Built for Sophisticated, Professional Weighing.

When laboratory work and research requires accuracy to the hundred-thousandth, there is simply no room for error. The Explorer series of semi-micro balances has been designed with the technology to ensure that your very specific weighing results are accurate. Sophisticated laboratories requiring accuracy and looking for innovative technology to obtain measurement results can find both in Explorer semi-micro balances.

Standard Features Include:

- **Intelligent Performance for Applications Requiring Extreme Accuracy** — The semi-micro Explorer series, which includes models with capacities up to 220 g and resolutions up to 0.01 mg, has been designed to use a High Speed Single Module weighing cell to ensure the accuracy of results. To minimize weighing errors and ensure accurate measurements, AutoCal™ utilizes two internal weights to perform a linear calibration.

- **Intuitive Software Provides an Extremely Modern User Experience** — Powered by SmarText™ 2.0 software, Explorer operates in the same manner as common electronics, with an icon-based touchscreen display, advanced applications, memory library, a USB host port, and more.

- **Ingenious Construction Designed to Enhance Usability** — Among Explorer's features designed to improve user experience and ensure the integrity of results are touchless sensors, automatic draftshield doors, an ionizer, and more.

Explorer® *Semi-Micro Balances*

Intelligent Performance for Applications Requiring Extreme Accuracy

Balances with capacities ranging from 52 g – 220 g and readabilities from 0.01 mg – 0.1 mg make up the Explorer series of semi-micro balances. In addition to superior craftsmanship and a High Speed Single Module weighing cell, various features are incorporated into the product's design to enhance performance.

Internal Calibration

OHAUS' signature AutoCal™ internal calibration system provides routine maintenance by automatically calibrating the balance every time it senses a temperature change of 1.5°C or every 3 hours, whichever occurs first. This helps ensure the accuracy of the balance when the operator has not performed a manual calibration or when the proper calibration masses are unavailable. In addition, to minimize weighing errors and ensure accurate measurements, AutoCal™ utilizes two internal weights to perform a linear calibration.

Efficiency

Explorer's ultra-fast stabilization time (0.1 mg: ≤3 second, 0.01 mg: ≤8 second) and audible stability alert increases laboratory efficiency.

Intuitive Software Provides an Extremely Modern User Experience

Explorer semi-micro balances include many facets of modern technology to provide the best weighing experience possible. The icon-based navigation provides tactile feedback and operates in the same manner as a smart phone or tablet computer.

Save to USB

A USB host port provides the capability of using a USB extension cable to directly transfer the data to a flash drive.

Memory

The balance's memory capabilities includes a library with space for up to 99 items, and a 10 recipe library for formulation mode.
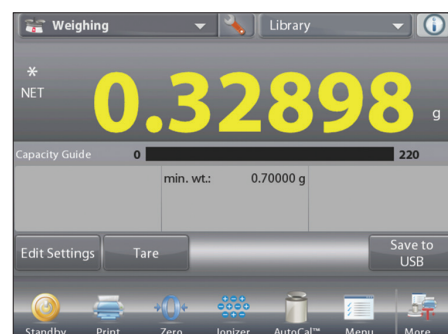
Multi-User

The user manager function provides profiles for one administrator and five additional users, allowing multiple users to utilize the same balance without compromising past results recorded on the balance.

Technology

Other technologically-advanced features include:
• Below minimum sample weight indicator
• Real time clock for GLP/GMP data collection
• Audible stability alert
• True type printing for SQC and pipette adjustment.

Ingenious Construction
Designed to Enhance Usability

The sleek Explorer semi-micro balance has been designed and constructed to provide a modern weighing experience as well as to bolster accuracy.

Operator Experience

Among the features that enhance the operator experience are:
• Color touchscreen display
• Four programmable touchless sensors allow the operator to perform common functions and commands with a swipe of the hand
• Modular design in which the base and display can be separated to allow the balance to fit ideally on the lab bench.

