × 1.6" (31.8 × 21.6 × 4.1 cm)	30400181	136



* Block color subject to change

Guardian™ 7000 Hotplates

- Dependable Hotplate Stirrers with superior safety features and intelligent performance
- SmartPresence™ ensures supervised operation in the lab
- SmartHeat™ safeguards temperature sensitive applications
- SmartHousing™ allows for consist safe use at high temperatures

OHAUS Guardian 7000 Hotplate Stirrers are designed with outstanding safety features and superior performance for every application. All sizes feature the exclusive SafetyHeat™; an industry leading internal protection system that assures safety in heating applications with dual monitoring of system health. For precise sample control, use the included temperature probe and enable SmartRate™ to select fast or slow temperature and speed ramp rates. Each model contains a backlit LCD display for temperature, speed and time as well as green indicator lights to show unit is heating and stirring.

Operating Features:

Adjustment Knobs: Used to adjust speed, temperature, time and also to activate program mode for advanced settings.

Operating Conditions:

Units can be run in conditions from 5 to 40°C (41 to 104°F), 20% to 80% relative humidity, non-condensing.

Applications:

Research and Academia chemistry.

Ordering Information:

Units include a 3-wire cord and plug, in-user cover and 8" stainless steel temperature probe. Stirrers and Hotplate-Stirrers are supplied with a 1.5" (3.8 cm) PTFE coated stir bar.



NEW
Available Early/Mid
2020

Model	Speed Range	Temperature Range	Maximum Stirring Capacity (H ₂ O)	Top Plate Material	Top Plate Dimensions	Overall Dimensions (L x W x H)	Item No.	List Price (USD)
e-G71HS07C	60 rpm to 1600 rpm	Ambient + 5°C – 500°C	15L	Ceramic	7" x 7" Square	12.2" x 8.8" x 4.8"	30500600	*
e-G71HS10C			18L	Ceramic	10" x 10" Square	16.3" x 11.25" x 4.8"	30500610	*
e-G71HSRDM		Ambient + 5°C – 380°C	20L	Aluminum	5.3" Round	10.5" x 6.8" x 5.0"	30500620	*

* Price available at launch

Guardian™ 5000 Hotplates

- Reliable Hotplate Stirrers with exceptional safety features for everyday use
- Consistently safe to use at high temperature settings with the SmartHousing™
- Dual monitoring SafetyHeat™ system protects the lab
- Modern durable design

OHAUS Guardian 5000 Hotplates Stirrers are designed for safe, reliable operation in all research, academia and industrial applications. Select the size and function you need for your everyday heating and stirring. All models feature a built-in support rod holder with locking knob that accepts the optional support rod kit. Monitor and control sample temperature with optional temperature probes on heating models. All models feature a backlit LCD display for temperature and speed as well as a green indicator light, which illuminates when the unit is heating and stirring.

Operating Features:

Adjustment Knobs: Used to adjust speed and temperature and also to activate program mode for advanced settings.

Operating Conditions:

Units can be run in conditions from 5 to 40°C (41 to 104°F), 20% to 80% relative humidity, non-condensing.

Applications:

Academia, Research and Industrial chemistry.

Ordering Information:

Units include a 3-wire cord and plug. Stirrers and Hotplate-Stirrers are supplied with a 1.5" (3.8 cm) PTFE coated stir bar



NEW
Available Early/Mid
2020

Model	Speed Range	Temperature Range	Maximum Stirring Capacity (H ₂ O)	Top Plate Material	Top Plate Dimensions	Overall Dimensions (L × W × H)	Item No.	List Price (USD)
e-G51HS07C	60 rpm to 1600 rpm	Ambient + 5°C – 500°C	15L	Ceramic	7" × 7" Square	12.2" × 8.8" × 4.8"	30500520	*
e-G51HP07C	n/a	Ambient + 5°C – 500°C					30500530	*
e-G51ST07C	60 rpm to 1600 rpm	n/a				10.5" × 6.8" × 5.0"	30500540	*
e-G51HS10C		Ambient + 5°C – 500°C	18L	Aluminum	10" × 10" Square	16.3" × 11.25" × 4.8"	30500550	*
e-G51HSRDM		Ambient + 5°C – 380°C	20L		5.3" Round	10.5" × 6.8" × 5.0"	30500560	*

* Price available at launch

Guardian™ Mini Hotplates & Stirrers

- 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.
- Built in support rod holder

The OHAUS Basic Mini Hotplates, Stirrers, and Hotplate-Stirrers are rugged, compact units that heat and stir up to 1000 mL of liquid. Ceramic tops feature a chemical resistant white reflective top plate that is easy to clean. Bi-metallic thermostat offers reliable temperature control. Powerful heater reaches maximum temperature in only minutes. Powerful motor and magnet deliver reliable and consistent stirring. Compact design saves bench space. Built-in support rod holder with locking knob accepts optional Support Rod and Clamp Kit.

Basic Mini Fixed Temperature Hotplate features an illuminated rocker switch to activate the preset fixed temperature of 500°C.

Basic Mini Auto-Stirrer is automatically activated by the minimum weight of a beaker or flask and will stop stirring when mixing vessel is removed.

Operating Features:

Adjustment Knobs: Basic speed and temperature control knobs with dial markings from 1 to 10.

Operating Conditions:

Units can be run in conditions from 5 to 40°C (41 to 104°F), 20% to 85% relative humidity, non-condensing.

Applications:

Academia and basic chemistry.

Ordering Information:

Units include a 3-wire cord and plug. Stirrers and Hotplate-Stirrers are supplied with a 1.5" (3.8 cm) PTFE coated stir bar.



Basic Mini Hotplates

Model	Temperature Range	Maximum Capacity (H ₂ O)	Top Plate Dimensions (Dia.)	Overall Dimensions (L × W × H)	Item No.	List Price (USD)
HSMNHP4CAL	to 500°C*	1000 mL	4 × 4" (10.2 × 10.2 cm)	7.9 × 6 × 5" (20.1 × 15.2 × 12.7 cm)	30392010	215
HSMNHP4CFT*					30392031	204

* Fixed Temperature Hotplate has a fixed temperature of 500°C.

Basic Mini Stirrers

Model	Speed Range	Maximum Capacity (H ₂ O)	Top Plate Dimensions (Dia.)	Overall Dimensions (L × W × H)	Item No.	List Price (USD)
HSMNST4CAL	100 to 1200 rpm	1000 mL	4 × 4" (10.2 × 10.2 cm)	7.9 × 6 × 5" (20.1 × 15.2 × 12.7 cm)	30392017	190
HSMNAS4CAL**					30392038	236

**Mini auto stirrer

Basic Mini Hotplate-Stirrers

Model	Temperature Range	Speed Range	Maximum Capacity (H ₂ O)	Top Plate Dimensions (Dia.)	Overall Dimensions (L × W × H)	Item No.	List Price (USD)
HSMNHS4CAL	to 500°C	100 to 1200 rpm	1000 mL	4 × 4" (10.2 × 10.2 cm)	7.9 × 6 × 5" (20.1 × 15.2 × 12.7 cm)	30392024	358

HT Lysing Bead Mill Homogenizer

- 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 10.2 × 12.7 × 6.4 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.
- Integral lid lock for increased safety

The HT (High Throughput) Lysing Bead Mill Lab Homogenizer offers efficient solutions for all of your grinding, lysing, pulverizing, mixing and homogenizing sample preparation applications. High-throughput processing is ideal for multiple sample and tube configurations. Easy-to-load tray securely locks the microplate or tube in place. High speed linear motion processes samples quickly. Flexibility to use OHAUS sample tubes or any other brand.

Operating Features:

LED display: Allows the operator to view speed and time settings

Microprocessor-control: Unit includes sample clamp and hex key

Applications: DNA, RNA and Protein Analysis (from mammalian tissue, plant, soil, seed, fungi, bacteria, virus and other cells), Cell Lysing, PCR, Gene Expression



Model	Speed Range	Motion	Timer	Capacity	Dimensions	Weight	Max. Capacity	Item No.	List Price (USD)
HOHTDG	300 to 1600 rpm (1 rpm increments)	Reciprocal, 31 mm	1 second to 10 minutes (1 second increments)	1 deep well plate, 4 microplates, or any sample matrix that can fit in the 10.2 × 12.7 × 6.4 cm adjustable holder	17.5 × 11.3 × 20.4 in / 44.6 × 28.6 × 51.8 cm	59 lb / 26.8 kg	300 g	30391393	7985

Bead Mill Homogenizer Tubes, Racks & Kits



Accessories	Item No.	List Price (USD)
White, Bacteria, 2 mL tube, 100/box	30391402	324
Yellow, Yeast, 2 mL Tube, 100/box	30391404	324
Blue, Fungi, 2 mL Tube, 100/box	30391405	324
Orange, Soft Sample, 2 mL Tube, 100/box	30391406	324
Green, Plant, 2 mL Tube, 100/box	30391408	324
Red, Animal Tissue, 2 mL Tube, 100/box	30391409	324
Brown, Environmental, 2 mL Tube, 100/box	30391410	331
Tube Rack, 25 × 2ml Tubes, 2 per pack	30391431	12
Sample Tube Kit, 14 Tubes	30391433	38

Multi-Purpose Clamps

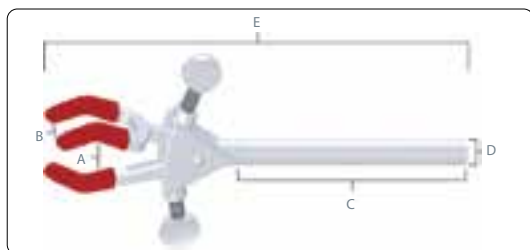
UltraJaws Heavy-Duty Clamps

- Corrosion-resistant stainless steel clamps provide excellent chemical resistance, durability, and can be autoclaved. Nickel-plated zinc clamps offer high-tensile strength at an economical price.
- Prevent accidents in the lab—versatile multi-purpose LabJaws clamps securely hold glassware and irregularly-shaped objects. Select from a variety of grip sizes, prong styles, and adjustment types.
- Choose from a variety of specialized LabJaws clamps with adjustable features to provide an exact fit for labware such as thermometers, thermocouples, columns, funnels, and round bottom flasks.
- Nickel-plated zinc

Our patented multi-purpose UltraJaws Heavy-Duty Clamps feature an innovative closed yoke construction that minimizes contamination and corrosion of internal components. The unique design enables secure gripping and positioning with added strength and durability.

Available in both single and dual prong adjustment, prongs open gradually to maximize grip size without binding. Both designs feature precise pressure regulation when gripping glassware surfaces to reduce the chance of breakage. UltraJaws clamps are constructed with extension rods for easy attachment to lab-frames and other apparatus. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

The prong height of the UltraJaws Heavy-Duty Clamps make them ideal for use in holding and securing glassware with precision ground glass joints. The chart details which UltraJaws Clamps are recommended.



NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 192–194.

Ground Glass Joint Reference Chart

Clamp	Joint Size
Small Dual Adjust	10/30, 12/30, 14/20, 19/22, 24/40, 29/42, 34/45
Medium Dual Adjust	14/40, 19/38
Large Dual Adjust	45/50

Single Adjust Clamps



Dual Adjust Clamps



3-Prong Single Adjust Clamps

Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Small	0 to 23 mm (0 to 0.91")	6 mm (0.24")	102 mm (4")	8 mm (0.32")	162 mm (6.38")	30392254	54
Medium	0 to 50 mm (0 to 1.97")	19 mm (0.75")	127 mm (5")	11 mm (0.43")	229 mm (9.02")	30392252	55
Large	0 to 72 mm (0 to 2.83")	29 mm (1.14")	127 mm (5")	11 mm (0.43")	260 mm (10.24")	30392250	62

3-Prong Dual Adjust Clamps

Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Small	0 to 32 mm (0 to 1.26")	6 mm (0.24")	102 mm (4")	8 mm (0.32")	152 mm (5.98")	30392253	54
Medium	0 to 70 mm (0 to 2.76")	19 mm (0.75")	127 mm (5")	11 mm (0.43")	222 mm (8.74")	30392251	55
Large	0 to 103 mm (0 to 4.06")	29 mm (1.14")	127 mm (5")	11 mm (0.43")	260 mm (10.24")	30392249	62

Multi-Purpose Clamps

Heavy-Duty Tapered Clamps

Heavy-Duty, 4-prong, dual adjust tapered clamps are designed to hold large vessels with ground glass joint necks. Clamps are constructed with extension rods for easy attachment to lab-frames and other apparatus. Nickel-plated zinc construction.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 192–194.



30392194



30392193

Size	Joint Size	Prong Width	Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
Small	24/40 mm	16 mm (0.63")	229 mm (9.02")	13 mm (0.51")	356 mm (14")	30392193	151
Large	34/45 mm	19 mm (0.75")	229 mm (9.02")	13 mm (0.51")	381 mm (15")	30392194	151

Multi-Purpose Clamps

- Corrosion-resistant stainless steel clamps provide excellent chemical resistance, durability, and can be autoclaved. Nickel-plated zinc clamps offer high-tensile strength at an economical price.
- Prevent accidents in the lab—versatile multi-purpose LabJaws clamps securely hold glassware and irregularly-shaped objects. Select from a variety of grip sizes, prong styles, and adjustment types.
- Choose from a variety of specialized LabJaws clamps with adjustable features to provide an exact fit for labware such as thermometers, thermocouples, columns, funnels, and round bottom flasks.

These durable, multi-purpose clamps are made entirely of stainless steel with an electro-polished finish and offer excellent chemical resistance and overall strength. The versatile 3-prong design secures various lab apparatus such as jointed glassware, columns, flasks, and tubes. Dual prong adjustments offer a wide range of motion. Long stainless steel extension arm offers easy positioning and depth adjustment. Autoclavable. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 192–194.



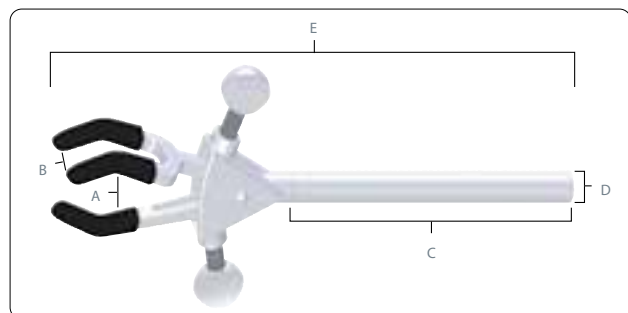
30392352



30392353



30392354



3-Prong Stainless Steel Dual Adjust Clamps

Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Small	0 to 48 mm (0 to 1.9")	13 mm (0.51")	102 mm (4")	10 mm (0.39")	172 mm (6.77")	30392354	88
Medium	0 to 69 mm (0 to 2.72")	19 mm (0.75")	127 mm (5")	13 mm (0.51")	229 mm (9.02")	30392353	102
Large	0 to 102 mm (0 to 4")	29 mm (1.14")	127 mm (5")	13 mm (0.51")	273 mm (10.75")	30392352	114

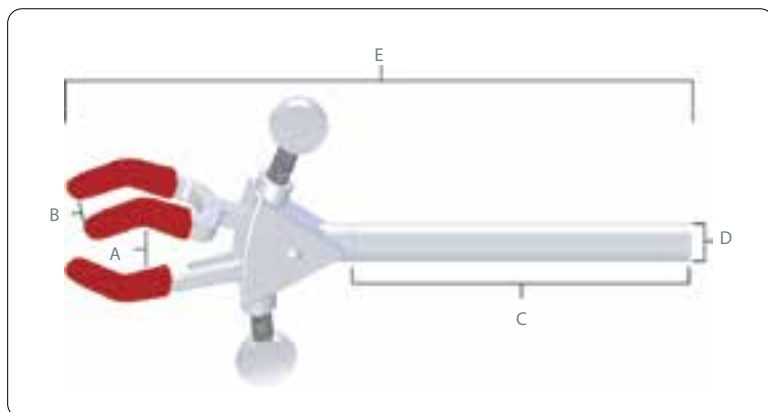
Multi-Purpose Clamps

3-Prong Multi-Purpose Clamps

- Corrosion-resistant stainless steel clamps provide excellent chemical resistance, durability, and can be autoclaved. Nickel-plated zinc clamps offer high-tensile strength at an economical price.
- Prevent accidents in the lab—versatile multi-purpose LabJaws clamps securely hold glassware and irregularly-shaped objects. Select from a variety of grip sizes, prong styles, and adjustment types.
- Choose from a variety of specialized LabJaws clamps with adjustable features to provide an exact fit for labware such as thermometers, thermocouples, columns, funnels, and round bottom flasks.
- Nickel-plated zinc

Designed to securely hold every type of laboratory glassware and apparatus. Long, seamless nickel-plated brass tubing attaches clamp head securely and offers easy positioning in the deepest fume hoods. Clamps are constructed with round extension arms, which allow the clamps to be rotated 360°. Extension arms also allow placement of apparatus at various distances from lab-frames without compromising the integrity of your experiment. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus. See the Connectors & Holders section of this catalog, pages 192–194.



