EXPLORER® SERIES

Semi-Micro, Analytical and Precision Balances

Reliable Precision.
Intelligent Performance.
Unmatched Functionality.

Ingeniously Practical

EXPLORER SERIES

Semi-Micro, Analytical and Precision Balances

The OHAUS Explorer series of electronic balances combine modern features and design elements to offer unmatched functionality in a line of high-performance balances unlike any other on the market. These smart and intuitive balances simplify even the most complex measurements, and are suited to both laboratory or industrial environments, and applications.

Semi-Micro
Readability of 0.01 mg and capacities up to 220 g

Analytical
Readability of 0.1 mg and capacities up to 320 g

Precision
Readabilities from 0.1 g to 1 mg and capacities up to 10 kg

High Capacity
Ultra-high resolution IP54 rated* high capacity balances with capacities up to 35 kg with 0.1 g readability

*IP54 only for weighing base

Outstanding Weighing Performance

High Performance Loadcell

Explorer's high-speed single module loadcell is precision-made from a single block of metal. This advanced design makes it rugged, highly repeatable, and suitable for a wide variety of environments and applications.

Temperature Compensated Loadcells

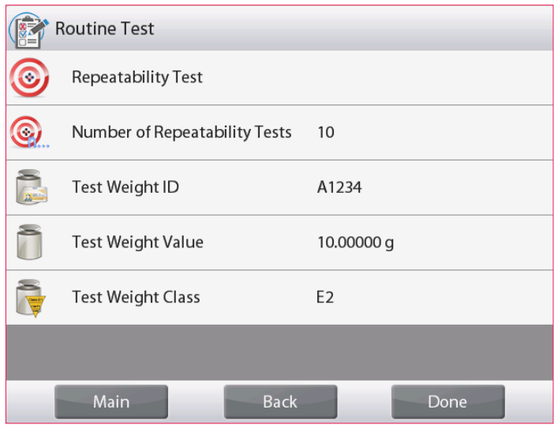
Each weighing cell is individually temperature compensated and undergoes OHAUS' rigorous testing process under a range of conditions. OHAUS' industry leading signal processing and advanced filter options prevent drift, and allows for use in sub-optimal environments.

Autocal™ Automatic Internal Calibration

OHAUS' signature AutoCal™ automatic internal calibration system ensures the balance is always ready for use with an adjustable temperature sensor.

Built In Repeatability Test

A built-in repeatability test helps evaluate the balance's performance, and aids in determining a suitable minimum weight for applications requiring high accuracy.



Online application video available

Superior Quality and Durability

High Quality Materials

High quality materials are essential for reliably precise results, as well as product durability and longevity. Explorer's weighing base features sturdy die-cast construction, and the weighing chamber features a 316 (medical class stainless steel) weighing pan and plate, as well as anti-static coatings on draftshield glass panels.

Quality Certification

OHAUS has obtained ISO14000 environmental quality certification, which recognizes manufacturers committed to using environmentally friendly materials, such as lead-free electronic components.

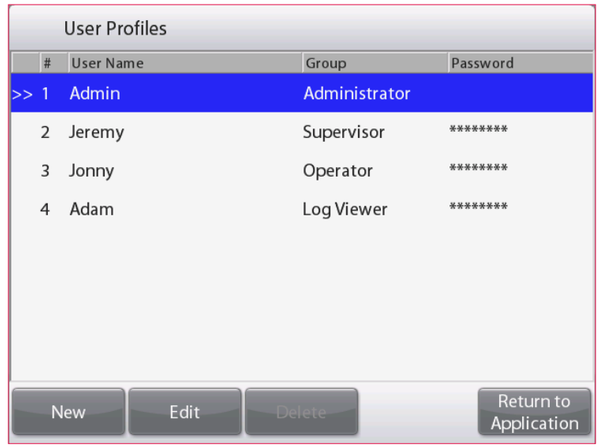
Supports Data Integrity

Explorer balances are perfect for use in regulated areas and make it easy to comply with laboratory and industrial regulations, such as those put forth by the FDA and USP. Explorer's built in features help ensure that recorded measurement data is accurate and consistent.

User Management

Explorer series balances offer a role-based user management system that prevents unauthorized changes. The enhanced user management system allows an administrator to create up to 113 user accounts and assign them to one of four pre-existing groups with access rights to the balance.

- Administrator (1)
- Supervisor (maximum of 10)
- Operators (100)
- Log Viewing (2)



Password Protection

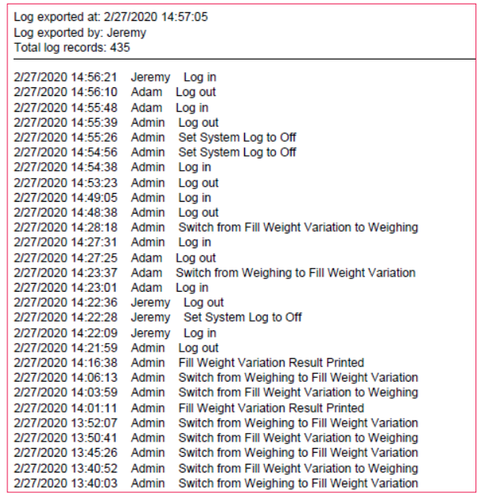
In a multi-user environment, data integrity and the ability to create user passwords with pre-set expiration dates is essential. Explorer series balances offer comprehensive password administration for increased security.

