ADVENTURER™

Semi-Micro, Analytical, and Precision Balances

Intuitive Balances Designed for Routine Weighing

Striking the ideal balance between inventive features and functional, uncomplicated weighing capabilities, the OHAUS Adventurer incorporates all of the applications necessary for routine weighing and measurement activities. With a color touchscreen, three level user management to fulfill GLP/GMP compliance capabilities, two USB ports, and much more, Adventurer is the most complete balance in its class.

Unique Features Include:

- 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.

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Stability, Accuracy, and Fast Operation Ensure Optimal Weighing Results in Routine Weighing Tasks

Weighing Performance

- Delivers stable and reliable weighing results for routine weighing tasks

Stabilization Time

- Adventurer's fast stabilization time improves productivityin the laboratory

Calibration

- AutoCal™ — Selected models feature OHAUS' automatic internal calibration system that performs routine maintenance by calibrating the balance daily
- External Calibration — Traditional calibration in which the operator manually calibrates the balance with their choice of calibration weight value to ensure accuracy available on every model

Color Touchscreen Offers Easy and Fast Operation of Adventurer's Applications

- Operate and access Adventurer's nine application modes and abundant features that eliminate the need to do several manual calculations through the modern color touchscreen
- Operators can wear laboratory gloves while utilizing the touchscreen, eliminating the inconvenience and hazards associated with constantly putting on and removing gloves
- In addition to the touchscreen, Adventurer also has six mechanical keys that provide tactile feedback and allow the operator to perform repetitive operations such as tare, zero, calibration, and print

Application Modes

Weighing
Determine the weight of items in the selected unit of measure.

Parts Counting
Count samples of uniform weight.

Percent Weighing
Measure the weight of a sample displayed as a percentage of a pre-established Reference Weight.

Dynamic Weighing
Weigh an unstable load. Scale takes an average of weights over a period of time.

Density Determination
Determine density of solids or liquid. With the weigh below hook, it's possible to perform specific gravity tests for objects that cannot be easily placed on the weighing pan.

Check Weighing
Compare the weight of a sample against target limits.

Display Hold
Manually holds the last stable weight or highest weighing value on the display.

Totalization / Statistics
Measure cumulative weight of multiple items. Cumulative total may exceed balance capacity.

Formulation
For compounding and recipe making. The number of components can range from 2 to 50.

Batch Printing
Combine multiple samples into one printout rather than printing them one at a time.

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Equipped with the Connectivity and Functional Features Required in Laboratories

Dual USB Ports

- A front USB host port is easily accessible and makes it simple to load data from the balance on to a flash drive without having to reach around to the back or move the balance
- A second USB device is located at the rear of the balance that can be used to connect the balance to a PC
- The connectivity options help meet traceability requirements in traditional installations

Label Printing Function

- Easy to link with Zebra printer and have one built-in label printing template

Balance Profiles

- The cloning feature allows you to save user and application settings to a USB flash drive which can be easily used to configure additional Adventurer balances

Below Minimum Sample Weight Indication

- When using the minimum weight feature, the display clearly indicates that your current sample weight is below your defined minimum limit. Simply increase your sample weight to assure that your results are up to your standard

Space-saving Draftshield Designed to Improve User Experience and Accessibility

- Draftshield doors are constructed of two glass panels, reducing the space required on the lab bench when the doors are open
- Wide door entry provides unobstructed access and allows larger weighing vessels to be easily placed on the pan, reducing the chance of accidental spillage
- Easy to keep clean in order to ensure a safe workspace by minimizing contamination

Power Saving Functions

- The Adventurer is designed with various power-saving features that help reduce the environmental impact. These include auto-off and brightness controls.

User Management Function ensures data security and data traceability

- 3 level user management function ensures data security and data traceability requirements
- One administrator, two supervisors and 10 users have preset accessibility in the software

Real Time Clock with GLP/GMP Data

- A real-time clock function keeps accurate time even during power loss
- GLP data capability has the ability to record Sample name, Project names and Balance IDs to help meet traceability and compliance requirements