3-Prong Single Adjust Clamps



3-Prong Dual Adjust Clamps



3-Prong Single Adjust Clamps

Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Small	0 to 39 mm (0 to 1.54")	11 mm (0.43")	102 mm (4")	8 mm (0.32")	160 mm (6.3")	30392205	48
Medium	0 to 71 mm (0 to 2.8")	19 mm (0.75")	127 mm (5")	11 mm (0.43")	218 mm (8.58")	30392203	51
Large	0 to 108 mm (0 to 4.25")	29 mm (1.14")	127 mm (5")	11 mm (0.43")	248 mm (9.76")	30392200	53

3-Prong Dual Adjust Clamps

Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Small	0 to 46 mm (0 to 1.81")	11 mm (0.43")	102 mm (4")	8 mm (0.32")	168 mm (6.61")	30392204	48
Medium	0 to 69 mm (0 to 2.72")	19 mm (0.75")	127 mm (5")	11 mm (0.43")	229 mm (9.02")	30392201	51
Medium (extended)	0 to 69 mm (0 to 2.72")	19 mm (0.75")	305 mm (12")	13 mm (0.5")	406 mm (16")	30392202	63
Large	0 to 105 mm (0 to 4.13")	29 mm (1.14")	127 mm (5")	11 mm (0.43")	273 mm (10.75")	30392198	53
Large (extended)	0 to 105 mm (0 to 4.13")	29 mm (1.14")	305 mm (12")	13 mm (0.5")	451 mm (17.76")	30392199	66

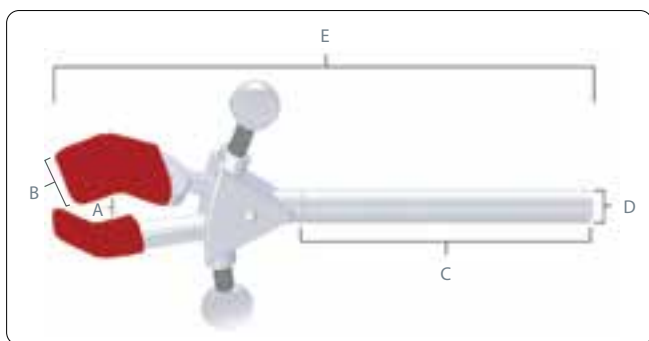
Multi-Purpose Clamps

2-Prong Multi-Purpose Clamps

- Corrosion-resistant stainless steel clamps provide excellent chemical resistance, durability, and can be autoclaved. Nickel-plated zinc clamps offer high-tensile strength at an economical price.
- Prevent accidents in the lab—versatile multi-purpose LabJaws clamps securely hold glassware and irregularly-shaped objects. Select from a variety of grip sizes, prong styles, and adjustment types.
- Choose from a variety of specialized LabJaws clamps with adjustable features to provide an exact fit for labware such as thermometers, thermocouples, columns, funnels, and round bottom flasks.
- 2-prong construction
- Single or dual adjust

Designed to securely hold laboratory glassware and apparatus. Extension arm attaches clamp head securely and offers easy positioning in the deepest fume hoods. Clamps are constructed with round extension arms, which allow the clamps to be rotated 360°. Extension arms also allow placement of apparatus at various distances from lab-frames without compromising the integrity of your experiment. Stainless steel clamps are electro-polished and made entirely of stainless steel. They offer exceptional chemical resistance and are autoclavable. Nickel-plated zinc offers a clamp with a high tensile strength at an economical price. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

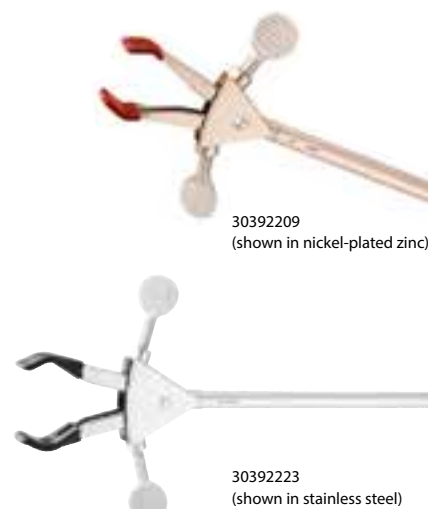
NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus. See the Connectors & Holders section of this catalog, pages 192–194.



2-Prong Single Adjust Clamps



2-Prong Dual Adjust Clamps



2-Prong Single Adjust Clamps

Material	Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Nickel-plated zinc	Medium	0 to 78 mm (0 to 3.07")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	216 mm (8.5")	30392208	39
Nickel-plated zinc	Large	0 to 92 mm (0 to 3.62")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	229 mm (9.02")	30392206	42

2-Prong Dual Adjust Clamps

Material	Size	(A) Min. to Max Grip Size	(B) Prong Width	(C) Arm Length	(D) Arm Dia.	(E) Overall Length	Item No.	List Price (USD)
Stainless steel	Medium	0 to 75 mm (0 to 2.95")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	229 mm (9.02")	30392220	95
Nickel-plated zinc	Medium	0 to 75 mm (0 to 2.95")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	229 mm (9.02")	30392209	39
Stainless steel	Large	0 to 95 mm (0 to 3.74")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	248 mm (9.76")	30392223	112
Nickel-plated zinc	Large	0 to 95 mm (0 to 3.74")	23 mm (0.91")	127 mm (5")	11 mm (0.43")	248 mm (9.76")	30392207	42

Multi-Purpose Clamps

Swivel Clamps

Used to hold apparatus near the lab-frame. Unlike extension clamps, the swivel clamps have an integral holder for attaching to a lab-frame or other apparatus. Built-in holder grips rods up to 19 mm (0.75") in diameter and is adjustable for forward or reverse-facing adjustment screws. Shaft wing-nut allows the holding angle of the swivel clamp to adjust through 360° of rotation and can be locked in place once desired position is achieved. Stainless steel electro-polished finish or nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.



Material	Description	Size	Min. to Max. Grip Size	Prong Width	Overall Length	Item No.	List Price (USD)
Stainless steel	2-Prong Single Adjust	Medium	0 to 76 mm (0 to 3")	23 mm (0.91")	163 mm (6.42")	30392226	109
Nickel-plated zinc	2-Prong Single Adjust	Medium	0 to 76 mm (0 to 3")	23 mm (0.91")	163 mm (6.42")	30392215	39
Nickel-plated zinc	2-Prong Single Adjust	Large	0 to 95 mm (0 to 3.74")	23 mm (0.91")	180 mm (7.09")	30392216	41
Stainless steel	3-Prong Dual Adjust	Medium	0 to 69 mm (0 to 2.72")	20 mm (0.79")	178 mm (7.01")	30392225	147
Nickel-plated zinc	3-Prong Dual Adjust	Medium	0 to 69 mm (0 to 2.72")	20 mm (0.79")	178 mm (7.01")	30392214	54

Fixed-Position Clamps

Used to hold apparatus near the lab-frame where no adjustment is required after set-up. Built-in holder grips rods up to 19 mm (0.75") in diameter. Fixed-Position Clamps have an integral holder but can be rotated after attachment to a lab-frame or other apparatus. Available in 2-prong or 3-prong. Stainless steel electro-polished finish or nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.



Material	Description	Size	Min. to Max. Grip Size	Prong Width	Overall Length	Item No.	List Price (USD)
Stainless steel	2-Prong Single Adjust	Medium	0 to 77 mm (0 to 3.03")	23 mm (0.91")	133 mm (5.24")	30392230	108
Nickel-plated zinc	2-Prong Single Adjust	Medium	0 to 77 mm (0 to 3.03")	23 mm (0.91")	133 mm (5.24")	30392218	37
Stainless steel	3-Prong Dual Adjust	Medium	0 to 69 mm (0 to 2.72")	20 mm (0.79")	146 mm (5.75")	30392229	136
Nickel-plated zinc	3-Prong Dual Adjust	Medium	0 to 69 mm (0 to 2.72")	20 mm (0.79")	146 mm (5.75")	30392217	46

Specialty Clamps

Thermometer Swivel Clamp

Holds glass tubes and thermometers 114 mm (4.49") from support rod. Clamp features safety adjust spring plate jaws that adjust to any angle with locking wing-nut. Built-in holder grips rods up to 19 mm (0.75") in diameter. Lightweight, rust, and corrosion-resistant. Nickel-plated construction.

Min. to Max. Grip Size	Overall Length	Item No.	List Price (USD)
6 to 8 mm (0.24 to 0.32")	159 mm (6.26")	30392238	46



Thermometer / Thermocouple Extension Clamp

Lightweight clamp holds glass tubing, thermometers or thermocouples up to 178 mm (7") from support rod. Tightening wing-nut applies tension to the nickel-plated jaws.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 192–194.

Min. to Max. Grip Size	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
6 to 12 mm (0.24 to 0.47")	127 mm (5")	11 mm (0.43")	210 mm (8.27")	30392239	40



Wall Clamp

Ideal for securing fermentation tubes, burets or other small objects to walls where no frames are available. Integral self-tapping screw secures clamp to wall. Nickel-plated construction.

Min. to Max. Grip Size	Overall Length	Item No.	List Price (USD)
5 to 10 mm (0.2 to 0.39")	80 mm (3.15")	30392244	35



Water Bath Clamps

Holds a variety of apparatus, including glass tubes and thermometers onto glass water bath walls. Built-in holder grips walls of varying thickness, up to 9 mm (0.35"). Knurled thumbscrew tightens jaws to hold objects firmly. Nickel-plated zinc construction. Large water bath clamp is supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

Size	Min. to Max. Grip Size	Prong Width	Overall Length	Item No.	List Price (USD)
Small	5 to 10 mm (0.2 to 0.39")	N/A	89 mm (3.5")	30392240	34
Large	0 to 46 mm (0 to 1.81")	11 mm (0.43")	117 mm (4.61")	30392241	51



Specialty Clamps

For the items listed below an additional holder must be purchased in order to attach clamps to frames or other apparatus. See the Connectors & Holders section of this catalog, pages 192–194.

Chain Clamps

Holds large round or irregular shaped objects firmly, yet gently, to lab-frames and rods. Quick and secure slip-on chain connection with large, easy-to-turn adjusting knob. Extension arm allows user to vary distance from the frame. Available as stainless steel clamp, constructed entirely of stainless steel with electro-polished finish or nickel-plated zinc clamp with strong, chromed-brass chain.

Stainless Steel

Size	Min. to Max. Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
Large-5	35 to 280 mm (1.38 to 11.02")	127 mm (5")	13 mm (0.51")	206 mm (8.11")	30392224	235



30392224
(shown in stainless steel)

Nickel-Plated Zinc

Size	Min. to Max. Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
Small	35 to 170 mm (1.38 to 6.69")	127 mm (5")	13 mm (0.51")	188 mm (7.4")	30392235	66
Large-5	35 to 280 mm (1.38 to 11.02")	127 mm (5")	13 mm (0.51")	206 mm (8.11")	30392259	96
Large-12	35 to 280 mm (1.38 to 11.02")	305 mm (12")	13 mm (0.51")	384 mm (15.12")	30392260	101

Column Clamps

These sturdy, easily adjusted, multi-purpose clamps are ideal for holding large cylindrical glassware and similar objects. A large, flat thumbscrew/worm-drive permits maximum tightening or removal in minimum time. Clamp is constructed of corrosion-resistant stainless steel. Ideal for chromatography columns.

Size	Min. to Max. Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
Small	65 to 89 mm (2.56 to 3.5")	211 mm (8.31")	11 mm (0.43")	282 mm (11.1")	30392314	77
Medium	91 to 114 mm (3.58 to 4.49")	211 mm (8.31")	11 mm (0.43")	315 mm (12.4")	30392315	79
Large	64 to 140 mm (2.52 to 5.51")	211 mm (8.31")	11 mm (0.43")	338 mm (13.31")	30392316	80
X-Large	92 to 165 mm (3.62 to 6.5")	211 mm (8.31")	11 mm (0.43")	368 mm (14.49")	30392317	80



30392316

Specialty Clamps

For the items listed below an additional holder must be purchased in order to attach clamps to frames or other apparatus. See the Connectors & Holders section of this catalog, pages 192–194.

Nester Extension Clamps

Securely holds large or small glass distillation columns and odd-shaped glassware. Constructed of stainless steel with strong, chromed-brass band and chain.

Min. to Max. Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
50 to 102 mm (1.97 to 4")	152 mm (5.98")	10 mm (0.39")	262 mm (10.32")	30392318	102



PVC Coated Open Extension Rings

Ideal for supporting funnels, round bottom flasks, reaction vessels, and other apparatus that require lower support. Opening in PVC coated aluminum ring allows for easy removal of sample container. PVC coating protects glassware. Long extension arm permits depth adjustment of the open ring from the lab-frame or ring stand.

Ring Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
76 mm (3")	254 mm (10")	9 mm (0.35")	328 mm (12.91")	30392346	72
102 mm (4")	305 mm (12")	9 mm (0.35")	404 mm (15.91")	30392347	81
127 mm (5")	305 mm (12")	11 mm (0.43")	427 mm (16.81")	30392348	107



Open Rings

Lightweight rings mount funnels, boiling flasks, and other irregular shaped objects to lab-frames. Open ring section allows items to pass in and out of support area easily, reducing risk of breakage. Aluminum construction.

Ring Dia.	Ext. Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
76 mm (3")	58 mm (2.28")	9 mm (0.35")	132 mm (5.2")	30392343	34
102 mm (4")	58 mm (2.28")	9 mm (0.35")	158 mm (6.22")	30392344	44
127 mm (5")	61 mm (2.4")	11 mm (0.43")	183 mm (7.2")	30392345	61



Specialty Clamps

Buret Holders

Stainless steel electro-polished finish or nickel-plated zinc construction. Double Buret Clamp holds any size buret from micro to 100 mL capacity. Simply compress the scissor-like mechanism, insert buret and gently release to grip. Numbers and graduation on buret remain easy to read. For height adjustments, recompress mechanism and slide buret up or down and gently release. Clamp unit with built-in reinforced hook connector attaches to optional standard support rod. Adjusting nut faces forward for easy use. Stainless steel or aluminum support rod attaches to optional porcelain base.