- Gives the ability to enforce complex password policies such as password strength, and frequency at which users must change them.
- Has an auto logout feature which forces a user to log in after a period of inactivity, helping to prevent access to unauthorized features or incorrectly attributing measurements to a different user.

Superior Quality and Durability

System Log and Traceability

In certain circumstances, it is necessary to keep a complete chronological log of system events and changes to operational parameters of a balance in order to comply with rules and regulations within a particular industry.

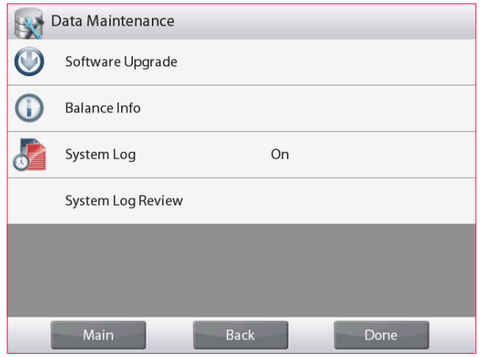


Real Time Clock and GMP/GLP Fields

A built-in real time clock which allows for date and time stamping of results and a large set of GMP/GLP fields allows for the identification of the balance, and the sample batch and I.D., which can be printed with each result. Together with the user management system, it makes it easy to identify the sample, who made a measurement and when, and which balance was used.

System Event Log

Explorer balances have a secure, temper-proof internal event log that records events such as changes to balance settings, user events (such as user login or the creation of a new user), calibrations or adjustments performed, etc. The event log can be either viewed on the device or exported directly to a PDF on the device, with no PC or additional software required. The system event log can hold up to 5000 records.



Calibration Log

A built-in calibration log automatically records the results of all calibrations performed on the balance, thereby facilitating traceability of captured data by allowing a user or auditor to verify the condition of the balance during the period in which a measurement was made.

Minimum Weight

Explorer balances facilitate the implementation of a minimum weight standard in applications where a maximum uncertainty tolerance must be guaranteed. In the event that a minimum weight is specified, a minimum weight enforcement feature can ensure that it is strictly observed by notifying the user if a net weight falls below the set weight, and prevents data from being captured (e.g. printed).

Online application video available

Operational Efficiency

Intuitive Interface

Explorer offers an intuitive interface, and a large, color graphic touchscreen makes setup easy. The display can be set to any of 14 languages.

Library

Explorer's built in library simplifies working with multiple samples, allowing application settings to be saved and recalled for reuse.

Barcode Scanner Support

By using a connected barcode scanner, Explorer balances allow quick entry of sample IDs which can be used to identify individual samples on printout and captured data. OHAUS supports several scanners from Datalogic (Heron, QuickScan, Gryphon 4100 and 4400).

Touchless Sensors

Multiple programmable touchless sensors allow the user to initiate balance functions such as zero, tare, print, automatically open draftshield doors, and more.

Online application video available

Weighing Applications

Multiple weighing applications with built in statistics simplify advanced workflows, and result in saved time and reduced errors. Explorer balances provide the following weighing applications:

Basic Weighing
Displays the weight of the object.

Parts Weighing
Displays the number of pieces or parts based on an average piece weight.

Percent Weighing
Displays the current weight as a percentage of a reference weight.

Check Weighing
Checks if the current weight is within tolerances (e.g. an over and under limit).

Dynamic Weighing
Used to weigh objects that are not stable, such as animals.

Filling
Used to add weight to reach a target value.

Totalization
Sums multiple samples which may ultimately exceed the balance's capacity or would not fit on the pan.

Formulation
Used to combine various elements in proportionate amounts.

Differential Weighing
Calculates the difference in weights of multiple samples taken at different times.

Density Determination
Determines the density of a solid or a liquid.

Peak Hold
Captures the maximum weight in a series of weighings.

Pipette Adjustment
Calculates the inaccuracy and imprecision of pipettes, used to check if a pipette's dosage is within tolerances.

SQC (Statistical Quality Control)
Used to determine the homogeneity of items in a batch and batches over time.

Fill Weight Variation
Checks the homogeneity of a series of items.

Advanced Connectivity & Communication

Communication Interfaces

Explorer balances are equipped with several communication interfaces that allow balances to be connected directly to a PC, integrated into a larger system such as LIMS or ERP, or connect to available accessories like printers and barcode scanners including:

- RS-232
- USB host and USB device ports
- An optional Ethernet port

Easy and Configurable Data Output

A configurable print output allows you to select which information is captured or printed as well as define the printout format, which provides flexibility when connecting to printers or computer systems.

Using OHAUS' free Serial Port Data Collection (SPDC) software, data from the balance can be easily captured onto a PC, into text files, directly into Excel, or into databases such as Microsoft Access.

Accessories

The Explorer balance is compatible with a wide array of available accessories designed to make measuring for specific applications and recording data easy.

All Explorer balances can be used with included weigh below hooks, which allow large samples to be weighed by hanging them below the balance.

Impact SF40A printer

Density kit

Pipette adjustment kit

Barcode scanner

Stand-alone Ionizer

Auxiliary display (AD7-RS)

RS232 - USB cable

Grid pan (for semi-micro models)

Ethernet option

OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of balances and scales, lab equipment and lab instruments that meet the weighing, sample processing and measurement needs of multiple industries. We are a global leader in the laboratory, industrial and education markets, as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS produces lab balances, industrial scales, lab equipment and lab instruments that are precise, reliable and affordable, and backed by industry-leading customer support.

