



## ***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 220g and resolutions up to 0.01mg, was built 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 include touchless sensors, automatic draftshield doors, an ionizer, and more.

# Explorer<sup>®</sup> Semi-Micro Balances

## Intelligent Performance for Applications Requiring Extreme Accuracy

Balances with capacities ranging from 52g-220g and readabilities from 0.1mg-0.01mg make up the Explorer series of semi-micro balances.

In addition to superior craftsmanship and an O-block load cell, various features are incorporated in to the product's design to enhance performance.

OHAUS' signature AutoCal™ internal calibration system provides routine maintenance by automatically calibrating the balance every time it senses a temperature change of 0.5°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.

Finally, Explorer's ultra-fast stabilization time (0.1mg: ≤3 second, 0.01mg: ≤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.

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

The balance's memory capabilities includes a library with space for up to 99 items, a 10 recipe library for formulation mode, as well as a calibration history that keeps a record of the last 25 calibrations, which provides metrological traceability for quality system requirements.

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.

Other technologically-advanced features include a below minimum sample weight indicator, a real time clock for GLP/GMP data collection, audible stability alert, and true type printing for SQC and pipette adjustment.



## Ingenious Construction Designed to Enhance Usability

The sleek-looking Explorer semi-micro balance has been designed and constructed in such a way to provide a modern and smooth weighing experience as well as to help bolster the balance's accuracy.

Among the features that enhance the operator experience are a color touchscreen display, four programmable touchless sensors that allow the operator to perform common functions and commands with a quick swipe of the hand, as well as a modular design in which the base and display can be separated in order to allow the balance to fit ideally on the lab bench.

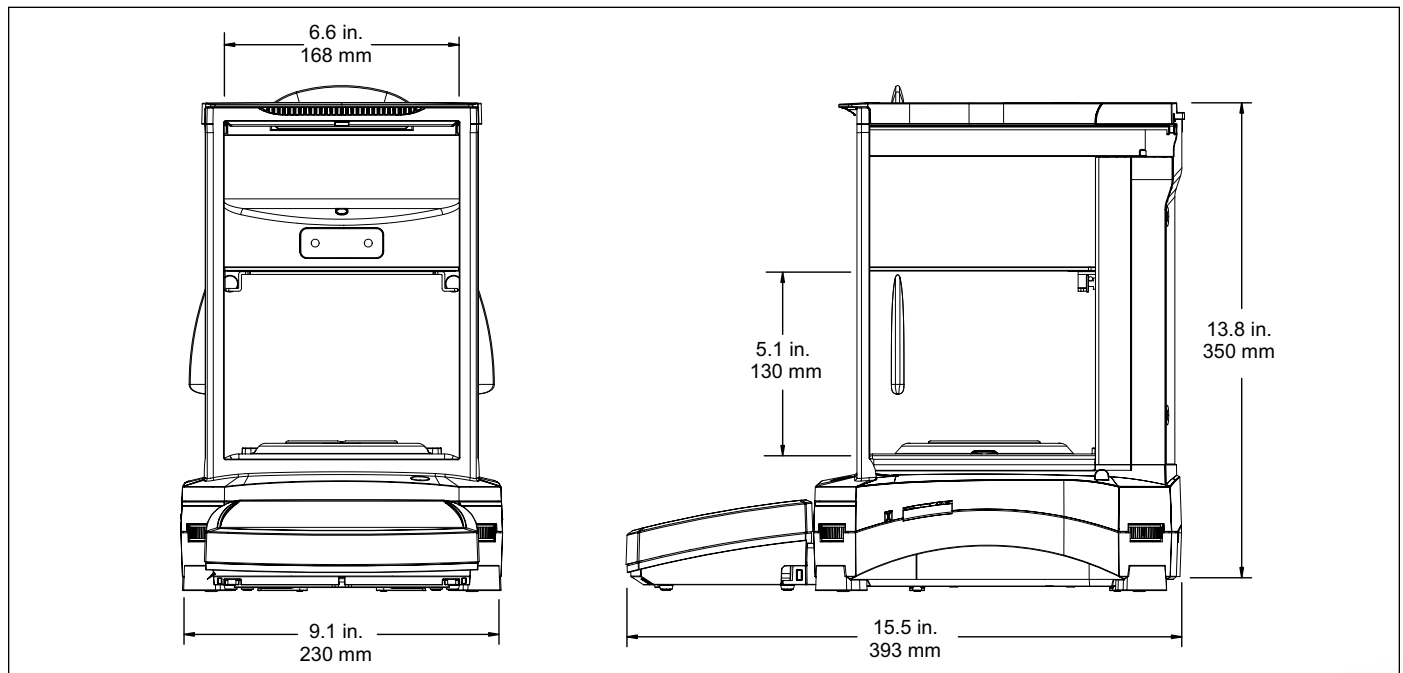
The automatic door on certain models allows the user to open the draftshield door with a wave of their left hand when their right hand is occupied with the sample. This feature allows the sample placement process to occur in one swift motion without having to repetitively pick up and put down samples due to a lack of free hands.