Support Rod (Dia. \times L): 13 \times 578 mm (0.51 \times 22.76")

Porcelain Base (L \times W \times H): 178 \times 330 \times 25 mm (7 \times 13 \times 1")

Stainless Steel

Description	Item No.	List Price (USD)
Double Buret Clamp (only)	30392227	188
Support Rod (only)	30392233	42
Support Stand with Rod	30392232	210
Double Buret Clamp & Support Stand with Rod (complete)	30392231	387

Nickel-Plated Zinc

Description	Item No.	List Price (USD)
Double Buret Clamp (only)	30392234	69
Support Stand with Rod	30392312	194
Double Buret Clamp & Support Stand with Rod (complete)	30392313	270



30392231
(shown in stainless steel)

Kettle Clamps

Holds flask and cover together firmly. Three insulated spring-activated clamping arms. Stainless steel springs. For use on reaction kettles.

Flask Size	Inside Dia.	Item No.	List Price (USD)
500 mL, 1000 mL	125 mm (4.92")	30392365	185
2000 mL, 3000 mL, 4000 mL	142 mm (5.59")	30392366	187



30392365

Electrode Support Clamp

Permits suspension of electrodes over beaker for potentiometric titrations. Holds any electrode clamp at desired level. Built-in nickel-plated zinc holder grips rods up to 19 mm (0.75") in diameter.

Overall Length	Item No.	List Price (USD)
178 mm (7")	30392242	73



30392242
Electrode holder
not included

Suspension Clamp

Holds thermometers, potash bulbs or drying tubes 114 mm (4.49") from support rod. Machine tapered, nickel-plated brass hook won't bend, rust, or corrode. Built-in holder grips rods up to 19 mm (0.75") in diameter.

Overall Length	Item No.	List Price (USD)
137 mm (5.39")	30392243	35



30392243

Support Clamp

Supports electrolysis apparatus, glass rods or tubing at any angle. Arms are nickel-plated brass with vinyl coating. Easily supports cylindrical objects up to 19 mm (0.75") in diameter. Built-in holder grips rods up to 19 mm (0.75") in diameter.

Overall Length	Prong Width	Item No.	List Price (USD)
152 mm (5.99")	25 mm (1")	30392237	94



30392237

Specialty Clamps

Ultra Flex Support Systems have unique flexible arms that are extremely versatile and can be placed in virtually any position or angle. Ultra Flex comes in three different systems; base plate, lab-frame connector, and bench clamp. Each system includes a 2-Prong Clamp Head, 3-Prong Clamp Head, Spring Clamp Head, nickel-plated flex arm in 305 mm (12") or 457 mm (18") length, and utility wrench. 2-prong and 3-prong clamp heads also supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

Arm Length	Ultra Flex 12 Ultra Flex 18	305 mm (12") 457 mm (18")
Arm Diameter		13 mm (0.51")
Max. Grip Size	2-Prong Clamp Head 3-Prong Clamp Head Spring Clamp Head	75 mm (2.95") 69 mm (2.72") 13 mm (0.51")

2-Prong Clamp Head



3-Prong Clamp Head



Spring Clamp Head



Ultra Flex Support System with Base Plate

OHAUS Ultra Flex Support System with Base Plate is constructed of all metal and designed with a stable, painted steel base plate with chemical resistant black finish that fits easily on bench tops or in fume hoods. Base plate measures 127 × 127 × 12.7 mm (5 × 5 × 0.5").

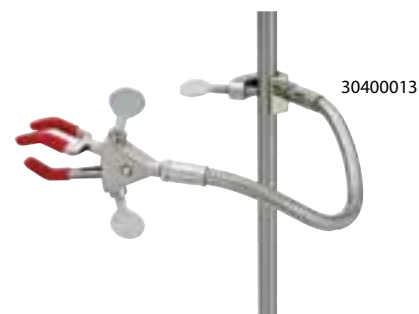
Description	Item No.	List Price (USD)
Ultra Flex 12 with Base Plate	30400011	305
Ultra Flex 18 with Base Plate	30400014	367



Ultra Flex Support System with Lab-Frame Connector

Ultra Flex Support System with Lab-Frame Connector securely attaches to support stands, lab-frames, or any support rod up to 19 mm (0.75") in diameter. Ideal for use in fume hoods. Lab-frame connector is made of cast alloy.

Description	Item No.	List Price (USD)
Ultra Flex 12 with Lab-Frame Connector	30400013	235
Ultra Flex 18 with Lab-Frame Connector	30400016	281



Ultra Flex Support System with Bench Clamp

Ultra Flex Support System with Bench Clamp easily attaches to the side of your lab bench or counter top, which helps utilize more space in your lab. Bench clamp is constructed of aluminum.

Description	Item No.	List Price (USD)
Ultra Flex 12 with Bench Clamp	30400012	271
Ultra Flex 18 with Bench Clamp	30400015	322



Specialty Clamps

Bench Clamp

Aluminum bracket with arm fastens quickly and firmly to any convenient shelf. Accepts 13 mm (0.51") rods vertically and horizontally, to which ordinary rings and clamps attach, leaving bench surface clear for apparatus.

Clamp Opening	Depth of Grip	Overall Length	Item No.	List Price (USD)
1.7" (43 mm)	2" (51 mm)	7.75" (197 mm)	30392311	246



30392311

Thumbscrew Knob

Thumbscrew tightening knob features a 32 mm (1.25") slot in the center of a nylon disc that will accept thumbscrews supplied with the LabJaws and UltraJaws Multi-Purpose Clamps, excluding the stainless steel version. Makes tightening of clamps easier on the hands and wrists.

Overall Diameter	Thumbscrew Slot	Item No.	List Price (USD)
64 mm (2.5")	32 mm (1.25")	30392192	48



30392192

Double Jaw Utility Clamp

Swivels 360° and locks securely in desired position. These 2-prong clamps have a medium and a large clamp on each end. Nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.



30392236

Description	Min. to Max. Grip Size	Prong Width	Overall Length	Item No.	List Price (USD)
Medium 2-Prong	0 to 76 mm (0 to 3")	23 mm (0.91")	222 mm (8.74")	30392236	49

Connectors & Holders

Regular Holder

Stainless steel electro-polished finish or nickel-plated zinc construction. Ideal for holding clamps to lab-frames. Use wherever clamping at 90° is required.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 18 mm (0 to 0.71")	30392219	62
Nickel-plated zinc	0 to 18 mm (0 to 0.71")	30392197	25



30392219
(shown in stainless steel)

Jumbo Holder

Stainless steel electro-polished finish or aluminum construction. Ideal for holding clamps to lab-frames or ring stands.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 21 mm (0 to 0.83")	30392357	62
Aluminum	0 to 21 mm (0 to 0.83")	30392196	37



30392357
(shown in stainless steel)

Heavy-Duty Holder

For mounting stirrers and other apparatus. Holder is constructed of strong aluminum alloy; fitted with oversized knobs for very secure positioning. Rods supported on 102 mm (4") long surface to avoid vibration and wobble.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Aluminum	6 to 24 mm (0.24 to 0.95")	30400045	103



30400045

Swivel Holder

Two rod holders with center swivel capacity allow tilting of clamps at any angle in parallel planes. Outside adjustment screw allows close proximity between items being held. Stainless steel electro-polished or nickel-plated zinc construction.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 19 mm (0 to 0.75")	30392228	99
Nickel-plated zinc	0 to 19 mm (0 to 0.75")	30392213	34



30392228
(shown in stainless steel)

All-Position Clamp Holder

Surpasses standard holding capabilities. The all-position clamp holder permits adjustment at any angle in any plane. Holders are set at 90° to each other, connected by a 90° connector, allowing 360° rotation. Nickel-plated zinc construction.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Nickel-plated zinc	0 to 19 mm (0 to 0.75")	30392248	67



30392248

Clamp Holder

Clamp is ideal for gripping 2 rods at 90°. Oversized thumbscrews make securing rods fast and easy.

Material	Min. to Max. Grip Size	Overall Length	Item No.	List Price (USD)
Aluminum	0 to 17 mm (0 to 0.66")	70 mm (2.75")	30392195	23



30392195

Connectors & Holders

Hook Connector

Stainless steel electro-polished finish or nickel-plated zinc construction. Simple, versatile, and easy-to-use. Hook connectors allow one-handed assembly of two components with one adjustment screw.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 13 mm (0 to 0.51")	30392358	35
Nickel-plated zinc	0 to 13 mm (0 to 0.51")	30392258	14



30392358
(shown in stainless steel)

End-to-End Connector

Extend the length of lab-frame rods. Strong aluminum alloy connector permits end-to-end joining of rods. Precision boring of connector ensures perfect alignment of rods. Corrosion resistant. Comes with two set screws.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Aluminum	0 to 13 mm (0 to 0.51")	30392264	26



30392264

Rod End Connector

Holds rods firmly at 90°. Use when semi-permanent installations are required. Comes with two set screws and is precision bored for close fit. Stainless steel electro-polished finish or nickel-plated zinc construction.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 13 mm (0 to 0.51")	30392222	40
Nickel-plated zinc	0 to 13 mm (0 to 0.51")	30392256	17



30392222
(shown in stainless steel)

S-Connector

Stainless steel electro-polished finish or nickel-plated zinc construction. Clamp is ideal for constructing lab-frames or other supports requiring the connection of two perpendicular rods. Clamp connects two 13 mm (0.51") rods at a 90° angle and features separate adjustment screws for each rod location.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Stainless steel	0 to 13 mm (0 to 0.51")	30392355	37
Nickel-plated zinc	0 to 13 mm (0 to 0.51")	30392257	24



30392355
(shown in stainless steel)

Frame Connector (Pack of 12)

Improved contour delivers simplicity and strength. Angled adjustment screws allow easy set-up and prevents misalignment. Smooth, rounded surfaces are easy-to-clean. Small size maximizes lab-frame space. Bright dipped aluminum finish sealed with silicon for maximum protection against corrosion.

Material	Min. to Max. Grip Size	Item No.	List Price (USD)
Aluminum	0 to 13 mm (0 to 0.51")	30392255	228



30392255

Connectors & Holders

Universal Stirrer Mounting Bracket

Use to mount stirrers and other devices to lab-frames. Aluminum mounting bracket with attachment screws.

Max. Weight Mounted	Min. to Max. Grip Size	Item No.	List Price (USD)
2.27 kg (5 lbs)	0 to 20 mm (0 to 0.78")	30392265	11

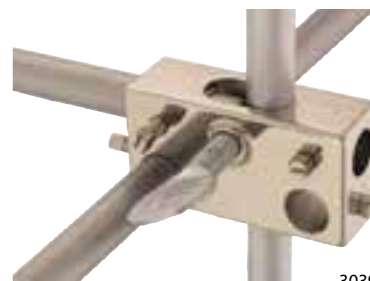


30392265

Multi-Rod Connector

Maximum adjustment capability within one connector. Two adjustment rods fit into the oval hole in the connector, preventing turning when tightened. Side and front 13 mm (0.51") holes allow creation of a variety of configurations. Nickel-plated zinc construction.

Min. to Max. Rod Size	Item No.	List Price (USD)
0 to 13 mm (0 to 0.51")	30392262	40



30392262

Wrench

Special adjusting wrench is for use with lab-frame items with set screws.

Length	Item No.	List Price (USD)
79 mm (3.11")	30392270	58

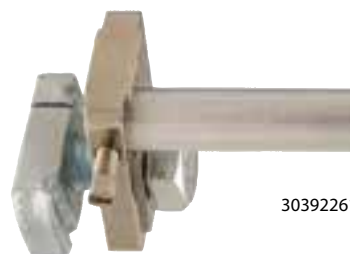


30392270

Channel Connector

Special connector fastens lab-frame rod to steel 41 mm (1.61") channels. Loosen the connector and slide up or down for easy adjustment of rod position.

Dimensions	Item No.	List Price (USD)
33 x 40 mm (1.3 x 1.58")	30392261	25



30392261

Horizontal Mounting Bars with Coupler

Threaded end for direct installation into channels. Comes with spring coupler for use in steel 41 mm (1.61") channels. Locking nut included. Use with steel channel frames.

Bar Length	Item No.	List Price (USD)
51 mm (2")	30392266	31
102 mm (4")	30392267	34
152 mm (6")	30392268	37
203 mm (8")	30392269	40



30392268

Rods, Frames, & Supports

Lab Frame Foot

Stainless steel electro-polished finish or nickel-plated zinc construction. Strong, durable lab-frame foot is designed for mounting lab-frames permanently to bench tops, fume hoods, walls, and floors. Spilled fluids roll right off the smooth body contour, minimizing contamination and easing clean-ups. Features a set screw and includes three 19 mm (0.75") mounting screws.

Material	Min. to Max. Grip Size	Dimensions (Dia. × H)	Item No.	List Price (USD)
Stainless steel	0 to 0.51" (0 to 13 mm)	2.3 × 1.25" (58 × 32 mm)	30392356	54
Nickel-plated zinc	0 to 0.51" (0 to 13 mm)	2.3 × 1.25" (58 × 32 mm)	30392263	27



30392356
(shown in stainless steel)

Frame Rods

Everything you need to customize a lab-frame to your laboratory space. Quality construction throughout. Frame rods are available in many lengths and materials.

Aluminum

Center-less ground for a precise fit. These hard aluminum rods provide a smooth fit with lab-frames. Corrosion resistant with chamfered ends for easy location.

Aluminum



Stainless Steel

Heavy-duty, top-of-the-line rods provide maximum strength and durability. Constructed of 303 stainless steel.

Stainless steel



Material	Rod Diameter	Rod Length	Item No.	List Price (USD)
Stainless Steel	0.51" (13 mm)	1.61" (41 mm)	30392293	11
Stainless Steel	0.51" (13 mm)	2" (51 mm)	30392294	11
Stainless Steel	0.51" (13 mm)	6" (152 mm)	30392295	14
Stainless Steel	0.51" (13 mm)	12" (305 mm)	30392296	24
Stainless Steel	0.51" (13 mm)	18" (457 mm)	30392297	32
Stainless Steel	0.51" (13 mm)	24" (610 mm)	30392298	40
Stainless Steel	0.51" (13 mm)	36" (914 mm)	30392299	55
Stainless Steel	0.51" (13 mm)	48" (1219 mm)	30392300	70
Stainless Steel	0.51" (13 mm)	60" (1524 mm)	30392301	82
Stainless Steel	0.51" (13 mm)	72" (1829 mm)	30392302	98
Stainless Steel	0.51" (13 mm)	96" (2438 mm)	30392303	127
Aluminum	0.51" (13 mm)	1.61" (41 mm)	30392271	7
Aluminum	0.51" (13 mm)	2" (51 mm)	30392272	10
Aluminum	0.51" (13 mm)	6" (152 mm)	30392273	12
Aluminum	0.51" (13 mm)	12" (305 mm)	30392274	18
Aluminum	0.51" (13 mm)	18" (457 mm)	30392275	19
Aluminum	0.51" (13 mm)	24" (610 mm)	30392276	24
Aluminum	0.51" (13 mm)	36" (914 mm)	30392277	26
Aluminum	0.51" (13 mm)	48" (1219 mm)	30392278	41
Aluminum	0.51" (13 mm)	60" (1524 mm)	30392279	47
Aluminum	0.51" (13 mm)	72" (1829 mm)	30392280	52
Aluminum	0.51" (13 mm)	96" (2438 mm)	30392281	66

Rods, Frames, & Supports

- Corrosion-resistant lab-frames, rods, and connectors are available in premium stainless steel offering high chemical-resistance and durability. Aluminum offers reliable strength at a lighter weight.
- Simplify lab set up—13 lab-frame kit options are available with four designed to fit in fume hoods. Build your own support system choosing from a wide selection of rods, bases, and connectors.