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With offices throughout Europe, Asia, and Latin America

***ISO 9001:2008**
Registered Quality Management System

Ingeniously Practical

ADVENTURER™

Analytical and Precision Balances

By Model

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.

ADVENTURER™ *Analytical and Precision Balances*

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.

*Only NTEP model(AXxxxN) will not have display hold.

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

ADVENTURER™ *Analytical and Precision Balances*

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 features power saving functions that make it environmentally friendly. The auto-off and other brightness setup will save electricity when the balance is not in use.

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

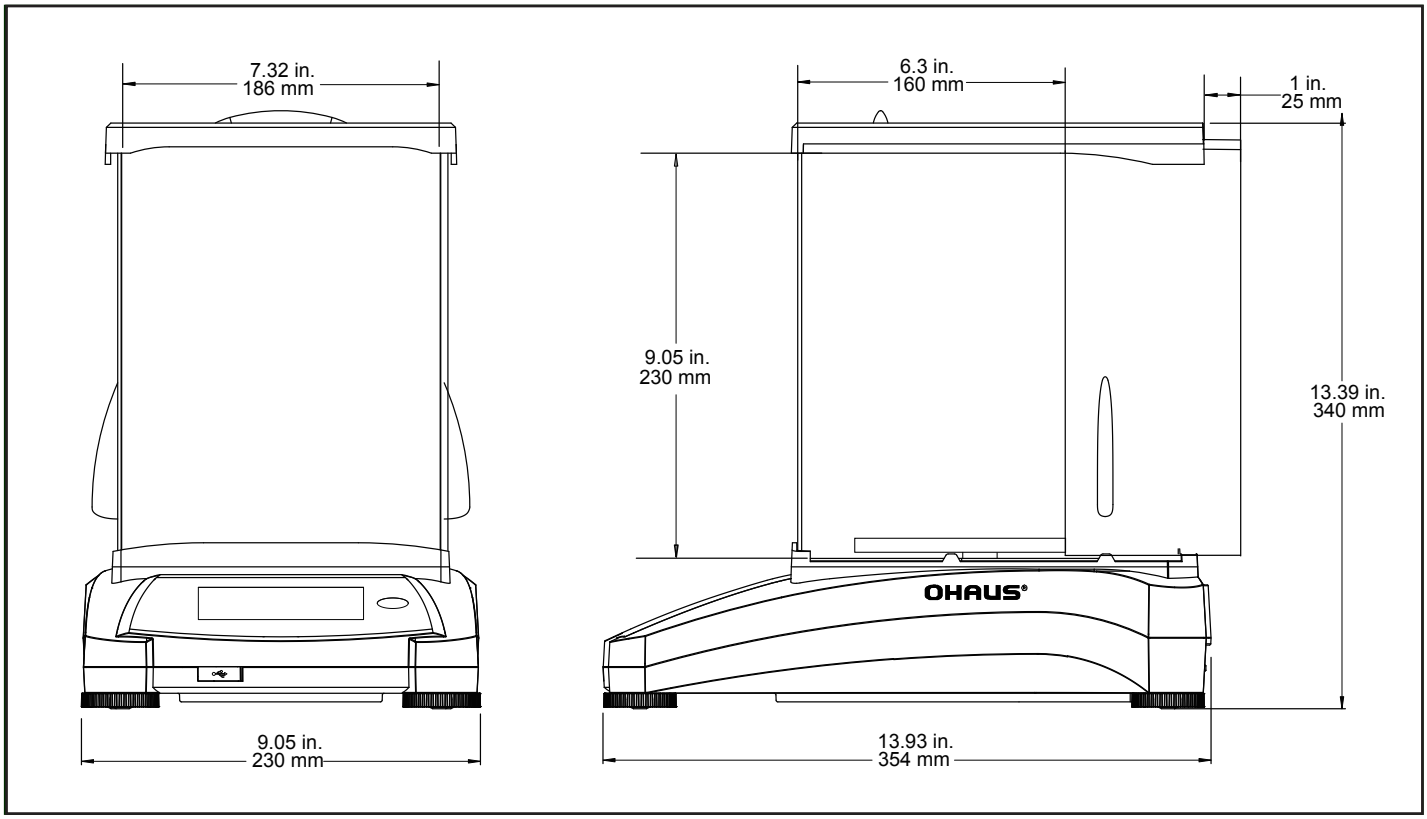
Real Time Clock with GLP/GMP Data

- 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

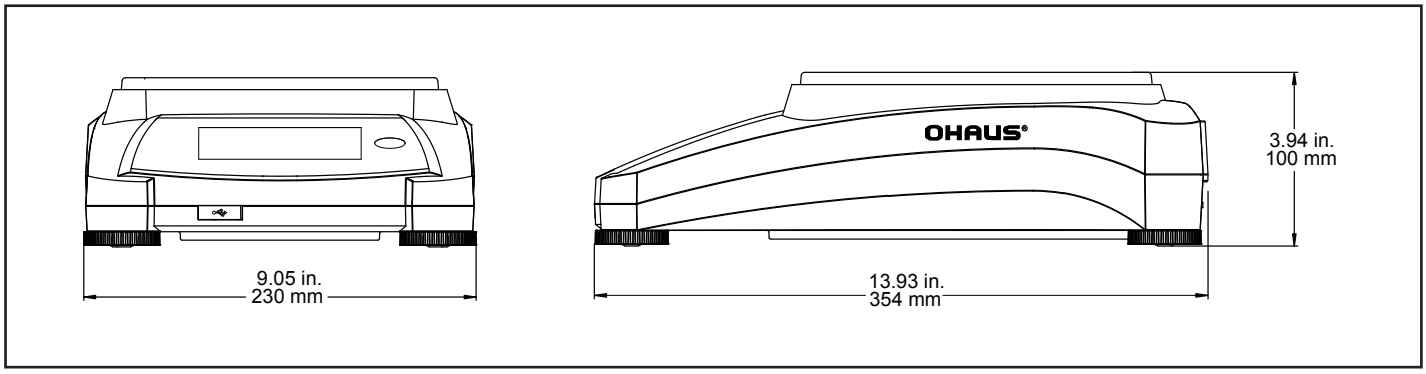
ADVENTURER™ *Analytical and Precision Balances*

Outline Dimensions

0.1 and 1mg Models



0.01 and 0.1g Models



Accessories

ION-100A US Standalone Ionizer	30130302
STP103 Printer	80251992
SF40A Impact Printer	30064203
Auxiliary Display	30472064
Density Determination Kit	80253384
Cable, USB Interface (Type A to B)	83021085
Security Device (Laptop Lock)	80850043
RS232 Cable, PC 9 Pin	80500525

ADVENTURER™ *Analytical and Precision Balances*

Specifications

Model	AX124	AX224	AX324	AX223	AX423	AX523	—	AX622	—	AX1502	AX2202	AX4202	AX5202	—	AX4201	AX8201
External Calibration	AX124/E	AX224/E	—	AX223/E	AX423/E	AX523/E	AX422/E	—	AX822/E	AX1502/E	AX2202/E	AX4202/E	—	AX2201/E	AX4201/E	AX8201/E
Approved Models	—	AX224N	—	AX223N/E	AX423N AX423N/E	AX523N/E	—	AX622N/E	—	AX1502N/E	AX2202N/E	AX4202N/E	—	—	—	AX8201N/E
Capacity (g)	120	220	320	220	420	520	420	620	820	1,520	2,200	4,200	5,200	2,200	4,200	8,200
Readability d (g)	0.0001			0.001			0.01							0.1		
Verification Interval* e (g)	—	0.001	—	0.01			0.1						—			1
Class*	—	I	—	II									—			II
Repeatability (sd.), ≤5% of Full Load (g)	0.00008			0.0008			0.008							0.08		
Repeatability (sd.), 5% of Full Load to Full Range (g)	0.0001			0.001			0.01							0.1		
Linearity Deviation, Typical (g)	±0.00006			±0.0006			±0.006							±0.06		
Linearity Deviation (g)	±0.0002			±0.002			±0.02							±0.2		
Stabilization Time (sec)	≤3			≤2			≤1.5									
Sensitivity Drift (ppm/°C)	2			3			3							5		
