



### ***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

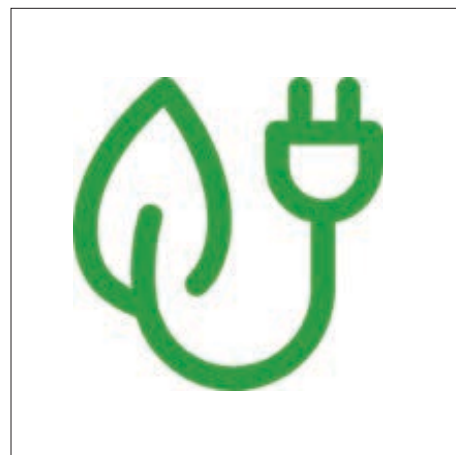
The PX features six standard modes including Weighing, Parts Counting, Percent Weighing, Dynamic Weighing, Density Determination and Formulation.

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.



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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)

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



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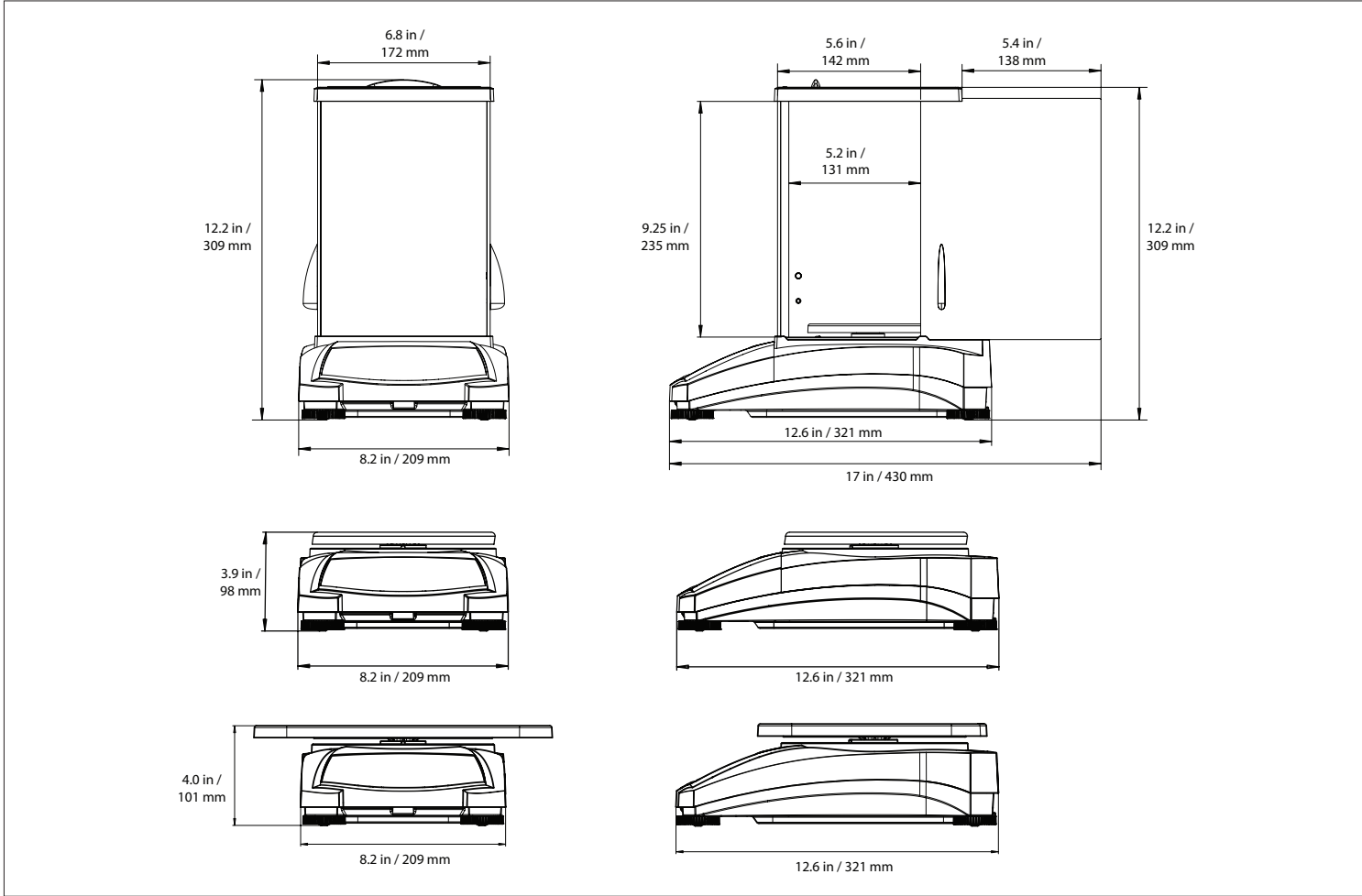
PX12001 and PX12001/E model

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