LabJaws offers the widest choice of standard lab frames available, plus the accessories to custom-fit any laboratory with the right frame for the job. Standard Lab-Frame sets are available in five sizes. Options of traditional center-less ground aluminum, non-corroding fiberglass, or tough stainless steel rods are available. Nickel-plated zinc connectors and lab-frame feet are standard with all kits.

Small Lab-Frame

Vertical mounting, great for glassware set-ups in small laboratories or where space is limited. Frame measures 24 × 24" (610 × 610 mm). Base is 18" (457 mm) wide for stability. Base may be permanently mounted to bench top with screws (included).

Components:

- (8) 2" (51 mm) Rods
- (2) 18" (457 mm) Rods
- (8) 24" (610 mm) Rods
- (18) S-Connectors
- (4) Rod End Connectors
- (4) Lab-Frame Feet



Material	Frame Dimensions	Base Dimensions	Item No.	List Price (USD)
Stainless Steel	24 × 24" (610 × 610 mm)	18" (457 mm) wide	30392323	849
Aluminum	24 × 24" (610 × 610 mm)	18" (457 mm) wide	30392304	496

Medium Lab-Frame

Horizontal or vertical mounting, convenient for distillation or general set-up. Frame measures 24 × 48" (610 × 1219 mm). Base is 18" (457 mm) wide for stability.

Components:

- (8) 2" (51 mm) Rods
- (2) 18" (457 mm) Rods
- (7) 24" (610 mm) Rods
- (4) 48" (1219 mm) Rods
- (35) S-Connectors
- (4) Rod End Connectors
- (4) Lab-Frame Feet



Material	Frame Dimensions	Base Dimensions	Item No.	List Price (USD)
Stainless Steel	24 × 48" (610 × 1219 mm)	18" (457 mm) wide	30392324	1206
Aluminum	24 × 48" (610 × 1219 mm)	18" (457 mm) wide	30392305	627

Rods, Frames, & Supports

Large Lab-Frame

This 48 × 48" (1219 × 1219 mm) frame is ideal for complex glassware set-ups. Base is 18" (457 mm) wide for stability.

Components:

- (10) 2" (51 mm) rods
- (3) 18" (457 mm) rods
- (2) 36" (914 mm) rods
- (10) 48" (1219 mm) rods
- (38) S-Connectors
- (4) Rod End Connectors
- (6) Lab-Frame Feet



Material	Frame Dimensions	Base Dimensions	Item No.	List Price (USD)
Stainless Steel	48 × 48" (1219 × 1219 mm)	18" (457 mm) wide	30392325	1698
Aluminum	48 × 48" (1219 × 1219 mm)	18" (457 mm) wide	30392306	968

Extra-Large Lab-Frame

Versatile, adaptable Extra-Large Lab-Frame measures 48 × 72" (1219 × 1829 mm) and may be used either horizontally or vertically.

Components:

- (6) 2" (51 mm) rods
- (6) 12" (305 mm) rods
- (2) 24" (610 mm) rods
- (7) 48" (1219 mm) rods
- (5) 72" (1829 mm) rods
- (45) S-Connectors
- (4) Rod End Connectors
- (8) Lab-Frame Feet



Material	Frame Dimensions	Stainless Steel Item No.	List Price (USD)
Stainless Steel	48 × 72" (1219 × 1829 mm)	30392326	1863
Aluminum	48 × 72" (1219 × 1829 mm)	30392307	1341

Rods, Frames, & Supports

Heavy-Duty Lab-Frame

Floor mounted, free-standing unit is specifically designed for heavy-duty work such as pilot plant set-ups. Outside frame is constructed of a strong, but lightweight steel channel. Interior lattice uses a horizontal channel connector; one end accommodates the rod, the other end fits into the channel and locks tightly with a bolt. Loosen the bolt, and the connector slides easily along the channel track for simple lattice adjustment. Entire apparatus is supported on sturdy, counter-weighted cast iron feet, which may be bolted to the floor for added stability required in top-heavy installations.

Components:

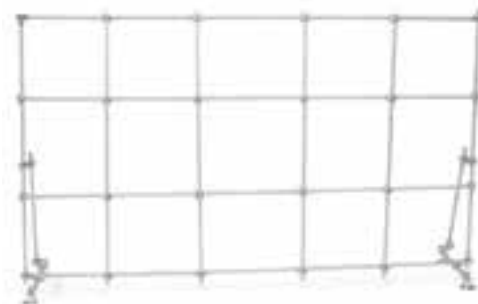
- (5) 48" (1219 mm) rods
- (3) 72" (1829 mm) rods
- (15) S-Connectors
- (16) Channel Connectors
- (24) Clamping Nuts
- (2) 21.7" (551 mm) Cast Iron Feet
- (1) Frame Kit
- (1) Wrench



Material	Frame Dimensions	Overall Dimensions	Item No.	List Price (USD)
Stainless Steel	48 × 72" (1219 × 1829 mm)	75 × 72" (1905 × 1829 mm)	30392328	3623
Aluminum	48 × 72" (1219 × 1829 mm)	75 × 72" (1905 × 1829 mm)	30392309	1936

Fume Hood Kits

Choose from four kits specifically designed to fit within laboratory fume hoods. All components are constructed of stainless steel with the exception of the Frame Connectors which are made of aluminum with a silicon finish.



4' (1.22 m) Fume Hood Kit Components: <ul style="list-style-type: none">• (8) 2" (51 mm) rods• (2) 12" (305 mm) rods• (2) 18" (457 mm) rods• (4) 36" (914 mm) rods• (4) 38" (965 mm) rods• (30) Frame Connectors• (4) Rod End Connectors• (4) Lab-Frame Feet Frame: 36 × 38" (914 × 965 mm) Base: 12" (305 mm) wide		5' (1.52 m) Fume Hood Kit Components: <ul style="list-style-type: none">• (8) 2" (51 mm) rods• (2) 12" (305 mm) rods• (2) 18" (457 mm) rods• (5) 36" (914 mm) rods• (4) 50" (1270 mm) rods• (34) Frame Connectors• (4) Rod End Connectors• (4) Lab-Frame Feet Frame: 36 × 50" (914 × 1270 mm) Base: 12" (305 mm) wide		6' (1.83 m) Fume Hood Kit Components: <ul style="list-style-type: none">• (8) 2" (51 mm) rods• (2) 12" (305 mm) rods• (2) 18" (457 mm) rods• (6) 36" (914 mm) rods• (4) 62" (1575 mm) rods• (38) Frame Connectors• (4) Rod End Connectors• (4) Lab-Frame Feet Frame: 36 × 62" (914 × 1575 mm) Base: 12" (305 mm) wide		8' (2.44 m) Fume Hood Kit Components: <ul style="list-style-type: none">• (10) 2" (51 mm) rods• (3) 12" (305 mm) rods• (2) 18" (457 mm) rods• (8) 36" (914 mm) rods• (4) 86" (2184 mm) rods• (45) Frame Connectors• (4) Rod End Connectors• (6) Lab-Frame Feet Frame: 36 × 86" (914 × 2184 mm) Base: 12" (305 mm) wide	
Item No.	30392329	30392330	30392331	30392332			
List Price (USD)	1087	1180	1268	1455			

Rods, Frames, & Supports

Support Stands

Support Stands are made entirely of 303 stainless steel. They have a durable base that can accommodate vessels up to 18" (457 mm) in diameter within the "U". The base area is 17.75" (451 mm) across × 10.5" (267 mm) deep overall. The stainless steel support rod is 0.63" (16 mm) in diameter and is screwed to the support base. Two additional threaded holes in the base legs accommodate rods, enabling the stand to support two mixers. The "U" shape of the base should be turned from the mixing apparatus when the two outside rods are in use. This balances the weight, preventing the base from tipping.

Description	Item No.	List Price (USD)
Support Stand with 23" (584 mm) Rod	30400030	325
Support Stand with 28" (711 mm) Rod	30400031	342
Support Stand with 36" (914 mm) Rod	30400032	393
Support Stand with 40" (1016 mm) Rod	30400033	414
Support Stand with 48" (1219 mm) Rod	30400034	437
Support Stand with 60" (1524 mm) Rod	30400035	483



Support Stand

Support Stand Stabilizer Knobs

Support Stand Stabilizer Knobs can be added to the two additional threaded holes in the base legs to secure the stand to a bench top.

Description	Item No.	List Price (USD)
Support Stand Stabilizer Knobs (2 per pack)	30400044	66



Support Stand Stabilizer Knobs

Heavy-Duty Support Stands

Heavy-Duty Support Stands have a four point cast iron base with stainless steel support rod. They are designed to accommodate vessels up to 12" (30.5 cm) in diameter to sit close to the support rod. They have rubber cushions on each of the four corners. The base area is 16.5" (41.9 cm) across × 12" (30.5 cm) deep overall. They are ideal for Heavy-Duty Mixers, page 162–163.

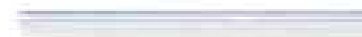
Description	Item No.	List Price (USD)
Heavy-Duty Support Stand with 18" (457 mm) Rod	30392334	325
Heavy-Duty Support Stand with 23" (584 mm) Rod	30392335	364
Heavy-Duty Support Stand with 28" (711 mm) Rod	30392336	384
Heavy-Duty Support Stand with 36" (914 mm) Rod	30392337	438
Heavy-Duty Support Stand with 40" (1016 mm) Rod	30392338	465
Heavy-Duty Support Stand with 48" (1219 mm) Rod	30392339	488
Heavy-Duty Support Stand with 60" (1524 mm) Rod	30392340	544



Heavy-Duty Support Stand

Replacement Support Rods

Description	Diameter	Item No.	List Price (USD)
18" (457 mm) Stainless Steel Rod	0.63" (16 mm)	30400036	109
23" (584 mm) Stainless Steel Rod	0.63" (16 mm)	30400037	120
28" (711 mm) Stainless Steel Rod	0.63" (16 mm)	30400038	132
36" (914 mm) Stainless Steel Rod	0.63" (16 mm)	30400039	167
40" (1016 mm) Stainless Steel Rod	0.63" (16 mm)	30400040	192
48" (1219 mm) Stainless Steel Rod	0.63" (16 mm)	30400041	211
60" (1524 mm) Stainless Steel Rod	0.63" (16 mm)	30400042	232



Replacement Support Rods

Rods, Frames, & Supports

Cast Iron Support Stands

Cast iron support stand bases are constructed with black enamel finish for chemical resistance and durability. All bases feature a built-in support rod holder with locking knob that accepts a 0.51" (13 mm) diameter support rod. U-shaped base features three built-in support rod holders and accommodates vessels up to 5" (127 mm) in diameter.

NOTE: Support rods are not included.



Rectangular Base Support Stand, Cast Iron

Description	Dimensions	Item No.	List Price (USD)
Rectangular Base (only)	4 × 6" (102 × 152 mm)	30392359	45
Rectangular Base (only)	5 × 8" (127 × 203 mm)	30392360	72
Rectangular Base (only)	6 × 9" (152 × 229 mm)	30392361	94
Rectangular Base (only)	8 × 10" (203 × 254 mm)	30392362	136

Tripod Base Support Stand, Cast Iron

Description	Overall Footprint Diameter	Item No.	List Price (USD)
Tripod Base (only)	14.75" (375 mm)	30392363	87



U-Shaped Base Support Stand, Cast Iron

Description	Dimensions	Item No.	List Price (USD)
U-Shaped Base (only)	7 × 7" (178 × 178 mm)	30392364	45

Aluminum Support Rods

Description	Diameter	Item No.	List Price (USD)
12" (305 mm) Aluminum Rod	0.51" (13 mm)	30392274	18
18" (457 mm) Aluminum Rod	0.51" (13 mm)	30392275	19
24" (610 mm) Aluminum Rod	0.51" (13 mm)	30392276	24
36" (914 mm) Aluminum Rod	0.51" (13 mm)	30392277	26



Stainless Steel Support Rods

Description	Diameter	Item No.	List Price (USD)
12" (305 mm) Stainless Steel Rod	0.51" (13 mm)	30392296	24
18" (457 mm) Stainless Steel Rod	0.51" (13 mm)	30392297	32
24" (610 mm) Stainless Steel Rod	0.51" (13 mm)	30392298	40
36" (914 mm) Stainless Steel Rod	0.51" (13 mm)	30392299	55



Rods, Frames, & Supports

Round Support Plate

Aluminum plate supports beakers, mantles and petri dishes. Fits standard lab-frames using connectors or holders, shown on pages 192–194.

Description	Distance from Rod	Item No.	List Price (USD)
6" (152 mm)	2.6" (66 mm)	30392342	83



Support Plates

Designed to hold hotplates, stirrers, hotplate-stirrers, and other apparatus to lab-frames or ring stands. Aluminum construction offers strength and durability. Support plates include a non-skid rubber mat and a built-in holder that grips rods up to 0.75" (19 mm) in diameter.

Size	Plate Dimensions	Distance from Rod	Item No.	List Price (USD)
Small	9.5 × 6.5" (241 × 165 mm)	1.9" (48 mm)	30392349	151
Medium	12.75 × 9" (324 × 229 mm)	1.9" (48 mm)	30392350	242
Large	15.75 × 12" (400 × 305 mm)	1.9" (48 mm)	30392351	302



Rods, Frames, & Supports

OHAUS Aluminum Lab-Lifts

- Lab-lifts are convenient adjustable lifting platforms. Exceptional strength and durability for holding small lab equipment such as glassware, hot plates, and water baths at different heights.
- Aluminum construction

Aluminum Lab-Lifts provide stable height adjustment for various items in the lab such as flasks, baths, and small equipment. Top and bottom decks are constructed of anodized aluminum. Internal supports and drive screws are constructed of stainless steel. Oversized sure-grip adjustment knobs provide smooth and accurate height adjustment. Lab-Lifts accept optional Support Rod Kit which mounts to the upper deck.



Deck Size	Min. to Max. Height	Max. Load*	Item No.	List Price (USD)
4 × 4" (102 × 102 mm)	2.5 to 5" (64 to 127 mm)	66 lbs (29.94 kg)	30400007	186
6 × 6" (152 × 152 mm)	3 to 9.75" (76 to 248 mm)	132 lbs (59.87 kg)	30400008	228
8 × 8" (203 × 203 mm)	3 to 9.75" (76 to 248 mm)	176 lbs (79.83 kg)	30400009	274
10 × 10" (254 × 254 mm)	3.5 to 13" (89 to 330 mm)	186 lbs (84.37 kg)	30400010	360

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

17" Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 17" (432 mm) threaded vertical support rod to the upper deck of a 6 × 6", 8 × 8", 10 × 10", 12 × 12" or 16 × 16" Lab-Lift by screwing the rod into the pre-drilled hole.

17" Support Rod Kit includes:

- 1 - 17" (432 mm) Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer



Description	Rod Diameter	Item No.	List Price (USD)
17" Support Rod Kit	0.51" (13 mm)	30400050	36

Rods, Frames, & Supports

OHAUS Heavy-Duty Lab-Lifts

- Lab-lifts are convenient adjustable lifting platforms. Exceptional strength and durability for holding small lab equipment such as glassware, hot plates, and water baths at different heights.
- Stainless steel construction
- Autoclavable and chemical resistant

These Heavy-Duty, Stainless Steel Lab-Lifts are ultra-stable lifting platforms with exceptional strength and durability. Constructed of stainless steel, Lab-Lifts are designed for use in extreme environments and high load applications. Equipped with oversized, sure-grip adjustment knobs that provide extra leverage for easy height adjustments. Durable construction allows lifts to be autoclaved or chemically cleaned. Ideal for use in fume hoods or bench tops and holds a variety of items such as glassware, hotplates, baths, and magnetic stirrers.