Min-Weight (Typical) (g) (USP, K=2, U=0.10%)	0.16			1.6			16							160		
Min-Weight (Optimal) (g) (USP, K=2, U=0.10%, SRP≤0.41d)**	0.082g			0.82g			8.2g							82 g		
Weighing Units	gram, milligram, 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	ct, grain, g, mg, oz, ozt, dwt						ct, grain, g, oz, ozt, dwt, lb, kg									
Weighing Applications	Weighing, Parts Counting, Percent Weighing, Check Weighing, Dynamic Weighing, Formulation, Density Determination, Totalization, Display Hold, Batch Printing															
Pan Size	Ø 3.5 in / 90			Ø 5.1 in / 130			6.9 x 7.7 in / 175 x 195									
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						13.93 × 3.94 × 9.05 in / 354 × 100 × 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						22.0 × 15.5 × 11.9 in / 557 × 392 × 301 mm									
Net Weight	11.3 lb / 5.1 kg			12.8 lb / 5.8 kg			10.2 lb / 4.6 kg									8.4 lb / 3.8 kg
Shipping Weight	17.2 lb / 7.8 kg			18.8 lb / 8.5 kg			14.4 lb / 6.5 kg									12.6 lb / 5.7 kg

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

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: NIST Handbook 44, Measurement Canada Weights and Measures Regulations (Class I, nmax 220000; Class II, nmax 62000)

Product Safety: CAN/CSA C22.2 61010-1, UL 61010-1, IEC 61010-1

Electromagnetic Compatibility: FCC Part 15 Class A, ICES-001 Class A, IEC 61326-1 (emissions Class B, immunity Basic requirements)

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

OHAUS®

PIONEER™

Semi-Micro, Analytical and Precision Balances

Affordable Balance to Achieve Reliable Results

The Pioneer PX combines essential weighing functionality with competitive performance, offering high accuracy and repeatability for applications in laboratory, industrial and education settings. The PX is affordably priced, intuitively designed for intelligent operation with a second line display for additional information, and USB and RS-232 connectivity for easy communication.

Unique Features Include:

- 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.
- Pioneer features a second line display for additional information or guidance, a static removal bar for convenient grounding, and USB connectivity.

PIONEER™ *Semi-Micro, Analytical and Precision Balances*

GLP/GMP and Password Protection

A real-time clock (RTC) keeps accurate time, even during power loss. GLP/GMP data output capability allows for sample name, project, user and balance IDs to be recorded, helping to meet traceability and compliance requirements.