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Specifications

Model	AX125D	AX85	AX225D	AX124	AX224	AX324	AX223	AX423	AX523	AX623
External Calibration	—	—	—	AX124/E	AX224/E	—	AX223/E	AX423/E	AX523/E	AX623/E
Approved Models	AX125DM	AX85M	AX225DM	AX124M	AX224M	AX324M	AX223M	AX423M	AX523M	AX623M
Capacity (g)	82/120	82	102/220	120	220	320	220	420	520	620
Readability d (g)	0.0001	0.00001	0.0001	0.0001			0.001			
Verification Interval* e (g)	0.001			0.001			0.01			
Class*	I						II			
"Repeatability (sd.), ≤5% of Full Load (g)"	0.00001			0.00008			0.0008			
Repeatability (sd.), 5% of Full Load to Fine Range Max (g)	0.00002			–						
Repeatability (sd.), 5% of Full Load to Full Range (g)	0.0001	0.00002	0.0001	0.0001			0.001			
Linearity Deviation, Typical (g)	±0.00006	±0.00006	±0.00006	±0.00006			±0.0006			
Linearity Deviation (g)	±0.0001	±0.0001	±0.0001	±0.0002			±0.002			
Stabilization Time (sec)	8s			≤3			≤2			
Sensitivity Drift (ppm/°C)	2						3			
Min-Weight (Typical) (g) (USP, K=2, U=0.10%)	20 mg			0.16			1.6			
"Min-Weight (Optimal) (g) (USP, K=2, U=0.10%, SRP≤0.41d)**"	8.2 mg			0.082 g			0.82 g			
Weighing Units	Baht, carat, grain, gram, milligram, mesgal, momme, Newton, ounce, pennyweight, pound, Tael (Hong Kong), Tael, (Singapore), Tael (Taiwan), tical, tola, troy ounce, custom (1)									
Weighing Units, Approved Models	mg, g, ct									
Weighing Applications	Weighing, Parts Counting, Percent Weighing, Check Weighing, Dynamic Weighing, Formulation, Density Determination, Totalization, Display Hold, Batch Printing									
Pan Size	Ø 3.1 in / 80 mm			Ø 90 mm			Ø 130 mm			
Calibration	All models feature external calibration. Models feature AutoCal™ internal calibration, except for AX.../E models									
Tare Range	To capacity by subtraction									
Power Requirements	AC Adapter Input: 100-240 VAC 0.3A 50-60 Hz AC Adapter Output: 12 VDC 0.84A									
Display Type	Full-Color Touchscreen WQVGA Graphic LCD									
Display Size	4.3 in / 109 mm (diagonal)									
Base Housing (W×H×D)	13.93 x 13.39 x 9.05 in / 354 × 340 × 230 mm									
Communication	RS232, USB Device, USB Host									
Temperature Range	50°F to 86°F / 10°C to 30°C									
Humidity Range	Maximum relative humidity 80 % for temperatures up to 86°F/30°C									
Storage Conditions	14°F / -10°C to 140°F / 60°C at 10% to 90% relative humidity, non-condensing									
Shipping Dimensions	20.0 × 15.4 × 20.9 in / 507 × 387 × 531 mm									
Net Weight	11.3 lb / 5.1 kg						12.8 lb / 5.8 kg			
Shipping Weight	17.2 lb / 7.8 kg						18.8 lb / 8.5 kg			