Deck Size	Min. to Max. Height	Max. Load*	Item No.	List Price (USD)
3 × 3" (76 × 76 mm)	2.5 to 5" (64 to 127 mm)	100 lbs (45.36 kg)	30400000	200
4 × 4" (102 × 102 mm)	2.5 to 5" (64 to 127 mm)	100 lbs (45.36 kg)	30400001	243
6 × 6" (152 × 152 mm)	3 to 9.75" (76 to 248 mm)	133 lbs (60.33 kg)	30400002	250
8 × 8" (203 × 203 mm)	3 to 9.75" (76 to 248 mm)	227 lbs (102.97 kg)	30400003	336
10 × 10" (254 × 254 mm)	3.5 to 13" (89 to 330 mm)	247 lbs (112.04 kg)	30400004	365
12 × 12" (305 × 305 mm)	4 to 19.5" (102 to 495 mm)	100 lbs (45.36 kg)	30400005	963
16 × 16" (406 × 406 mm)	4 to 19.5" (102 to 495 mm)	100 lbs (45.36 kg)	30400006	1703

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

17" Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 17" (432 mm) threaded vertical support rod to the upper deck of a 6 × 6", 8 × 8", 10 × 10", 12 × 12" or 16 × 16" Lab-Lift by screwing the rod into the pre-drilled hole.

17" Support Rod Kit includes:

- 1 - 17" (432 mm) Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer



Description	Rod Diameter	Item No.	List Price (USD)
17" Support Rod Kit	0.51" (13 mm)	30400050	36

Ratchet Tool

Designed to add extra leverage to your 12 × 12" or 16 × 16" Lab-Lift. This recommended Ratchet Tool easily attaches to the actuating rod to allow easy, accurate adjustments.

Description	Item No.	List Price (USD)
Ratchet Tool	30400049	72



Rods, Frames, & Supports

Cylinder Bench Clamps

Rugged cast aluminum clamps safely secure gas cylinders to benches, tables or other flat surfaces up to 2.5" (64 mm) thick. The 1" (25 mm) wide, 54" (1372 mm) long nylon strap features a nickel-plated, non-slip spring catch and buckle for easy adjustment around cylinders from 4 to 14" (102 to 356 mm) in diameter. Models 711 and 716 available with or without a "Secure Cylinder" safety message strap.

Model 711 Bench Clamp

This bench clamp has a large tightening handle for mounting to any flat surface up to 2.5" (64 mm) thick. A nylon pad prevents damage to the bench or table surface. Two tapered mounting screw holes are provided for permanent attachment to bench-top.



Safety Message Strap

Description	Dimensions L × W × H (closed)	Cylinder Diameter	Item No.	List Price (USD)
Model 711 Bench Clamp with Strap	3.25 × 5.25 × 6.5" (83 × 133 × 165 mm)	4 to 14" (102 to 356 mm)	30400020	74
Model 711 Bench Clamp with Safety Message Strap	3.25 × 5.25 × 6.5" (83 × 133 × 165 mm)	4 to 14" (102 to 356 mm)	30400021	87

Model 716 Bench Clamp

This bench clamp is similar to Model 711, but includes a sturdy safety chain for extra security. Chain measures 49" (1245 mm).



Safety Message Strap

Description	Dimensions L × W × H (closed)	Cylinder Diameter	Item No.	List Price (USD)
Model 716 Bench Clamp with Strap & Chain	3.25 × 5.25 × 6.5" (83 × 133 × 165 mm)	4 to 14" (102 to 356 mm)	30400026	80
Model 716 Bench Clamp with Safety Message Strap & Chain	3.25 × 5.25 × 6.5" (83 × 133 × 165 mm)	4 to 14" (102 to 356 mm)	30400027	96

Model 712 Heavy-Duty Bench Clamp

This bench clamp has two screw clamps to tighten for extra firm mounting to any flat surface up to 1.75" (45 mm) thick with a 1.25" (32 mm) overhang. Especially convenient for temporary storage situations. Rugged cast aluminum bench clamp features a 1" (25 mm) wide, 54" (1372 mm) long nylon strap with nickel-plated, non-slip spring catch buckle to hold cylinders from 4 to 14" (102 to 356 mm) in diameter. This clamp is not available with a safety message strap.



Description	Dimensions L × W × H (closed)	Cylinder Diameter	Item No.	List Price (USD)
Model 712 Heavy-Duty Bench Clamp with Strap	3.25 × 6 × 4.5" (83 × 152 × 114 mm)	4 to 14" (102 to 356 mm)	30400022	77

Rods, Frames, & Supports

Model 715 Wall Bracket

Cylinder wall-mount brackets are constructed of cast aluminum and contoured to allow cylinders to fit firmly along the support edge. Recessed screw holes at each side of the bracket allow for easy wall mounting. Features a 1" (25 mm) wide, 54" (1372 mm) long nylon strap with nickel-plated, non-slip spring catch and buckle for fast, easy adjustment. Available with or without a "Secure Cylinder" safety message strap. For cylinders from 4 to 14" (102 to 356 mm) in diameter.



Safety Message Strap

Description	Dimensions L × W × H	Cylinder Diameter	Item No.	List Price (USD)
Model 715 Wall Bracket with Strap	1.88 × 8.13 × 4.63" (48 × 206 × 118 mm)	4 to 14" (102 to 356 mm)	30400024	66
Model 715 Wall Bracket with Safety Message Strap	1.88 × 8.13 × 4.63" (48 × 206 × 118 mm)	4 to 14" (102 to 356 mm)	30400025	80

Model 717 Wall Bracket

This wall bracket is similar to Model 715, but includes a sturdy safety chain for extra security. Chain measures 49" (1245 mm).



Safety Message Strap

Description	Dimensions L × W × H	Cylinder Diameter	Item No.	List Price (USD)
Model 717 Wall Bracket with Strap & Chain	1.88 × 8.13 × 4.63" (48 × 206 × 118 mm)	4 to 14" (102 to 356 mm)	30400028	74
Model 717 Wall Bracket with Safety Message Strap & Chain	1.88 × 8.13 × 4.63" (48 × 206 × 118 mm)	4 to 14" (102 to 356 mm)	30400029	91

Rods, Frames, & Supports

Model 701 PVC Coated Stand

The PVC coated stand has a flat bottom support so it can't "ride up" on the cylinder. Includes an adjustable 1" (25 mm) wide, 54" (1372 mm) long nylon strap with nickel-plated, non-slip spring catch and buckle for fast, easy adjustment to keep the cylinder safely in place against upper support bar. Lower support bar stops cylinder shift. The PVC coating prevents marring of the cylinder surface. This clamp is not available with a safety message strap.



Description	Dimensions L × W × H	Cylinder Diameter	Item No.	List Price (USD)
Model 701 PVC Coated Stand	17.25 × 17.25 × 10.75" (438 × 438 × 273 mm)	7 to 10" (178 × 254 mm)	30400017	510

Model 703 Stand

This cast aluminum stand hinges open and has 4 thumbscrews to tightly grip cylinders from 8 to 9" (203 to 229 mm) in diameter.



Description	Dimensions (Dia. × H)	Cylinder Diameter	Item No.	List Price (USD)
Model 703 Stand	18.25 × 6" (464 × 152 mm)	8 to 9" (203 × 229 mm)	30400018	390

Model 704 Adjustable Stand

Heavy-duty, cast aluminum stand with adjustable "L" brackets hold cylinders from 6 to 9.25" (152 to 235 mm) in diameter. Hinges open for installation without lifting the cylinder or disturbing connections. Prevents accidental tipping. Hinges open for easy, no-lifting installation.



Description	Dimensions (Dia. × H)	Cylinder Diameter	Item No.	List Price (USD)
Model 704 Adjustable Stand	18.5 × 7.5" (470 × 191 mm)	6 to 9.25" (152 × 235 mm)	30400019	452

Model 713 Portable Stand

This cast iron portable cylinder stand offers a sturdy cylinder stand and a convenient cylinder dolly all-in-one. This cylinder stand is designed in two interlocking halves and can be installed without lifting the tank. Built-in rubber wheels for easy mobility. Three thumbscrews tightly grip cylinder.



Description	Dimensions (Dia. × H)	Cylinder Diameter	Item No.	List Price (USD)
Model 713 Portable Stand	15.5 × 3" (394 × 76 mm)	7 to 9.25" (178 × 235 mm)	30400023	441

Flow Control Clamps

LabJaws flow control devices offer selection and quality. They are finely machined to deliver accurate regulation or interruption of fluid flow. Every flow control device resists corrosion and rust. Hosecocks offer easy one-hand operation. Convex bearing surfaces and rounded edges protect tubing. Pinchcocks are designed to quickly start and stop flow and provide complete closure without damaging tubing. Operated with a simple squeeze. Nickel-plated construction (unless otherwise noted).

Regular Hosecock

Adjustment screw with oversized head for accurate regulation. Built-in side lugs for foot mounting. Tubing retainer screw.

Stainless Steel

Min. to Max. Grip	Dimensions (W × H - open)	Item No.	List Price (USD)
0 to 17 mm (0 to 0.67")	37 × 62 mm (1.46 × 2.44")	30392221	68

Nickel-Plated Zinc

Min. to Max. Grip	Dimensions (W × H - open)	Item No.	List Price (USD)
0 to 17 mm (0 to 0.67")	37 × 62 mm (1.46 × 2.44")	30392210	27

Heavy-Duty Hosecock

Large hand wheel for ease of flow adjustment. Unique design offers unparalleled control. Works well with heavy cut nylon braided tubing.

Min. to Max. Grip	Dimensions (W × H - open)	Item No.	List Price (USD)
0 to 29 mm (0 to 1.14")	57 × 106 mm (2.24 × 4.17")	30392310	68

Hosecock Extension Clamp

Similar to regular hosecock but with 145 mm (5.7") bottom mounted extension rod for attachment to frames and rods.

Min. to Max. Grip	Arm Length	Arm Dia.	Overall Length	Item No.	List Price (USD)
0 to 17 mm (0 to 0.67")	145 mm (5.71")	8 mm (0.32")	175 mm (6.89")	30392212	55

Hosecock Foot

Add this option to Regular Hosecock (916062 or 916361) for bench or table mounting. Includes two mounting screws.

Diameter	Item No.	List Price (USD)
27 mm (1.06")	30392211	9

Regular Pinchcock

For routine stop/start flow operation.

Min. to Max. Grip	Clamp Height	Item No.	List Price (USD)
0 to 12 mm (0 to 0.47")	47 mm (1.85")	30392245	28

Variable Flow Pinchcock

For precise flow adjustment and duplication of flow rates.

Min. to Max. Grip	Clamp Height	Item No.	List Price (USD)
0 to 13 mm (0 to 0.51")	47 mm (1.85")	30392247	35

Heavy-Duty Pinchcock

Equipped with heavy-duty spring for tough jobs. Ensures complete closure.

Min. to Max. Grip	Clamp Height	Item No.	List Price (USD)
0 to 11 mm (0 to 0.43")	48 mm (1.89")	30392246	28



Misc. Non-Electrical Products

Inoculating Turntables

OHAUS hand-operated inoculating turntables produce almost concentric circles of bacterial colonies that are evenly distributed across petri dishes. Cast iron turntables are coated with gray baked acrylic enamel.

The 76 mm (3") high, small turntable accommodates 100 mm petri dishes. It has a tripod base to bring work approximately to eye level. It has a center disk covered with non-skid rubber lining.

The large turntable accommodates 100 mm or 150 mm petri dishes. It has a height of only 32 mm (1.26"), ideal for steadying a forearm on the work surface while plating. The large turntable contains two circular sections. The top section has a raised gripper lip as well as a recessed center disk covered with non-skid rubber lining.

Description	Dimensions (Dia. × H)	Item No.	List Price (USD)
Small Turntable	4.49 × 3.03" (114 × 77 mm)	30400046	179
Large Turntable	5.91 × 1.26" (150 × 32 mm)	30400047	213



30400046



30400047

Slide Staining Rack

Constructed of stainless steel, the OHAUS Slide Staining Rack will resist corrosion under normal use. Adjustable to fit trays or sinks up to 533 mm (21") inside.

Description	Dimensions (L × W)	Item No.	List Price (USD)
Slide Staining Rack	23.74 × 3.5" (603 × 89 mm)	30400048	75



30400048

Airejector

Rapid air removal evacuates 1 liter of air to 711 mm (28") of vacuum in 30 seconds. Works with compressed air sources to 60 psi. Nickel-plated construction.

Description	Length	Item No.	List Price (USD)
Airejector	5.51" (140 mm)	30392367	120



30392367

Laboratory Instruments



Streamline your water quality analysis applications using the intuitive OHAUS Starter Series line of bench, portable, and pen meters. With the ability to handle applications from pH to Dissolved Oxygen—and everything in between—the Starter Series boasts powerful performance that goes where you go.



Instrument Selector Guide

	Starter Series Bench Meters					Starter Series Portable Meters						Starter Series Pen Meters						
	Starter 5000	Starter 3100M	Starter 3100	Starter 3100C	Starter 2100	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	-2,00 to 20,00 pH 0.0 µS/cm to 199.9 mS/cm -5°C to 110 °C	-2,00 to 16,00 pH -5 °C to 110 °C	00.0 µS/cm to 199.9 mS/cm 0 °C to 100 °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 ... 20MΩ-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*	0.0 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 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	X-IP54					X-IP54	X-IP54	X-IP54	X-IP67	X-IP67	X-IP54	X-IP67	X-IP67	X-IP67	X-IP67	X-IP67	X-IP67	X-IP67
Stand-alone Electrode Holder	●	●	●	●														
Quick Reference Operation Guide	●	●	●	●	●													
In-Use Cover	●	●	●	●		●	●											
Hold Function				●	●	●	●	●	●	●	●	●*	●	●	●	●	●	●
Auto Shut Off									●	●		●	●	●	●	●	●	●
Page No.	209	210	211	212	213	214	215	216	217	218	219	220	220	220	220	220	220	220

*on specific models

Measuring Parameter	Bench Meters					Portable Meters						Pen Meters												
	ST5000	ST3100M	ST3100	ST3100C	ST2100	ST400	ST400M	ST400D	ST300	ST300C	ST300D	ST10	ST20	ST20M-B	ST20M-C	ST10C	ST20C	ST10T	ST20T	ST10S	ST20S	ST10R	ST20R	ST20D
pH	●	●	●		●	●	●		●			●	●	●	●									
Conductivity		●		●			●			●				●	●	●	●							
TDS		●		●			●			●				●				●	●					
ORP	●	●	●		●	●	●		●													●	●	
Salinity		●		●			●								●					●	●			
Resistivity		●					●																	
DO								●			●													●
Temperature	●	●	●	●	●	●	●	●	●	●	●		●	●	●		●		●		●		●	●

Starter 5000 pH Bench

High Performance Bench Meter for Universal pH Applications

- 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.



- Application** pH, oxidation-reduction potential (ORP) measurement
- Display** Backlit liquid crystal display (LCD), touchscreen
- Operation** AC adapter (included)
- 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



Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST5000-B	N/A	pH -2.000...20.000 ORP -2000.00...+2000.00 mV Temperature -30 °C...130 °C	pH 0.1/0.01/0.001 ORP 1/0.1/0.01 mV Temperature 0.1 °C	30129895	1334
ST5000-F	ST350			30129896	1417

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
Adapter, 9 Pin-9 Pin, PC-SF40A	30059316	37
Printer, Impact, SF40A, AM	30064203	964
pH electrolyte	30059255	33
pH electrode protection	30059256	26
In-Use Cover, ST5000	30129897	27

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
Adapter, 9 Pin-9 Pin, PC-SF40A	30059316	37
Printer, Impact, SF40A, AM	30064203	964
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Buffer Powder pH4.01; 7.00; 10.01	83033971	23

See page 223 for additional Starter Series Electrodes



Starter 3100M Bench

The Versatile Multi-Parameter Bench Meter

- Combining all of the features from the benchtop pH and conductivity meter into one multi-meter, makes testing pH, ORP, conductivity, salinity, TDS, resistivity, temperature a seamless process.
- A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large backlit LCD display.
- A 99-item memory for pH and/or conductivity measurements makes for efficient data documentation. RS232 interface allows for connection to external devices for data storage or transfer.