Password protection reduces the potential risk of accidental or unauthorized changes in balance settings such as date and time, external calibration, print settings etc.

Multiple Application Modes

The PX features six standard modes including Weighing, Parts Counting, Percent Weighing, Dynamic Weighing, Density Determination and Formulation.

Equipped with USB and RS232 connectivity ports, the PX allows for easy communication with a PC, impact printer or a Zebra label printer.

Power Saving Functions

The PX features power saving functions that makes it environmentally friendly. The auto-off and other brightness setup will save the electricity when the balance is not used.

PIONEER™ *Semi-Micro, Analytical and Precision Balances*

Durably constructed of cast metal lower housing, metal sub-pan and stainless steel weighing pan for long-term use.

A static removal bar (constructed of permanent static electric dissipative ABS) provides a convenient grounding location.

RS-232 and USB device ports allow for easy connectivity to PCs and PLCs. Equipped with a security lock to prevent unauthorized use.

Large viewing angle with bright backlit LCD display.

Two line display provides additional information or guidance prompts to the user.

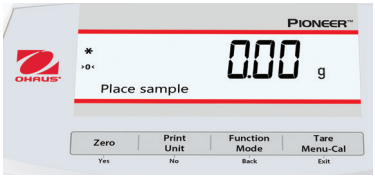
Four quick keys enable easy operation of multiple weighing modes.

InCal™ Models	PX85*	PX225D*	PX84	PX124	PX224	PX163	PX323	PX623
ExCal Models			PX84/E	PX124/E	PX224/E	PX163/E	PX323/E	PX623/E
Capacity (g)	82	82/220	82	120	220	160	320	620
Readability d, Fine Range (g)	0.00001		-			-		
Readability d, Full Range (g)	0.00001	0.0001	0.0001			0.001		
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.), Fine Range Max to Full Range (g)	0.00002	0.0001	0.0001			0.001		
Linearity deviation, Typical (g)	± 0.00006		±0.00006			± 0.0006		
Linearity deviation (g)	± 0.0001		± 0.0002			± 0.002		
Stabilization Time (s)	10		3			2		
Typical Minimum Weight USP (g), (USP K=2, U=0.10%)	0.02		0.16			1.6		
Min-Weight (optimal) (g) (USP, K=2, U=0.10%, SRP≤0.41d**)	0.0082		0.082			0.82		
Units	Milligram, Gram, Kilogram, Ounce, Pound, Carat, Pennyweight, Troy Ounce, Grain, Newton, Hong Kong Tael, Singapore Tael, Taiwan Tael, Momme, Tical (MM), Mesghal, Tola (India), Baht, 1 custom unit							
Applications	Basic Weighing, Parts Counting, Percent Weighing, Animal Weighing, Density Determination, Formulation							
Pan Size (Ø)	3.15 in. / 80 mm		3.54 in. / 90 mm			4.72 in. / 120 mm		
Draftshield Size	6.8 × 5.2 × 8.1 in. / 172 × 131 × 205 mm							
Power Supply	Power Input: 100–240V ~ 200mA 50–60Hz 12–18VA Power Output: 12 VDC 0.5A							
Assembled Dimensions (W × D × H)	8.2 × 12.6 × 12.2 in. / 209 × 321 × 309 mm							
Operating Conditions	Operating conditions for ordinary lab application: 50° F to 86° F / +10 to 30° C (operability guaranteed between +5 and 40° C)							
Storage Conditions	14° F to 140° F / -10° C to 60° C at 10% to 90% relative humidity, non-condensing							
Net Weight	10 lb / 4.5 kg							
Shipping Weight	15.4 lb / 7 kg							
Shipping Dimensions (W × D × H)	21.7 × 15.2 × 11.5 in. / 507 × 387 × 531 mm							

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

PIONEER™ *Semi-Micro, Analytical and Precision Balances*

RS-232 and USB device ports allow for easy connectivity to PCs and PLCs. Equipped with a security lock to prevent unauthorized use.



Large viewing angle with bright backlit LCD display.

Two line display provides additional information or guidance prompts to the user.

Four quick keys enable easy operation of multiple weighing modes.