The automatic doors are more than just a user-friendly feature, they minimize vibrations caused by manual operation which can affect weighing results.

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



# Explorer<sup>®</sup> Semi-Micro Balances

MODEL	EX125D	EX125	EX225D	EX225D/AD	EX225/AD
Capacity	52g / 120g	120g	120g / 220g	120g / 220g	220g
Readability d	0.01mg / 0.1mg	0.01mg	0.01mg / 0.1mg	0.01mg / 0.1mg	0.01mg
Repeatability (20g) (std. dev.)	0.015mg				
Repeatability (100g) (std. dev.)	0.1mg	0.03mg	0.03mg / 0.1mg		0.03mg
Linearity	±0.1mg	±0.1mg	±0.1mg	±0.1mg	±0.1mg
Span Calibration Points	50g 100g	50g 100g	100g 150g 200g	100g 150g 200g	100g 150g 200g
Calibration	Standard AutoCal™, AutoCal on Δ0.5° temperature change, 3 hours				
Auto Door	n/a			Motorized	
Weighing Units	g, kg, ct, gn, lb, oz, ozt, N, dwt, hkt, sgt, twt, mom, tical, msg, tola, Custom Units 1, Custom Unit 2, Custom Unit 3				
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	0.1mg: ≤3 second, 0.01mg: ≤8 second				
Sensitivity Temp. Drift	0.50 ppm / °C				
Min-Weight (typical)	0.03g Fine Range (USP, u=0.10%, k=2)				
Min-Weight (optimal)	0.123g Fine Range (USP, u=0.10%, k=2) SRP≤0.41d*				
Display	Full-Color VGA Graphic, 5.7 in / 14.5 cm (diagonal)				
Interface	Standard connectivity: 1 USB host, 1 USB device, 1 RS232 Optional connectivity: 2 <sup>nd</sup> RS232, Ethernet				
Working Environment	10°C – 30°C / 50°F – 86°F, 85% RH, non-condensing				
Storage Conditions	-14°F (10°C) to 140°F (60°C) at 10% to 90% relative humidity, non-condensing				
Power Supply	AC Adapter Input: 100-240 VAC 0.6A 50-60 Hz, AC Adapter Output: 12 VDC 1.5A				
Platform Size (diameter)	3.1 in / 80 mm				
Dimensions (W × H × D)	9 × 15.5 × 13.8 in / 230 × 393 × 350 mm				
Shipping Dimensions (W × H × D)	24.9 × 25.2 × 18.4 in / 632 × 640 × 467 mm				
Net Weight	15.4 lb / 7kg			16.5 lb / 7.5kg	
Shipping Weight	26.5 lb / 12kg			27.8 lb / 12.6kg	

\*The value for SRP is the standard deviation for n replicate weighing's (n ≥ 10)

## Approvals

- **Metrology:** OIML R76, EN 45501(Class I, nmax 320000)
- **Product Safety:** EN 61010-1, IEC 61010-1
- **Electromagnetic Compatibility:** IEC 61326-1, EN61326-1  
(emissions Class B, immunity Industrial requirements)

## Accessories

<b>Second RS232 Interface</b> .....	83021081	<b>Cable kit to connect Dot Matrix Printer</b> ...	80252571
<b>Ethernet Interface</b> .....	83021082	<b>Paper for Dot Matrix Printer</b> .....	80251932
<b>Terminal Extension Cable</b> .....	83021083	<b>Ink Ribbon for Dot Matrix Printer</b> .....	80251933
<b>Interface Cable USB</b> .....	83021085	<b>RS232 Cable, PC 9 Pin</b> .....	80500525
<b>Density Determination Kit</b> .....	80253384	<b>USB Extension Cable</b> .....	30215156
<b>Security Device Kit</b> .....	80850043	<b>ION-100A Ionizer</b> .....	30130302
<b>Dot Matrix Printer</b> .....	SF-40A	<b>Dust Cover</b> .....	30093334

### OHAUS CORPORATION

\* 7 Campus Drive  
Suite 310  
Parsippany, NJ 07054 USA

Tel: 800.672.7722  
973.377.9000  
Fax: 973.944.7177

[www.ohaus.com](http://www.ohaus.com)

With offices throughout  
Europe, Asia, and  
Latin America

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