Application	pH & Conductivity
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included)
Communication	RS232 Interface Kit (Included)
Construction	ABS housing, standalone electrode holder, disposable in-use cover
Design Features	Auto Temperature Compensation, manual and auto end points, 99-item memory for pH and conductivity measurements.

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST3100M-B	N/A	pH -2 to 20 pH Conductivity 00.0 μ S/cm – 199.9 mS/cm	pH 0.01 pH Conductivity 0.01 μ S/cm	30276082	795
ST3100M-F	ST310, STCON3	TDS 0.1mg/l...199.9 g/l ORP -2000...+2000mV Salinity 0-100 psu	TDS 0.01 mg/L ORP 1mV Salinity 0.01 psu	30276083	943
ST3100M-N	ST230, STTEMP30, STCON3	Resistivity 0...20M Ω -cm Temperature -5 °C – 110 °C	Resistivity 0.01 Ω -cm Temperature 0.1 °C	30332140	943

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
Printer, Impact, SF40A, AM	30064203	964
RS232 Kit, STX SPX ST3100M	30268982	162
USB Kit, Device, STX SPX ST3100M	30268984	113
pH electrolyte	30059255	33
pH electrode protection	30059256	26
In-Use-Cover, STARTER	30058734	23

Accessories	Item No.	List Price (USD)
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Buffer pH1.68 250 ml	30100424	21
Buffer Powder pH4.01;7.00;10.01	83033971	23
Standard Conduct 10 μ S/cm 250 ml	30100441	21
Standard Conduct 84 μ S/cm 250 ml	30100442	21
Standard Conduct 1413 μ S/cm 250 ml	30100443	21
Standard Conduct 12.88mS/cm 250 ml	30100444	21

See page 223 for additional Starter Series Electrodes



Starter 3100 pH Bench

Smart pH Bench Meter for Standard Laboratory Applications

- Auto buffer recognition with three different buffer groups makes it easy to avoid errors during the calibration process.
- A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large backlit LCD display.
- A 99-item memory for pH and/or conductivity measurements makes for efficient data documentation. RS232 interface allows for connection to external devices for data storage or transfer.



Application	pH, oxidation-reduction potential (ORP) measurement
Display	Backlit liquid crystal display (LCD)
Operation	AC adapter (included)
Communication	RS232 (included)
Construction	ABS housing, standalone electrode holder, replaceable in-use cover
Design Features	99 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation, quick reference guide

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST3100-B	N/A	pH -2.00 to 16.00 pH	pH 0.01 pH	30057497	610
ST3100-F	ST310	ORP -1999 to 1999 Temperature -5 °C – 110 °C	ORP 1 mV Temperature 0.1 °C	30058489	697

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
Adapter, 9 Pin-9 Pin, PC-SF40A	30059316	37
Printer, Impact, SF40A, AM	30064203	964
pH electrolyte	30059255	33
pH electrode protection	30059256	26
In-Use-Cover, STARTER	30058734	23

Accessories	Item No.	List Price (USD)
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Buffer Powder pH4.01;7.00;10.01	83033971	23

See page 223 for additional Starter Series Electrodes



Starter 3100C Conductivity Bench

Smart Conductivity Bench Meter for Standard Laboratory Applications

- Four-pole linear electrode with temperature sensor safeguards the unit from polarization and pollution effects to ensure accurate readings.
- A user-friendly bench meter with an innovative design, including an adjustable standalone electrode holder and large backlit LCD display.
- 99-item memory for conductivity measurements makes for efficient data documentation. RS232 interface allows for connection to external devices such as a printer or computer for data storage/transfer.



Application Conductivity, total dissolved solids (TDS), salinity measurement

Display Backlit liquid crystal display (LCD)

Operation AC adapter (included)

Communication RS232 (included)

Construction ABS housing, standalone electrode holder, replaceable in-use cover

Design Features 99 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST3100C-B	N/A	Conductivity 00.0 $\mu\text{S}/\text{cm}$ – 199.9 mS/cm Salinity 0.00 – 19.99 psu	Conductivity 0.01 $\mu\text{S}/\text{cm}$ Salinity 0.01 psu	30058730	682
ST3100C-F	STCON3	TDS 0.0 – 19.9 mg/L Temperature 0 – 100 °	TDS 0.1 mg/L Temperature 0.1 °C	30058731	550

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
In-Use-Cover, STARTER	30058734	23
Printer, Impact, SF40A, AM	30064203	964
Standard Conduct 10 $\mu\text{S}/\text{cm}$ 250 ml	30100441	21
Standard Conduct 84 $\mu\text{S}/\text{cm}$ 250 ml	30100442	21
Standard Conduct 1413 $\mu\text{S}/\text{cm}$ 250 ml	30100443	21
Standard Conduct 12.88 mS/cm 250 ml	30100444	21

See page 223 for additional Starter Series Electrodes



Starter 2100 pH Bench

Economical pH Bench Meter for Basic Laboratory Applications

- With the attached quick guide, five clearly marked keys and user friendly software, novices can operate the meter with minimal training.
- The built-in electrode holder provides straightforward and convenient all-in-one operation, while the large LCD display screen clearly displays results.
- Accurate results are ensured by key features like auto buffer recognition, electrode condition indicator, automatic temperature compensation and reference input.



Application pH, oxidation-reduction potential (ORP) measurement

Display Liquid crystal display (LCD)

Operation AC adapter (included)

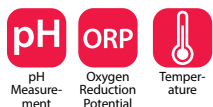
Construction ABS housing, built-in electrode holder

Design Features Auto buffer recognition, two point calibration, quick reference guide

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST2100-B	N/A	pH -2 to 16 pH	pH 0.01 pH	30057494	363
ST2100-E	ST210	ORP -1999 – 1999 mV	ORP 1 mV	30057495	385
ST2100-F	ST210 ; STTEMP30	Temperature 0 – 100 °C	Temperature 0.1 °C	30057496	414

Accessories	Item No.	List Price (USD)
Holder, Stand Alone, Electrode	30058733	85
pH electrolyte	30059255	33
pH electrode protection	30059256	26
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Buffer Powder pH4.01;7.00;10.01	83033971	23

See page 223 for additional Starter Series Electrodes



Starter 300 pH Portable

Convenient Portable pH Meter for Wherever Your Work Takes You

- 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.

Application pH, oxidation-reduction potential (ORP) measurement

Display Liquid crystal display (LCD)

Operation 4 AAA batteries (included)

Construction ABS housing, wrist strap

Design Features 30 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation



ST300-G

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST300-B	N/A	pH 0.00 – 14.00	pH 0.01 pH	83033962	313
ST300	ST320	ORP -1999 – 1999 mV	ORP 1 mV	83033961	414
ST300-G		Temperature 0 – 100 °C	Temperature 0.1 °C	30219114	433

Accessories	Item No.	List Price (USD)
pH electrolyte	30059255	33
pH electrode protection	30059256	26
Portable Bag STARTER	30031635	59
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Seal kit, STARTER portables	83032962	45
Buffer Powder pH4.01;7.00;10.01	83033971	23

See page 223 for additional Starter Series Electrodes



Starter 300C Conductivity Portable

Convenient Portable Conductivity Meter for Wherever Your Work Takes You

- 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.

Application Conductivity, total dissolved solids (TDS) measurement

Display Liquid crystal display (LCD)

Operation 4 AAA batteries (included)

Construction ABS housing, wrist strap

Design Features Automatic temperature compensation, adjustable temperature coefficient



ST300C-G

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST300C-B	N/A	Conductivity 00.0 μ S/cm – 199.9 mS/cm;	Conductivity 0.01 μ S/cm	30092000	382
ST300C	STCON3	TDS 0.1 mg/L – 199.9 g/L	TDS 0.1 mg/L	83033964	474
ST300C-G		Temperature 0 – 100 °C	Temperature 0.1 °C	30219115	503

Accessories	Item No.	List Price (USD)
Portable Bag STARTER	30031635	59
Standard Conduct 10 μ S/cm 250 ml	30100441	21
Standard Conduct 84 μ S/cm 250 ml	30100442	21
Standard Conduct 1413 μ S/cm 250 ml	30100443	21
Standard Conduct 12.88mS/cm 250 ml	30100444	21
Seal kit, STARTER portables	83032962	45

See page 223 for additional Starter Series Electrodes



Starter 300D DO Portable

Convenient Portable Dissolved Oxygen Meter for Wherever Your Work Takes You

- 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.

Application Dissolved Oxygen (DO) measurement

Display Liquid crystal display (LCD)

Operation 4 AAA batteries (included)

Construction ABS housing, wrist strap

Design Features 30 measurement memory

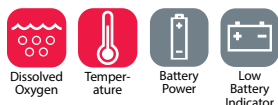


ST300D-G

Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST300D-B	N/A	DO 0.0 to 199.9%; 200 to 400% Temperature 0 to 50 °C	DO 0.1%; 1% Temperature 0.1 °C	30031656	369
ST300D	STDO11 ; STTEMP30			30031655	651
ST300D-G	STDO11; STTEMP30			30219116	698

Accessories	Item No.	List Price (USD)
Portable Bag STARTER	30031635	59
Zero Oxygen Chemicals, STARTER	30059257	22
Seal kit, STARTER portables	83032962	45

See page 223 for additional Starter Series Electrodes



Starter 400 pH Portable

Durable, Waterproof Battery-Operated pH Meters Ideal for Field Testing

- 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.



- Application** pH, Oxidation-Reduction Potential (ORP) measurement
- Display** Backlit Liquid Crystal Display (LCD)
- Operation** Rechargeable lithium battery
- Communication** Built-in micro-USB port
- Construction** IP67 waterproof plastic housing, IP67 probes, rubber cover
- Design Features** Data storage of up to 1000 items

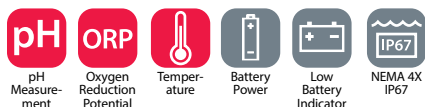


Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST400-B	ST320 IP67 3m Probe	pH -2 ... 16.00 pH	pH 0.01 pH	30468964	465
ST400-F		ORP -1999 ... 1999 mV	ORP 1 mV	30468965	539
ST400-G*		Temperature -5 °C ... 110 °C	Temperature 0.1 °C	30468966	569

*Portable bag included

Accessories	Item No.	List Price (USD)
pH electrolyte	30059255	33
pH electrode protection	30059256	26
Portable Bag STARTER	30031635	59
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Seal kit, STARTER portables	83032962	45
Buffer Powder pH4.01;7.00;10.01	83033971	23

See page 223 for additional Starter Series Electrodes



Starter 400M Portable

Durable, Waterproof Battery-Operated Multi-Parameter Meters Ideal for Field Testing

- 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.

Application	pH, Conductivity, TDS, Salinity and Resistivity Testing
Display	Backlit Liquid Crystal Display (LCD)
Operation	Rechargeable lithium battery
Communication	Built-in micro-USB port
Construction	IP67 waterproof plastic housing, IP67 probes, rubber cover
Design Features	Data storage of up to 1000 items

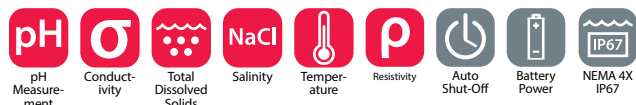


Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST400M-B	N/A	pH -2 ... 16.00 pH ORP -1999 ... 1999 mV	pH 0.01 pH ORP 1 mV	30468990	719
ST400M-F	ST320 IP67 3m and STCON3 IP67 3m probes	Conductivity 0.0 μ S/cm ... 199.9 mS/cm	Conductivity 0.1 μ S/cm, Auto-range	30468991	895
ST400M-G*		TDS 0.1 mg/l ... 199.9 g/l Salinity 0.0 ... 99.9 psu Resistivity 0... 20M Ω ·cm Temperature -5 °C ... 110 °C	TDS 0.01 mg/l, Auto-range Salinity 0.01 psu, Auto-range Resistivity 0.01 Ω ·cm, Auto-range Temperature 0.1 °C	30468992	926

*Portable bag included

Accessories	Item No.	List Price (USD)
Portable Bag STARTER	30031635	59
Zero Oxygen Chemicals, STARTER	30059257	22
Seal kit, STARTER portables	83032962	45

See page 223 for additional Starter Series Electrodes



Starter 400D DO Portable

Dissolved Oxygen (DO) Meter with Optical Technology

- 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.

Application Dissolved Oxygen measurement

Display Backlit Color Liquid Crystal Display (LCD)

Operation 4 AAA batteries (included)

Construction ABS housing, wrist strap

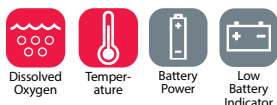
Design Features 99 measurement memory, last calibration data recall, auto barometric pressure measurement, auto temperature compensation with manual salinity compensation



Model	Included Electrode	Measurement Range	Measurement Resolution	Item No.	List Price (USD)
ST400D-B	STD021	DO 0.00 – 20.0 mg/L (ppm) Temperature 0 – 50 °C	DO 0.01 mg/L; 0.1% Temperature 0.1 °C	30378541	567
ST400D-G				30378542	1380
ST400D				30378543	1343

Accessories	Item No.	List Price (USD)
Seal kit, STARTER portables	83032962	45
Zero Oxygen Chemicals, STARTER	30059257	22
DO Probe Cap, STD021	30253566	184
Portable Bag STARTER	30031635	59

See page 223 for additional Starter Series Electrodes



Starter Pen Meters

Accurate Electrochemistry Measurement At Your Fingertips

- 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.

Application pH, oxidation-reduction potential (ORP), conductivity, total dissolved solids (TDS), salinity, dissolved oxygen (DO)

Display Liquid crystal display (LCD) display with secondary information line (on select models)

Operation 4 1.5V batteries (included)

Construction ABS Housing

Design Features Easily replaceable electrodes, automatic shut off feature



ST20D

Model	Meter Type	Measurement Range	Measurement Resolution	Temperature Display	Item No.	List Price (USD)
ST10	pH	0.00 – 14 pH	0.1 pH	Not Available	30073970	61
ST20		0.00 – 14 pH ; 0.0 – 99.0 °C	0.01 pH	Yes	30073971	104
ST20M-B	Multi	pH 0-14 Conductivity 0 ... 1999 µS/cm TDS 0 ... 1000 mg/L Temperature 0-99.0 °C	pH 0.01 pH Conductivity 1µS/cm TDS 1 mg/L NA Temperature 0.1 °C	Yes	30393199	129
ST20M-C		pH 0-14 Conductivity 0 ... 19.99 mS/cm Salinity 0.0-10.0 ppt Temperature 0-99.0°C	pH 0.01pH Conductivity 0.01mS/cm Salinity 0.1 ppt Temperature 0.1°C	Yes	30393200	129
ST10C-A	Conductivity	0.00 – 199.9 µS/cm	0.1 µS/cm	Not Available	30073972	81
ST10C-B		0 – 1999 µS/cm	1µS/cm		30073973	81
ST10C-C		0.00 – 19.99 ms/cm	10 µS/cm		30073974	81
ST20C-A		0.00 – 199.9 µS/cm ; 0.0 – 99.0 °C	0.1 µS/cm	Yes	30073975	119
ST20C-B		0 – 1999 µS/cm ; 0.0 – 99.0 °C	1µS/cm		30073976	119
ST20C-C		0.00 – 19.99 ms/cm ; 0.0 – 99.0 °C	10 µS/cm		30073977	119
ST10T-A	TDS	0.0 – 100.0 mg/L	0.1 mg/L	Not Available	30073978	92
ST10T-B		0.0 – 1000 mg/L	1 mg/L		30073979	92
ST20T-A		0.0 – 100.0 mg/L ; 0.0 – 99.0 °C	0.1 mg/L	Yes	30073980	119
ST20T-B		0.0 – 1000 mg/L ; 0.0 – 99.0 °C	1 mg/L		30073981	119
ST10S	Salinity	0.0 – 10.0 ppt	0.1 ppt	Not Available	30073982	81
ST20S		0.0 – 80.0 ppt ; 0.0 – 99.0 °C		Yes	30073983	119
ST10R	ORP	-1000 – 1000 mV	1 mV	Not Available	30073984	133
ST20R		-1000 – 1000 mV ; 0.0 – 99.0 °C		Yes	30073985	178
ST20D	Dissolved Oxygen	0.0 – 80.0 ppt	0.1 mg/L	Yes	30073986	415

Accessories	Item No.	List Price (USD)
Zero Oxygen Chemicals, STARTER	30059257	22
Buffer pH4.01 250 ml	30100425	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH10.01	30100429	17

Accessories	Item No.	List Price (USD)
Standard Conduct 84µS/cm 250 ml	30100442	21
Standard Conduct 1413µS/cm 250 ml	30100443	21
Standard Conduct 12.88mS/cm 250 ml	30100444	21
Membrane Kit Replaceable, ST20D	30222084	102

See next page for additional Laboratory Instrument Replacement Electrodes



Starter Electrodes

OHAUS Precision Powers the Starter Electrodes

- All sturdy and durable electrodes are constructed of either plastic or glass shafts and built to withstand daily use.
- All 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.