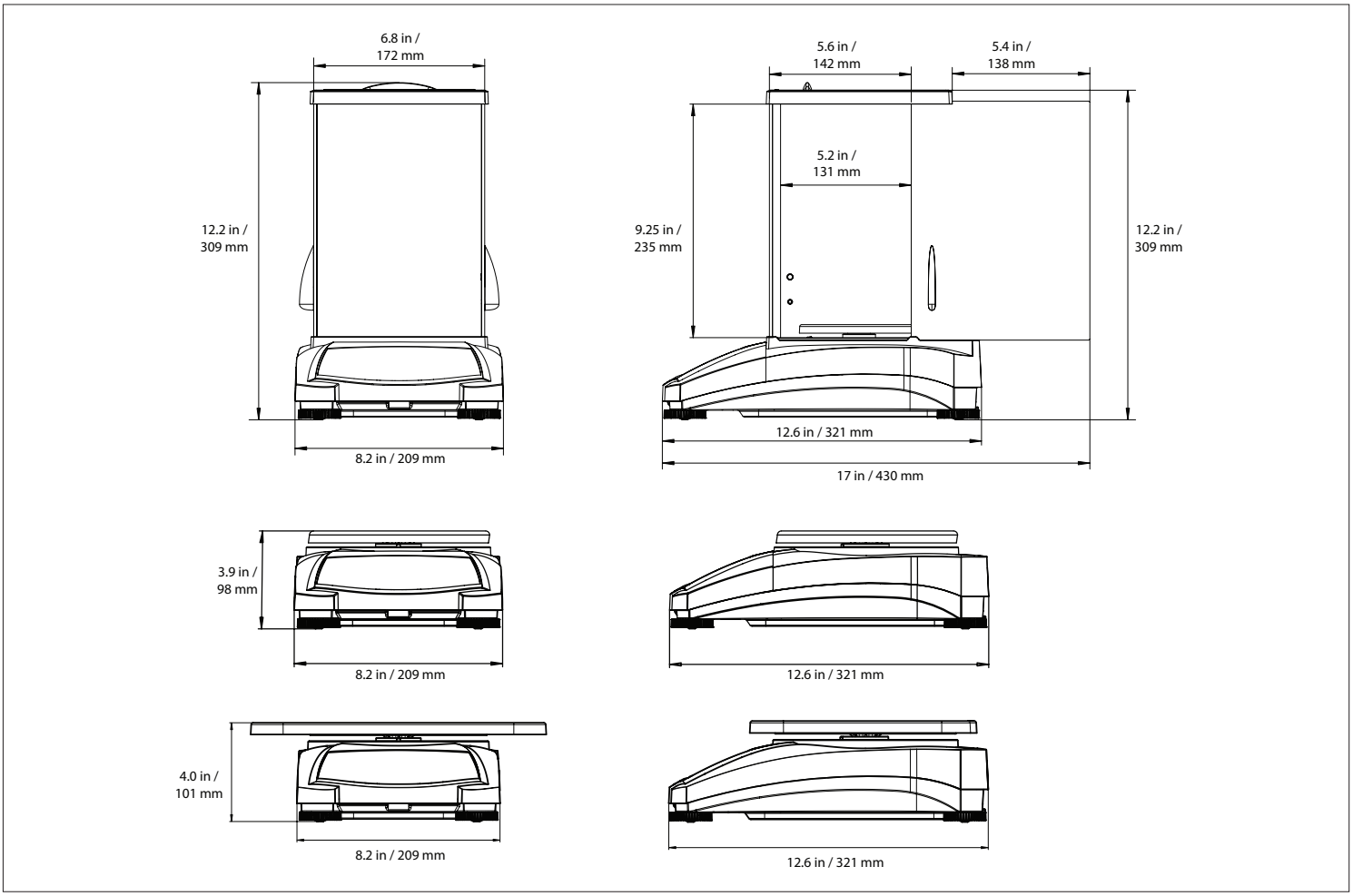
PX12001 and PX12001/E model

InCal™ Models	PX1602	PX2202	PX3202	PX4202	PX6202	PX2201	PX4201	PX12001
ExCal Models	PX1602/E	PX2202/E	PX3202/E	PX4202/E	PX6202/E	PX2201/E	PX4201/E	PX12001/E
Capacity (g)	1600	2200	3200	4200	6200	2200	4200	12000
Readability (g)	0.01					0.1		
Repeatability (sd.), ≤5% of Full Load (g)	0.008					0.08		
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 (s)	1							
Typical Minimum Weight USP (g), (USP K=2, U=0.10%)	16 g					160 g		
Optimized Minimum Weight (USP, U=0.10%, K=2) SRP≤0.41d**	8.2 g					82 g		
Units	Milligram, Gram, Kilogram, Ounce, Pound, Carat, Pennyweight, Troy Ounce, Grain, Newton, Hong Kong Tael, Singapore Tael, Taiwan Tael, Momme, Tical (MM), Mesghal, Tola (India), Baht, 1 custom unit							
Applications	Basic Weighing, Parts Counting, Percent Weighing, Animal Weighing, Density Determination, Formulation							
Pan Size (Ø)	7.09 in. / 180 mm							7.6 x 9.8 in. / 193 x 248 mm
Draftshield Size	N/A							
Power Supply	Power Input: 100–240V ~ 200mA 50–60Hz 12–18VA Power Output:12 VDC 0.5A							
Assembled Dimensions (W × D × H)	8.2 × 12.6 × 3.9 in. / 209 × 321 × 98 mm							8.2 x 12.6 x 4.0 in. / 209 x 321 x101 mm
Operating Conditions	Operating conditions for ordinary lab application: 50° F to 86° F / +10 to 30° C (operability guaranteed between +5 and 40° C)							
Storage Conditions	14° F to 140° F / -10° C to 60° C at 10% to 90% relative humidity, non-condensing							
Net Weight	7.7 lb / 3.5 kg							
Shipping Weight	11 lb / 5 kg							
Shipping Dimensions (W × D × H)	21.7 × 15.2 × 11.5 in. / 550 × 385 × 291 mm							

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

PIONEER™ SEMI-MICRO, ANALYTICAL AND PRECISION BALANCES

Outline Dimensions



Other Standard Features and Equipment

Metal base, plastic top housing, removable stainless steel pan, removable glass draftshield or side doors, Real Time Clock with GLP/GMP Data, integrated weigh-below-hook, security bracket, calibration lock and in-use cover, user-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, overload indicator, software lockout and reset menu, user-selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator, 11 operating languages