Auto-Doors

The automatic door feature, available on certain models, allows access to the weighing chamber without the need to touch the draftshield door. Placement of samples is achieved in one swift motion, eliminating the repetition of picking up and putting down samples due to a lack of free hands.
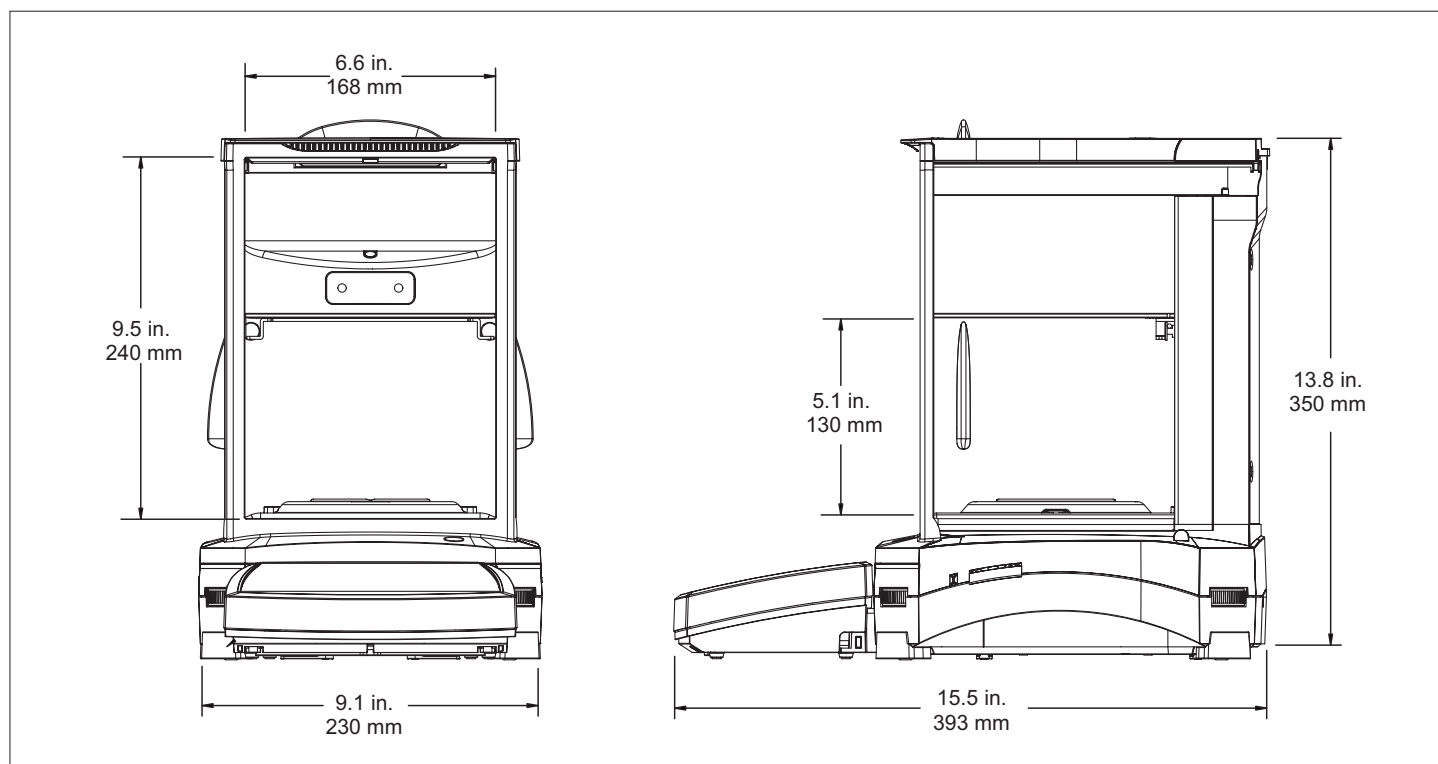
The automatic doors are also more than a user-friendly feature; they minimize vibrations caused by manual operation that can affect weighing results.

Ionizer

The built-in ionizer, included in Explorer automatic door models, generates bipolar ions continuously from positive and negative discharge electrodes and directs the ionized air onto the charged body to eliminate static electricity. These charges can build up in the weighing chamber and alter weighing results by as much as several milligrams.