Application pH, reference, oxidation-reduction potential (ORP), conductivity, dissolved oxygen (DO), temperature measurement

Construction Glass, plastic or metal

Design Features Can be used in conjunction with all Starter bench and portable meters

Model	ST5000, ST3100, ST2100, & ST300	ST3100M	ST3100C & ST300C	ST300D	ST400	ST400M	ST400D	Temperature	Shaft Material	Item No.	List Price (USD)
ST230	•	•							Glass	83033968	122
ST260	•	•							Glass	30129357	163
ST270	•	•							Glass	30240974	291
ST350	•	•						•	Glass	30129354	174
STMICR05	•	•							Glass	30087566	250
STMICR08	•	•							Glass	30087569	268
STPURE	•	•							Glass	83033969	136
STREF1	•	•							Glass	30059253	145
STORP2	•	•							Glass	30038553	246
STORP1	•	•							Plastic	30038555	92
ST210	•	•							Plastic	83033966	65
ST272	•	•							Plastic	30393265	170
ST310	•	•						•	Plastic	83033965	140
ST320	•	•						•	Plastic	83033967	140
STSURF	•	•							Plastic	30129470	159
STCON3		•	•					•	Plastic	83033972	298
STCON7		•	•					•	Plastic	30080693	534
STD011				•					Plastic	30031639	362
STD021, 1m							•	•	Plastic	30378544	1104
STD021, 5m							•	•	Plastic	30378545	1123
STTEMP30	•	•		•				•	S.Steel	83033970	80
ST320 IP67					•	•			Plastic	30468960	180
STCON3 IP67						•			Plastic	30468962	395

Bead Mill Homogenizer Accessories

Accessories	Item No.	List Price (USD)
White, Bacteria, 2mL tube, 100/box	30391402	324
Yellow, Yeast, 2mL Tube, 100/box	30391404	324
Blue, Fungi, 2mL Tube, 100/box	30391405	324
Orange, Soft Sample, 2mL Tube, 100/box	30391406	324
Green, Plant, 2mL Tube, 100/box	30391408	324
Red, Animal Tissue, 2mL Tube, 100/box	30391409	324
Brown, Environmental, 2mL Tube, 100/box	30391410	331
Tube Rack, 25 × 2mL Tubes, 2 per pack	30391431	12
Sample Tube Kit, 14 Tubes	30391433	38

Centrifuge Tube Adapters

Accessories	Item No.	List Price (USD)
Adapter, D6mm, 0.2/0.4ml Tubes × 6	30130884	95
Adapter, D8mm, 0.5ml Tubes × 6	30130885	95
Adapter, D11mm, 1.5/2.0ml Tubes × 6	30130886	187
Adapter, D12.6mm, 1.0ml Cryo × 6	30130887	297
Adapter, D12.6mm, 1.8ml Cryo × 6	30130888	297
Adapter, D13.5mm, 7ml Tubes × 2	30130889	113
Adapter, D13.5mm, 5ml Tubes × 2	30130890	103
Adapter, D26mm, 30ml Tubes × 2	30130891	236
Adapter, D18mm, 16ml Tubes × 2	30130892	236
Adapter, D17mm, 15ml Tubes × 2	30130893	236
Adapter, D17mm, 15ml RB Tubes × 2	30130894	164
Adapter, 9 × 1.5/2.0ml D11mm, 2/pk	30304368	279
Adapter, 8 × 1.5ml D11mm, 2/pk	30304369	260
Adapter, 5 × 10ml D16mm RB, 2/pk	30304370	260
Adapter, 4 × 15ml D17mm FA, 2/pk	30304371	260
Adapter, 2 × 30ml D26mm RB, 2/pk	30304372	260
Adapter, 1 × 50ml D30mm RB, 2/pk	30304373	260
Adapter, 1 × 50ml D30mm FA, 2/pk	30304374	260
Adapter, 48 × 1.5/2.0ml D11mm, 2/pk	30314891	792
Adapter, 1 × 15ml D17.5mm FA, 2/pk	30314892	201
Adapter, 1 × 15ml D17mm RB, 2/pk	30314893	179
Adapter, 1 × 30ml D25mm RB, 2/pk	30314894	179
Adapter, 1 × 50ml D29mm RB, 2/pk	30314895	179
Adapter, 1 × 50ml D29mm FA, 2/pk	30314896	179
Adapter, 1 × 15ml D17mm FA, 2/pk	30314897	179
Adapter, 2 × 15ml D17mm RB, 2/pk	30314898	179
Adapter, 1 × 16ml D18mm RB, 2/pk	30314899	179
Adapter, 1 × 1.5ml for over 16000 × g, 6/pk	30314900	97

Dry Block Heater Accessories

Accessories	Item No.	List Price (USD)
Test Tube Combination	30400156	145
Centrifuge Tube Combination	30400193	145
Micro-Tube Combination	30400194	145
12 × 15mL Conical Tube	30400172	145
5 × 50mL Conical Tube	30400168	145
2 × (12) 12.5 mm Cuvettes	30400161	174
2 Block Cover	30400179	129
4 Block Cover	30400180	125
6 Block Cover	30400181	136
30 × 0.5 mL Tube	30400157	145
20 × 1.5 mL Tube	30400159	145
20 × 1.5 mL Eppendorf™ Tube	30400162	145
20 × 2 mL Eppendorf™ Tube	30400191	145
20 × 2 mL Corning™ Tube	30400192	145
2 × 96-well PCR Plate	30400171	326
10 × 8 Tube Strips	30400169	161
64 × Individual PCR Tubes	30400170	161
Solid Block, Single	30400160	145
Solid Block, Double	30400166	212
30 × 6 mm Tube	30400158	145
24 × 10 mm Tube	30400151	145
20 × 12/13 mm Tube	30400152	145
16 × 12/13 mm Tube	30400165	145
12 × 15/16 mm Tube	30400153	145
12 × 17/18 mm Tube	30400195	145
8 × 20 mm Tube	30400154	145
6 × 25 mm Tube	30400155	145
4 × 35 mm Tube	30400167	145
Sand Bath, 1 Block Dry Block Heater	30400173	312
Sand Bath, 2 Block Dry Block Heater	30400174	325
Sand Bath, 4 Block Dry Block Heater	30400175	348
Sand Bath, 6 Block Dry Block Heater	30400176	361
Sand, 1 lb (0.45 kg)	30400177	89
Stainless Steel Shot, 1 lb (0.45 kg)	30400178	108
Titer Plate	30400164	298

Dry Block Heater Accessories

Accessories	Item No.	List Price (USD)
20 × 12 mm Vial	30400182	145
20 × 15 mm Vial	30400183	145
16 × 16 mm Vial	30400190	145
12 × 17 mm Vial	30400184	145
12 × 19 mm Vial	30400185	145
9 × 21 mm Vial	30400186	145
8 × 23 mm Vial	30400187	145
8 × 25 mm Vial	30400188	145
6 × 28 mm Vial	30400189	145

Extreme Environment and Heavy Duty Shaker Accessories

Accessories	Item No.	List Price (USD)
18 × 18" (45.7 × 45.7 cm) Culture Platform	30400066	364
18 × 24" (45.7 × 61 cm) Culture Platform	30400067	380
13 × 13" (33 × 33 cm) Dedicated Platform / 125 mL Flask Clamp	30400075	574
13 × 13" (33 × 33 cm) Dedicated Platform / 250 mL Flask Clamp	30400076	574
13 × 13" (33 × 33 cm) Dedicated Platform / 500 mL Flask Clamp	30400077	574
13 × 13" (33 × 33 cm) Dedicated Platform / 1 L Flask Clamp	30400078	574
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 125 mL Flask Clamp	30400079	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 250 mL Flask Clamp	30400080	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 500 mL Flask Clamp	30400081	631
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 1 L Flask Clamp	30400082	631
18" (45.7 cm) Adjustable Bar (with Mounting Hardware)	30400083	610
Two-Tier Braces (set of 4)	30400051	116

Frontier Multi Pro Centrifuge Accessories

Accessories	Price USD	List Price (USD)
Bucket, 100ml w/o Cap, 2/pk	30314860	313
Bucket, 100ml w/ Cap, Sealable, 2/pk	30314861	376
Screw Cap, 100ml Bucket, Sealable, 2/pk	30314862	110
O-ring, 100ml Bucket, Sealable, 10/pk	30314863	52
Bucket, 2 × 50ml D29mm FA, w/ Rack, 2/pk	30314881	487
Bucket, 3 × 15ml D17mm FA, w/ Rack, 2/pk	30314882	489
Bucket, 3 × MTP, 2/pk	30314890	3001
Rack, 8 × 4-10ml D16mm Vac, 2/pk	30304367	303
Rack, 4 × 50ml D29mm FA, 2/pk	30304375	410
Rack, 10 × 15ml D17mm FA, 2/pk	30314583	410
Rack, 14 × 5-7ml D13mm Vac/Sar, 2/pk	30314584	410
Rack, 12 × 4-10ml D16mm Vac/Sar, 2/pk	30314585	410
Rack, 1 × 100ml D46mm RB, 2/pk	30314842	256
Rack, 1 × 85ml D38mm RB, 2/pk	30314843	256
Rack, 1 × 50ml D34mm RB, 2/pk	30314844	256
Rack, 1 × 50ml D29mm RB, 2/pk	30314845	256
Rack, 1 × 50ml D29mm FA, 2/pk	30314846	256
Rack, 1 × 50ml D29mm Rim, 2/pk	30314847	256
Rack, 1 × 30ml D25mm Rim, 2/pk	30314848	256
Rack, 1 × 25ml D25mm RB, 2/pk	30314849	256
Rack, 2 × 15ml D17mm FA, 2/pk	30314850	256
Rack, 1 × 15ml D17mm Rim, 2/pk	30314851	256
Rack, 7 × 15ml D17mm RB, 2/pk	30314852	256
Rack, 9 × 5-7ml D13mm RB, 2/pk	30314853	256
Rack, 10 × 1.5ml D11mm, 2/pk	30314854	256
Rack, 9 × 4.5ml D12mm FB, 2/pk	30314855	256
Rack, 7 × 5-7ml D13mm RB, 2/pk	30314856	256
Rack, 7 × 5-7ml D13mm Vac, 2/pk	30314857	256
Rack, 5 × 4-10ml D16mm Sar, 2/pk	30314858	256
Rack, 1 × 100ml D40mm RB, 2/pk	30314864	230
Rack, 1 × 85ml D38mm RB, 2/pk	30314865	230
Rack, 1 × 50ml D34mm RB, 2/pk	30314866	230
Rack, 1 × 50ml D29mm RB, 2/pk	30314867	230
Rack, 1 × 50ml D29mm FA, 2/pk	30314868	230
Rack, 1 × 50ml D29mm Rim, 2/pk	30314869	230
Rack, 1 × 30ml D25mm Rim, 2/pk	30314870	230
Rack, 1 × 25ml D25mm RB, 2/pk	30314871	236
Rack, 1 × 15ml D17mm FA, 2/pk	30314872	236
Rack, 2 × 15ml D17mm FA, 2/pk	30314873	236
Rack, 2 × 15ml D17mm Rim, 2/pk	30314874	236
Rack, 4 × 15ml D17mm RB, 2/pk	30314875	236
Rack, 7 × 5-7ml D13mm RB, 2/pk	30314876	236
Rack, 5 × 1.5ml D11mm, 2/pk	30314877	236
Rack, 3 × 10ml D17mm Sar, 2/pk	30314878	236
Rack, 4 × 5-7ml D13mm RB, 2/pk	30314879	236
Rack, 4 × 10ml D17mm Vac, 2/pk	30314880	230

Frontier Multi Pro Centrifuge Accessories

Accessories	Item No.	List Price (USD)
Screw Cap, Rack of 250ml Rotor, 2/pk	30314901	124
O-ring, Rack of 250ml Rotor, 10/pk	30314902	64
Rack, 1x250ml D62mm FB, 2/pk	30314903	294
Rack, 1x100ml D41mm RB, 2/pk	30314904	294
Rack, 3x50ml D29mm RB, 2/pk	30314905	294
Rack, 3x50ml D29mm FA, 2/pk	30314906	294
Rack, 1x50ml D34mm RB, 2/pk	30314907	294
Rack, 2x50ml D29mm Rim, 2/pk	30314908	294
Rack, 1x50ml D29mm Rim, 2/pk	30314909	294
Rack, 5x25ml D24.5mm RB, 2/pk	30314910	294
Rack, 3x25ml D24.5mm Rim, 2/pk	30314911	294
Rack, 9x15ml D17mm RB, 2/pk	30314912	294
Rack, 7x15ml D17mm FA, 2/pk	30314913	294
Rack, 7x15ml D17mm Rim, 2/pk	30314914	294
Rack, 8x10ml D16mm RB, 2/pk	30314915	294
Rack, 14x5-7ml D13mm RB, 2/pk	30314916	294
Rack, 10x1.6-7ml D13mm Vac, 2/pk	30314917	294

Heavy Duty Shaker Accessories

Accessories	Item No.	List Price (USD)
4-bar Large Vessel Carrier Platform	30400070	1324
4-bar Large Vessel Carrier Platform	30400071	1386
5-bar Large Vessel Carrier Platform	30400072	1777

Heavy Duty Vortex Mixer Accessories

Accessories	Item No.	List Price (USD)
Foam insert for 0.5 mL microtubes	30400216	42
Foam insert for 1.5 to 2.0 mL microtubes	30400217	42
Foam insert for 12-13 mm test tubes	30400220	42
Foam insert for 15-18 mm test tubes	30400221	42
Foam insert for 19-21 mm test tubes	30400222	42
Foam insert for 22-25 mm test tubes	30400223	42
Foam insert for 26-29 mm test tubes	30400224	42

Heavy Duty Vortex Mixer Accessories

Accessories	Item No.	List Price (USD)
Flat Foam Insert	30400209	42
Large Vessel Holder	30400211	51
Microplate Single Holder	30400215	61
Microplate Double Holder	30400213	69
Microplate Quad Holder	30400214	139
Small Vessel Holder	30400218	51
Universal Holder	30400226	63
Universal Holder Cover	30400225	22
Stackable Microplate Holder	30400212	130