Model	AX422	AX822	AX1502	AX2202	AX4202	AX5202	AX6202	AX2201	AX4201	AX8201	AX12001
External Calibration	AX422/E	AX822/E	AX1502/E	AX2202/E	AX4202/E	—	AX6202/E	AX2201/E	AX4201/E	AX8201/E	AX12001/E
Approved Models	—	—	AX1502M	AX2202M	AX4202M	AX5202M	AX6202M	—	—	AX8201M	AX12001M
Capacity (g)	420	820	1520	2200	4200	5200	6200	2200	4200	8200	12000
Readability d (g)	0.01								0.1		
Verification Interval* e (g)	–		0.1						–	1	
Class*	–		II						–	II	
"Repeatability (sd.), ≤5% of Full Load (g)"	0.008							0.08			
Repeatability (sd.), 5% of Full Load to Fine Range Max (g)	–										
Repeatability (sd.), 5% of Full Load to Full Range (g)	0.01							0.1			
Linearity Deviation, Typical (g)	±0.006							±0.06			
Linearity Deviation (g)	±0.02							±0.2			
Stabilization Time (sec)	≤1.5										
Sensitivity Drift (ppm/°C)	3							5			
Min-Weight (Typical) (g) (USP, K=2, U=0.10%)	16							160			
"Min-Weight (Optimal) (g) (USP, K=2, U=0.10%, SRP≤0.41d)**"	8.2 g							82 g			
Weighing Units	gram, kilogram, mesgal, momme, Newton, ounce, pennyweight, Baht, carat, grain, pound, Tael (Hong Kong), Tael (Singapore), Tael (Taiwan), tical, tola, troy ounce, custom (1)										
Weighing Units, Approved Models	–		g, kg, ct					–		g, kg, ct	
Weighing Applications	Weighing, Parts Counting, Percent Weighing, Check Weighing, Dynamic Weighing, Formulation, Density Determination, Totalization, Display Hold, Batch Printing										
Pan Size	175 × 195 mm										
Calibration	All models feature external calibration. Models feature AutoCal™ internal calibration, except for AX.../E models										
Tare Range	To capacity by subtraction										
Power Requirements	AC Adapter Input: 100-240 VAC 0.3A 50-60 Hz AC Adapter Output: 12 VDC 0.84A										
Display Type	Full-Color Touchscreen WQVGA Graphic LCD										
Display Size	4.3 in / 109 mm (diagonal)										
Base Housing (W×H×D)	13.93 x 13.39 x 9.05 in / 354 × 340 × 230 mm										
Communication	RS232, USB Device, USB Host										
Temperature Range	50°F to 86°F / 10°C to 30°C										
Humidity Range	Maximum relative humidity 80 % for temperatures up to 86°F/30°C										
Storage Conditions	14°F / -10°C to 140°F / 60°C at 10% to 90% relative humidity, non-condensing										
Shipping Dimensions	20.0 × 15.4 × 20.9 in / 507 × 387 × 531 mm										
Net Weight	10.2 lb / 4.6 kg										7.5 lb / 3.4 Kg
Shipping Weight	14.4 lb / 6.5 kg										11.6 lb / 5.3 Kg

* The value for SRP is the standard deviation for n replicate weighings (n ≥ 10)