Compliance

- **Product Safety:** IEC/EN 61010-1; CAN/CSA C22.2 61010-1; UL 61010-1
- **Electromagnetic Compatibility:** IEC/EN 61326-1 Class B, Basic Environments; FCC Part 15 Class A; Canada ICES-003 Class A
- **Compliance Marks:** CSA

Accessories

Auxiliary Display	30472064
Density Kit	80253384
Sinker Glass for Density Determination	83034024
USB Interface Cable	83021085
Security Device	80850043
RS-232 Cable (25-pin)	80500524
RS-232 Cable (9-pin)	80500525
In-Use Cover	30372546
Printer SF40A	30064203
ION-100A	30130302
PX Full Housing In-Use Cover for 0.01g and 0.1g Model	30759721
ACC. Pan 12kg 300X225 PX	30868077

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

OHAUS®

PR SERIES

Analytical and Precision Balances

Economical Balances For Routine Weighing Applications

Offering accuracy and repeatability in essential weighing applications in laboratory, industrial and education settings, PR Analytical and Precision Balances deliver competitive performance at an economical price. Featuring RS-232 connectivity for easy communication, and a backlit display and a simple interface for uncomplicated operation, the PR is perfectly designed for your workplace.

Standard Features:

- **Basic Functionality for Routine Weighing Applications**
  The PR is equipped with three essential weighing modes, RS-232 connectivity for data transfer and storage, making it ideal for routine weighing applications.
- **Designed for Uncomplicated Operation with Easy-to-Use Display and Interface**
  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.
- **Smart Design and Durable Construction**
  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.

PR SERIES *Analytical and Precision Balances*

Model (InCal™)		PR124	PR224							
Model (ExCal)	**PR64/E**	**PR124/E**	**PR224/E**	**PR223/E**	**PR523/E**	**PR1602/E**	**PR2202/E**	**PR4202/E**	**PR2201/E**	**PR4201/E**
Capacity (g)	62	120	220	220	520	1600	2200	4200	2200	4200
Readability (g)	0.0001			0.001					0.1	
Repeatability stdev (g)	0.0001			0.001		0.01			0.1	
linearity (g)	±0.0002			±0.002		±0.02			±0.2	
Stabilization Time (s)	4			2		1				
Units	g, mg, ct, dwt, grain, oz, ozt					g, kg, ct, dwt, grain, oz, ozt, lb				
Applications	Basic Weighing, Parts Counting, Percent Weighing									
Pan Size Ø	3.54 in. / 90 mm			4.72 in. / 120 mm		7.09 in. / 180 mm				
Draftshield Size	6.8 × 5.1 × 8.1 in. / 172 × 131 × 205 mm					N/A				
Power supply	Power input: 100–240V ~ 200mA 50–60Hz 12–18VA Power output: 12 VDC 0.5A									
Overall Dimensions (W × D × H)	7.9 × 12.5 × 11.9 in. / 201 × 317 × 303 mm					7.9 × 12.5 × 3.7 in. / 201 × 317 × 93 mm				
Operating Conditions	50° F to 86° F / 10° C to 30° C									
Storage Conditions	14° F to 140° F / -10° C to 60° C at 10% to 90% relative humidity, non-condensing									
Net Weight	10 lb / 4.5 kg					7.7 lb / 3.5 kg				
Shipping Weight	15.4 lb / 7 kg					11 lb / 5 kg				
Shipping Dimensions (W × D × H)	20 × 15 × 21 in. / 507 × 387 × 531 mm					21.5 × 15 × 11.5 in. / 550 × 385 × 291 mm				

PR SERIES *Type Approved Balances*

Economical Balances For Legal-For-Trade Applications

The PR Series is NTEP certified and Measurement Canada approved, making it suitable for legal-for-trade applications in the United States and Canada. The PR is equipped with basic weighing, parts counting and percent weighing applications, and is capable of displaying weight in grams, milligrams, carats, ounces, and more. The PR can also be connected to point-of-sale systems or printers via its standard RS-232 port, or via USB or Ethernet through an interface kit. Featuring an easy-to-read, brightly-lit display and a simple user interface, the PR is well-constructed for long-term use, and delivers competitive performance at an economical price.

Model (InCal™)		**PR523N**								
Model (ExCal)	**PR323N/E**	**PR523N/E**	**PR322N/E**	**PR522N/E**	**PR822N/E**	**PR2202N/E**	**PR5202N/E**	**PR2201N/E**	**PR5201N/E**	**PR6201N/E**
Capacity (g)	320	520	320	520	820	2200	5200	2200	5201	6200
Readability d (g) (LFT off)	0.001		0.01					0.1		
Readability d (g) (LFT on)	0.00[1]		0.01		0.1	0.0[1]		0.1		1
Verification Scale Interval e (g) (LFT on)	0.01				0.1					1
Class	II				III	II				III
Repeatability stdev (g)	0.001				0.01			0.1		
linearity (g)	±0.002				±0.02			±0.2		
Stabilization Time (s)	2				1					
Units	g, mg, ct, dwt, grain, oz, ozt				g, kg, ct, dwt, grain, oz, ozt, lb					
Applications	Basic Weighing, Parts Counting, Percent Weighing									
Pan Size Ø	4.72 in. / 120 mm				7.09 in. / 180 mm					
Draftshield Size	6.8 × 5.1 × 8.1 in. / 172 × 131 × 205 mm				N/A					
Power supply	Power input: 100–240V ~ 200mA 50–60Hz 12–18VA Power output: 12 VDC 0.5A									
Overall Dimensions (W × D × H)	7.9 × 12.5 × 11.9 in. / 201 × 317 × 303 mm					7.9 × 12.5 × 3.7 in. / 201 × 317 × 93 mm				
Operating Conditions	50° F to 86° F / 10° C to 30° C									
Storage Conditions	14° F to 140° F / -10° C to 60° C at 10% to 90% relative humidity, non-condensing									
Net Weight	10 lb / 4.5 kg				7.7 lb / 3.5 kg					
Shipping Weight	15.4 lb / 7 kg				11 lb / 5 kg					
Shipping Dimensions (W × D × H)	20 x 15 x 21 in. / 507 x 387 x 531 mm				21.5 x 15 x 11.5 in. / 550 x 385 x 291 mm					