Incubating Cooling Thermal Shaker Accessories

Accessories	Item No.	List Price (USD)
24 × 2.0 mL Cryotubes	30400133	829
30 × 0.5 mL Microtubes	30400129	829
24 × 1.5 mL Microtubes	30400130	829
24 × 2.0 mL Microtubes	30400131	829
24 × 5-7 mL Tubes	30400132	829
Microplate Thermal Block with Lid	30400126	1089
384 Well Plate Thermal Block with Lid	30400127	1089
0.2 mL PCR Plate Thermal Block with Lid	30400128	1089
5 mL Eppendorf Tube Block	30400134	829
15 mL Conical Tubes	30400135	829
50 mL Conical Tubes	30400136	829

Light Duty Shaker Accessories

Accessories	Item No.	List Price (USD)
8.6" (21.8 cm) Adjustable Bar(with Mounting Hardware)	30400122	47
18" (45.7 cm) Adjustable Bar (with Mounting Hardware)	30400073	63
2-bar Adjustable Platform	30400121	519
4-bar Adjustable Platform	30400068	553
4-bar Adjustable Platform	30400069	792
18" (45.7 cm) Adjustable Bar (with Mounting Hardware)	30400073	63
24" (61 cm) Adjustable Bar (with Mounting Hardware)	30400074	79
Dilution Cup Tray	30400125	234
Universal Harness	30400123	42

Mini Vortex Mixer Accessories

Accessories	Item No.	List Price (USD)
Single Tube Holder	30400202	179
Cup Head	30400210	41
Cup Head	30400235	41
Micro-Tube Holder (0.5 mL)	30400204	78
Microtube Holder (1.5 mL to 2.0 mL)	30400205	78
9 to 13 mm Tube Holder (2 pack)	30400229	34
14 to 19 mm Tube Holder (2 pack)	30400230	34
20 to 25 mm Tube Holder (2 pack)	30400231	34
3" (7.6 cm) Rubber Head Cover	30400196	57
3" (7.6 cm) Head	30400236	41
3" (7.6 cm) Head with Rubber Cover	30400237	41
15 to 17 mm Ampule Tube Holder	30400207	132
10 to 17 mm Ampule Tube Holder	30400208	186
Adapter Plate For Vortex-Genie® Mixer	30400203	91
Flat Foam Insert (2 pack)	30400234	32
Insert Retainer	30400227	138
Foam Insert Variety Pack	30400201	62
Microplate Holder (2 pack)	30400233	71
Micro-Tube Holder (2 pack)	30400232	71
Micro-Tube & Microplate Holder Kit	30400198	122
Microtube Kit with /Retainer	30400200	122
Microwell Kit with Retainer	30400199	122
Rack For 30 × 0.5 mL Tube Block	30400250	42
Rack For 24X1.5 / 24X2.0 mL Tube Blocks	30400251	42
Cover For 0.5mL/1.5mL/2.0mL Tube Blocks	30400252	29
Microtube Holder	30400206	284
Vessel Harness (2 pack)	30400228	11
Tube Holder Kit	30400197	209

Multi-Tube Vortex Mixer Accessories

Accessories	Item No.	List Price (USD)
50 × 10 mm Test Tube Foam Rack	30400238	38
50 × 12 mm Test Tube Foam Rack	30400239	37
50 × 13 mm Test Tube Foam Rack	30400240	37
50 × 16 mm Test Tube Foam Rack (for 15 mL centrifuge tubes)	30400241	48
28 × 25 mm Test Tube Foam Rack	30400243	48
15 × 29 mm Test Tube Foam Rack (for 50 mL centrifuge tubes)	30400242	48
Replacement Tray Pad Set (upper & lower)	30400245	54
Post Extension Kit	30400244	190

Open Air and Incubating Shaker Accessories

Accessories	Platform Item No.	List Price (USD)
11 × 13 Platform (4 Microplate Clamps)	30400052	214
13 × 13 Platform (6 Microplate Clamps)	30400053	305
18 × 18 Platform (12 Microplate Clamps)	30400054	365
18 × 24 Platform (18 Microplate Clamps)	30400056	411
18 × 30 Platform (21 Microplate Clamps)	30400057	975
24 × 24 Platform (24 Microplate Clamps)	30400058	933
24 × 36 Platform (36 Microplate Clamps)	30400059	1246
Microplate Clamp	30400104	62
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	30400114	165
10 mL Erlenmeyer Flask Clamp	30400084	38
25 mL Erlenmeyer Flask Clamp	30400085	38
50 mL Erlenmeyer Flask Clamp	30400086	40
125 mL Erlenmeyer Flask Clamp	30400087	40
250 mL Erlenmeyer Flask Clamp	30400088	40
500 mL Erlenmeyer Flask Clamp	30400089	43
1 L Erlenmeyer Flask Clamp	30400090	58
2 L Erlenmeyer Flask Clamp	30400091	91
2.8 L Fernbach Flask Clamp	30400092	121
3 L Fernbach Flask Clamp	30400093	164
4 L Erlenmeyer Flask Clamp	30400094	151
5 L Erlenmeyer Flask Clamp	30400095	183
11 × 13" (27.9 × 33 cm) Rubber Mat	30400060	61
13 × 13" (33 × 33 cm) Rubber Mat	30400061	74
18 × 18" (45.7 × 45.7 cm) Rubber Mat	30400062	106
18 × 24" (45.7 × 61 cm) Rubber Mat	30400063	117
24 × 24" (61 × 61 cm) Rubber Mat	30400064	138
24 × 36" (61 × 91.4 cm) Rubber Mat	30400065	153
6 L Erlenmeyer Flask Clamp	30400096	179
500 mL Media Bottle Clamp	30400097	113
1 L Media Bottle Clamp	30400098	122
125 mL Erlenmeyer Flask Clamp	30400099	42
250 mL Erlenmeyer Flask Clamp	30400100	43
500 mL Erlenmeyer Flask Clamp	30400101	49
1 L Erlenmeyer Flask Clamp	30400102	55
2 L Erlenmeyer Flask Clamp	30400103	92

Open Air and Incubating Shaker Accessories

Accessories	Item No.	List Price (USD)
1.5 to 2 mL Micro-Tube Rack Half Size, Stationary	30400114	165
10 to 13 mm Test Tube Rack Half Size, Stationary	30400115	182
14 to 16 mm Test Tube Rack Half Size, Stationary	30400116	182
18 to 20 mm Test Tube Rack Half Size, Stationary	30400117	182
22 to 25 mm Test Tube Rack Half Size, Stationary	30400118	182
15 mL Centrifuge Tube Rack Half Size, Stationary	30400119	189
50 mL Centrifuge Tube Rack Half Size, Stationary	30400120	189
10 to 14 mm Test Tube Rack Full Size, Stationary	30400110	359
16 to 20 mm Test Tube Rack Full Size, Stationary	30400111	359
21 to 25 mm Test Tube Rack Full Size Stationary	30400112	359
50 mL Centrifuge Tube Rack Full Size, Stationary	30400113	376
13 mm Test Tube Rack Full Size, Pivoting	30400105	320
16 mm Test Tube Rack Full Size, Pivoting	30400106	320
20 mm Test Tube Rack Full Size, Pivoting	30400107	320
25 mm Tube Rack Full Size, Pivoting	30400108	320
30 mm Tube Rack Full Size, Pivoting	30400109	320
11 × 13" (27.9 × 33 cm) Universal Platform	30400052	214
13 × 13" (33 × 33 cm) Universal Platform	30400053	305
18 × 18" (45.7 × 45.7 cm) Universal Platform	30400054	365
18 × 24" (45.7 × 61 cm) Universal Platform	30400056	411
24 × 24" (61 × 61 cm) Universal Platform	30400057	975
18 × 30" (45.7 × 76.2 cm) Universal Platform	30400058	933
24 × 36" (61 × 91.4 cm) Universal Platform	30400059	1246
Two-Tier Braces (set of 4)	30400051	116

Laboratory Instrument Accessories

Accessories	Item No.	List Price (USD)
Pen Meter Electrode pH10 ST	30087992	38
Pen Meter Electrode pH20 ST	30087993	67
Pen Meter Electrode ST20M-B	30393203	61
Pen Meter Electrode ST20M-C	30393204	61
Pen Meter Electrode CT10A ST	30087994	54
Pen Meter Electrode CT10B ST	30087995	54
Pen Meter Electrode CS10C ST	30087996	54
Pen Meter Electrode CT20A ST	30087997	54
Pen Meter Electrode CT20B ST	30087998	54
Pen Meter Electrode CS20C ST	30087999	54
Pen Meter Electrode R10 ST	30088020	81
Pen Meter Electrode R20 ST	30088021	107
Pen Meter Electrode ST20D	30222083	230
pH electrolyte (KCl saturated AgCl, 30ml)	30059255	33
pH electrode protection solution(3M KCl)	30059256	26
pH sensor protect bottle(10 in bag)	30064800	45
Zero Oxygen Chemicals, STARTER	30059257	22
Buffer pH1.68 250 ml	30100424	21
Buffer pH4.01 250 ml	30100425	17
Buffer pH6.86 250 ml	30100426	17
Buffer pH7.00 250 ml	30100427	17
Buffer pH9.18 250 ml	30100428	17
Buffer pH10.01 250 ml	30100429	17
Buffer pH12.45 250 ml	30100440	21
Standard Conduct 10 µs/cm 250 ml	30100441	21
Standard Conduct 84 µs/cm 250 ml	30100442	21
Standard Conduct 1413 µs/cm 250 ml	30100443	21
Standard Conduct 12.88 mS/cm 250 ml	30100444	21
Buffer Powder pH4.01; 7.00; 10.01	83033971	23

Rocking and Waving Shaker Accessories

Accessories	Item No.	List Price (USD)
Dimpled Mat, 12.75 × 10" (32.4 × 25.4 cm)	30400140	57
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	30400142	57
Dimpled Mat, 10 × 7.5" (25.4 × 19.1 cm)	30400141	57
Dimpled Mat, 9.25 × 7.25" (23.5 × 18.4 cm)	30400143	57
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	30400124	54
Dimpled Mat, 14 × 11" (35.6 × 27.9 cm)	30400144	66
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	30400137	137
Stacking Tray, 11.75 × 8.75" (29.9 × 22.2 cm)	30400138	167
Stacking Tray, 14 × 11" (35.6 × 27.9 cm)	30400139	121

OHAUS Resources

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.

Six Month Warranty			Three Year Warranty
Starter Series Electrodes			Harvard Junior® Balances
One Year Warranty			TJ611 Balance
Accessories	Hand Held Scales	SD & Catapult Scales	Five Year Warranty
Aviator® Scales	Indicators, all models	Spring Scales	All Other Mechanical Balances
CX & CR Scales	JE Emerald & JR Ruby Scales	Starter Series Meters	Ten Year Warranty
D500 Beam Scales	MB23 with MB27	TAJ Scales	Triple Beam Pro® Balances
Defender® Scales	Navigator® Scales	Valor® Scales	
CKW Scales	Primer® Balance	Drum & VN/VX Floor Scales	
ES Scales	PS Scales	Weights & Weight Sets	
FD Scales	Ranger® Scales	Y Series Scales	
Frontier Mini Centrifuge	Scale Bases, all models		
Two Year Warranty			
Adventurer® Balances	MB90 & MB120	Scout® STX , SPX & SJX Balances	
Explorer® Balances	Pioneer® Balances	Vortex Mixers	
Guardian™ Hotplates & Stirrers	Dry Block Heaters	Homogenizers	
Open Air Shakers	Incubating & Incubating Cooling Shakers	Frontier Micro & Multi Centrifuges	
Labjaws Clamps & Supports		PR Series Balances	

Any product not listed above includes a one year warranty

All replacement parts include a 90 day warranty

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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 January 1, 2020 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) canceling and limiting pending and future orders; (3) reducing a dealer's status, including reducing discount status; (4) 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 January 1, 2020 are set forth in the schedule below, exclusive of all state and local taxes.

Product Series	MAP Price % off List Price	Product Series	MAP Price % off List Price
Explorer® / Adventurer® / Pioneer™ / PR Series	15%	Valor® Series	15%
Moisture Analyzers (MB) Series	15%	FD Series	20%
Scout® Series / SJX / TAJ Series	30%	Navigator® Series	20%
Hand Held / CR Series/ PS Series	40%	Defender® 3000	20%
Compass™ CX / Ruby Series	25%	Defender® 5000	10%
Mechanicals (all)	25%	CKW Series	10%
Starter Series Portable / Bench Meters	15%	Emerald / YJ / YA Series	40%
Starter Series Pen Meters	20%	ES Series	20%
Replacement Electrodes	15%	SD / Catapult Series	25%
Frontier 5306 Centrifuge	25%	Ranger® 7000 Series	20%
Spring Scales	20%	Ranger / Ranger Count 3000 Series	25%
Frontier Micro & Multi Centrifuges / Hotplates & Stirrers / Dry Block Heaters / Vortex Mixers / Open Air Shakers / Incubating & Incubating Cooling Shakers / Homogenizers / Labjaws Clamps & Supports	15%	Ranger / Ranger Count 4000 Series	25%
		Aviator® Series	30%
		Industrial Indicators and Bases	0%
		Defender Drum Scales and VN/VX Floor Scales	30%
		Weights and Accessories	10%

OHAUS Partner Shop

The recently improved 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! In addition to our online dealer-dedicated site (us.partnershop.ohaus.com) you may also

- Email your order to sales@ohaus.com or
- Fax your order to **973-944-7177**

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 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 & Product 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, and common problems. The emphasis will be placed on the practical side of balance repair.

We also offer product-specific training seminars, in the form of both webinar and on-demand technical trainings on our full portfolio of weighing and laboratory equipment. These trainings offer an in-depth look at the functionality and capability of our product offerings, bettering your sales abilities.

If you are interested in finding out more about these training seminars, please contact us at

TechService@OHAUS.com

OHAUS Document Exchange System

A comprehensive repository of sales materials, product information, and promotions, the OHAUS Document Exchange system (better known as DMX) is your one-stop shop for everything OHAUS. Register today, by visiting

<http://dmx.ohaus.com/>

Applications



Weighing



Check-weighing



Conductivity



Density Determination



Differential Weighing



Display Hold



Dissolved Oxygen



Dynamic Weighing



Filling



Formulation



Gross/Net/Tare



Ingredient Costing



Moisture Analysis



Oxygen Reduction Potential



pH Measurement



Parts Counting



Total/Accumulation



Specific Gravity



SQC



Statistics



Temperature



Peak Hold



Percent Moisture Regain



Percent Moisture



Percent Solid



Percent Weighing



Pipette Calibration



Price Computing



NaCl

Salinity



Total Dissolved Solids



Resistivity

Features



Audible Alerts



Auto Shut-Off



Auto Standby



Backlight



Battery Power



Environmental Filters



External Analog Base Input



GLP Data Output



GMP/GLP



Hinged Cover



Software Lockout



Stability Indicator



Stackable



Time/Date



Touch Screen



Touchless Sensors



Weigh Below Hook



NEMA 4X IP65



NEMA 4X IP66



NEMA 4X IP67



Overload Protection



Internal Calibration



IPX8



LED Checkweighing Indicator



Level Indicator



Leveling Feet



Low Battery Indicator



Multi-Language



Overload/Underload Indicators



Rechargeable Battery



Security Bracket



Shipping Lock

Approvals



Measurement Canada Approved



NSF Listed



NTEP Certified



USDA-AMS Accepted



TUV Certified



CE Certified



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!

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