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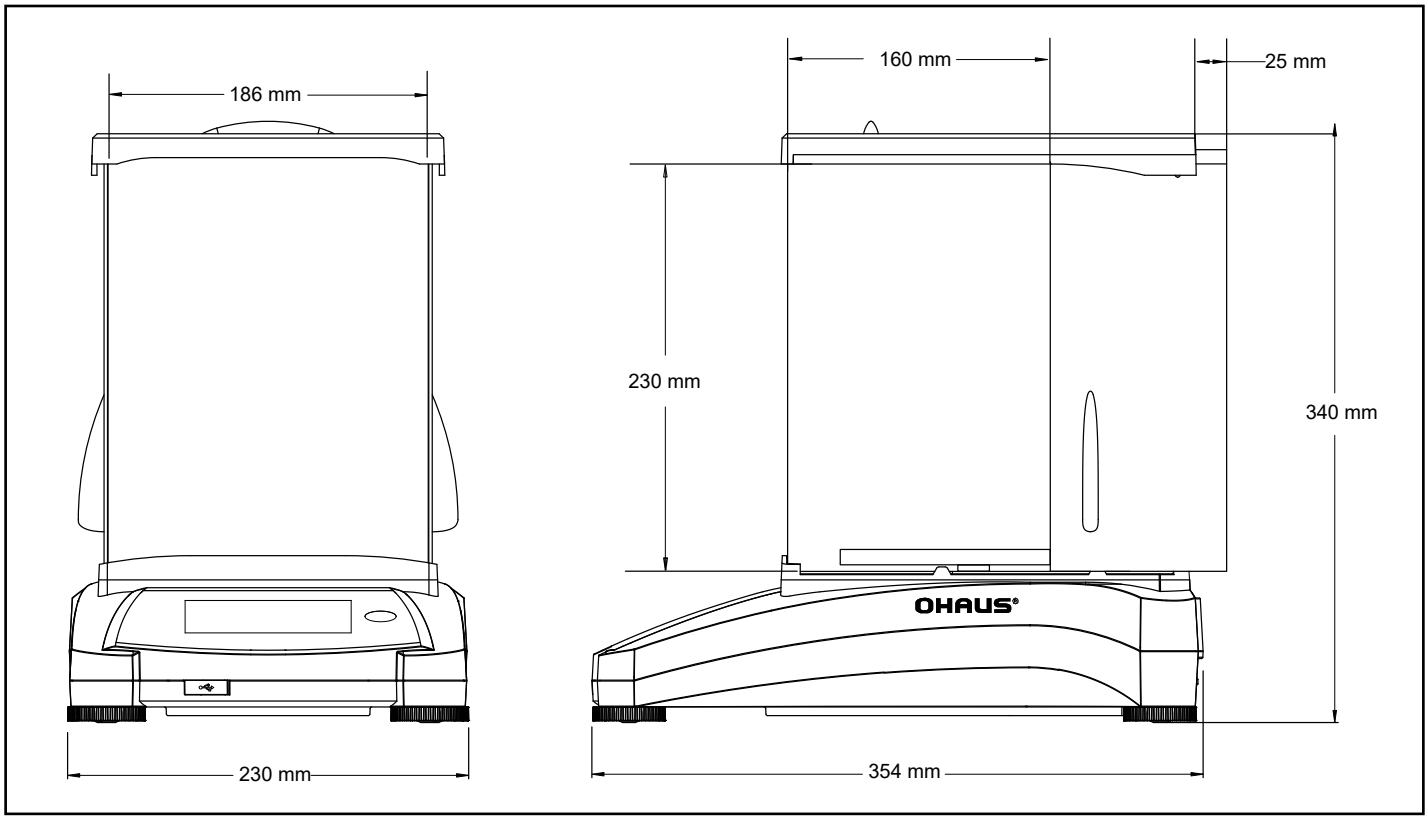
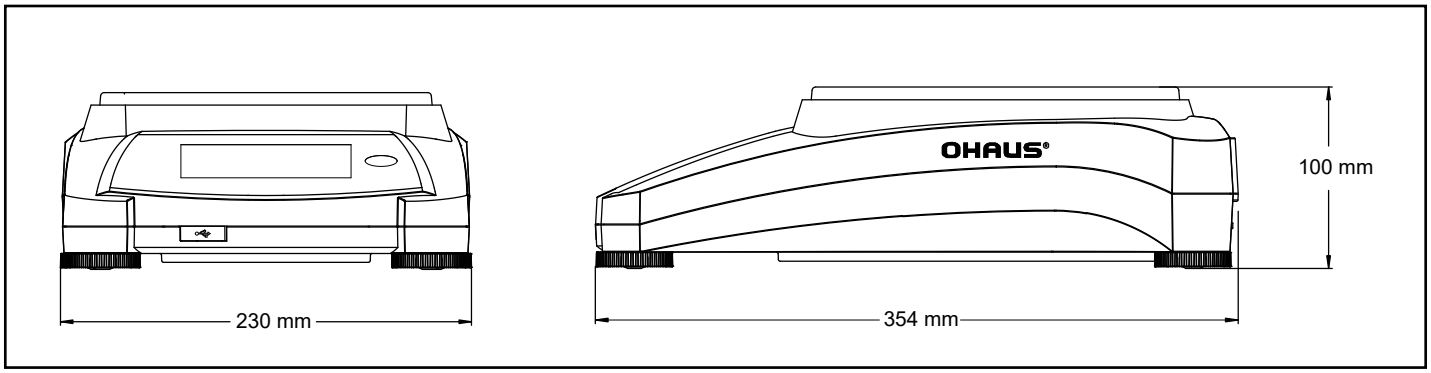
Outline Dimensions

0.1 and 1mg Models



0.01 and 0.1g Models



Additional Features

RS232 interface, integrated weigh below hook, full housing in-use cover, removable stainless steel pan, die-cast metal bottom housing, security bracket, illuminated up-front level indicator, four adjustable feet, software lockout menus, stability indicator, software overload/underload indicators, user selectable environmental settings, audible indicator, user selectable brightness settings, auto dim, auto-standby, auto-off, touchscreen calibration, auto tare, user selectable operating language (14), compatible interface command with MT-SICS and ST protocol

Compliance

Metrology (AX…M… models only): OIML R76; EN 45501
Product Safety: IEC/EN 61010-1; CAN/CSA C22.2 61010-1; UL 61010-1
Electromagnetic Compatibility: IEC/EN 61326-1(Class B, basic requirements); FCC Part 15 Class A, Canada ICES-003 Class A
Compliance Marks: CE, UKCA, CSA
Other: WEEE, RoHS

Accessories

Printer, Impact, SF40A, EU	30064202
Auxiliary Display, AD7-RS	30472064
Density Determination Kit	80253384
Cable, USB Interface (Type A to B)	83021085
Security Device (Laptop Lock)	80850043
RS232 Cable, PC 9 Pin	80500525
Static Ionizer, ION-100A, EU	30095929

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The management system governing the manufacture of this product is ISO 9001:2015 certified.

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