Outline Dimensions

6.6 in.
168 mm

9.5 in.
240 mm

9.1 in.
230 mm

5.1 in.
130 mm

13.8 in.
350 mm

15.5 in.
393 mm

Explorer® *Semi-Micro Balances*

MODEL	EX125D	EX125	EX225D	EX225D/AD	EX225/AD	EX125DM	EX125M	EX225DM	EX225DM/AD	EX225M/AD
Capacity	52 g / 120 g	120 g	120 g/220g	120 g/220 g	220 g	52 g / 120 g	120 g	120 g/220 g	120 g/220 g	220 g
Readability (d)	0.01 mg / 0.1 mg	0.01 mg	0.01 mg / 0.1 mg	0.01 mg / 0.1 mg	0.01 mg	0.01 mg / 0.1 mg	0.01 mg	0.01 mg / 0.1 mg	0.01 mg / 0.1 mg	0.01 mg
Approved Readability (e)	Non-approved model					1 mg				
Repeatability (20 g) (std. dev.)	0.015 mg									
Repeatability (100 g) (std. dev.)	0.1 mg	0.02 mg	0.02 mg / 0.1 mg		0.03 mg	0.1 mg	0.02 mg	0.02 mg / 0. 1mg		0.03 mg
Linearity	±0.1mg									
Span Calibration Points	50 g 100 g	50 g 100 g	100 g 150 g 200 g	100 g 150 g 200 g	100 g 150 g 200 g	50 g 100 g	50 g 100 g	100 g 150 g 200 g	100 g 150 g 200 g	100 g 150 g 200 g
Calibration	Standard AutoCal™, AutoCal on Δ1.5° temperature change, 3 hours									
Automatic Door	n/a		Standard*			n/a		Standard*		
Weighing Units	g, mg, kg, ct ,gn, oz, ozt, lb, dwt, N, mom, tical, msg, tola, baht, Hong Kong Tael, Singapore Tael, Taiwan Tael, Custom Units 1, Custom Unit 2, Custom Unit 3					g, mg, ct				
Applications	Weighing, Parts Counting, Percent Weighing, Checkweighing, Dynamic Weighing, Filling, Totalization, Formulation, Differential Weighing, Peak Hold, Density Determination, Pipette Adjustment, Statistical Quality Control									
Stabilization Time	0.1 mg: ≤3 second, 0.01 mg: ≤8 second									
Sensitivity Temp. Drift	0.50 ppm / °C									
Min-Weight (typical)	20.0 mg, fine range (USP, u=0.10%, k=2)									
Min-Weight (optimal)	9.0 mg, fine range (USP, u=0.10%, k=2) SRP≤0.41d**									
Display	5,7'', 14.5 cm (diagonal) Full-Color touch screen									
Interface	Standard connectivity: 1 USB host, 1 USB device, 1 RS232 Optional connectivity: 2nd RS232, Ethernet									
Working Environment	10°C – 30°C, 85% RH, non-condensing									
Storage Conditions	-10°C – 60°C at 10% to 90% RH, non-condensing									
Power Supply	AC Adapter Input: 100 – 240 VAC 0.6 A 50/60 Hz, AC Adapter Output: 12 VDC 1.5 A									
Pan Size	Ø 80 mm									
Dimensions (W × H × D)	230 × 393 × 350 mm									
Shipping Dimensions (W × H × D)	632 × 640 × 467 mm									
Net Weight	7 kg		7.5 kg			7 kg		7.5 kg		
Shipping Weight	12 kg		12.6 kg			12 kg		12.6 kg		

*Two motorized doors operated by 4 sensors or onscreen button
**The value for SRP is the standard deviation for n replicate weighing's (n ≥ 10)

Approvals
• **Metrology:** OIML R76, EN 45501 (Class I, nmax 220000)
• **Product Safety:** EN 61010-1, IEC 61010-1
• **Electromagnetic Compatibility:** IEC 61326-1, EN61326-1 (Class B emissions, Industrial immunity)

Accessories
ION-100A - Ionizer 30095929
Density Determination Kit .80253384
Sinker glass for Density Determination kit 83034024
Full-featured Impact Printer SF40A 30064202
SF40A Paper roll (57,5mm 2pcs) 12120799
SF40A Ink ribbon cassette .12120798
RS232 cable, PC 9 Pin 00410024
USB cable (type A to B) 83021085
Second RS232 interface 83021081
Ethernet interface 83021082
Terminal extension cable (3m) 83021083
Secondary display PAD7 80251396
Security device (Cable & lock) 80850000
Security device (Laptop lock) 80850043
Terminal in-use cover 83033633
Dust cover 30093334

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