PR SERIES *Analytical and Precision Balances*

Other Standard Features and Equipment

ABS top housing, removable stainless steel pan, glass draftshield with sliding top door, integrated weigh-below-hook, security bracket, calibration lock, user-selectable environmental filters and brightness settings, auto-tare, auto-dim, user-selectable span calibration points, software lockout and reset menu, user-selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator

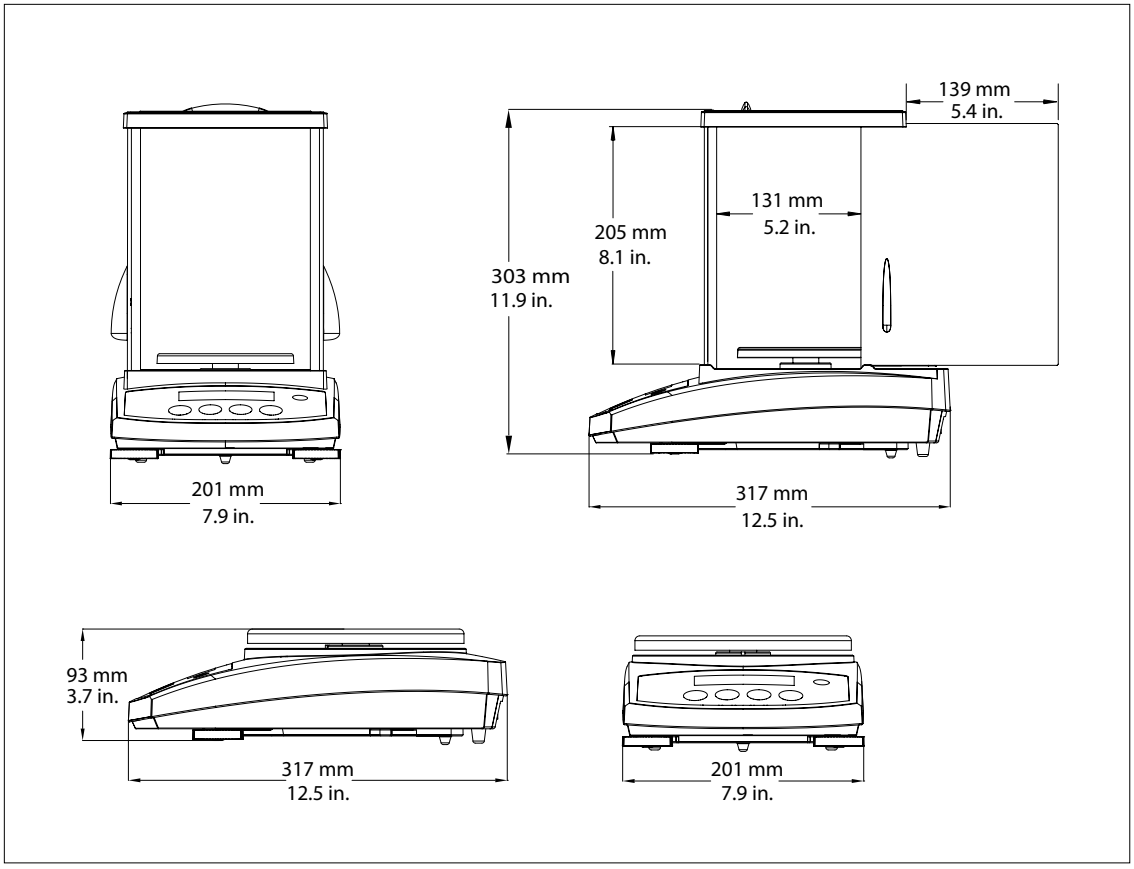
Compliance

- **Metrology:** NIST Handbook 44; Canada Weights and Measures Regulations (PR…N models only)
- **Product Safety:** IEC/EN 61010-1; CAN/CSA C22.2 61010-1; UL 61010-1
- **Electromagnetic Compatibility:** IEC/EN 61326-1 Class B, Basic Environments; FCC Part 15 Class A; Canada ICES-003 Class A
- **Compliance Marks:** CSA

Accessories

Auxiliary Display	30472064
Density Kit	80253384
RS-232 Cable (9-pin)	80500525
Dust Cover	30093334
In-use Cover	30372547
Printer SF40A	30064203
Interface Kit, RS-232 (USB)	30304101
Interface Kit, RS-232 (Ethernet)	30304102

Dimensions



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

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