



# Pioneer® Series

Analytical and Precision Balances



## *The Best Balance For Basic Weighing!*

The OHAUS Pioneer Series of analytical and precision balances are designed for basic routine weighing in a variety of laboratory, industrial and education applications. Now with both internal and external calibration models and the right combination of performance and features, the OHAUS Pioneer offers uncomplicated performance for all your basic weighing needs.

### *Standard Features Include:*

- **Easy to Clean Analytical Draftshield** — Pioneer's draftshield is designed with all glass panels, including three sliding doors. All panels are easy to remove and replace, and together with a stainless steel bottom, make it fast and easy to clean.
- **Bright Backlit Display** — The bright backlit LCD display is easy-to-view in any environment.
- **Selectable Environmental Settings** — Three filter modes and adjustable zero tracking adjust balance sensitivity to environmental disturbances, or application requirements.

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## Removable Doors Provide Convenient Access and Easy Cleaning

To address the ease of cleaning requirement often expressed by routine users, Pioneer's draftshield has been designed with easy to remove doors and panels. Disassembly takes just seconds and all components including the balance housing can be quickly wiped clean.



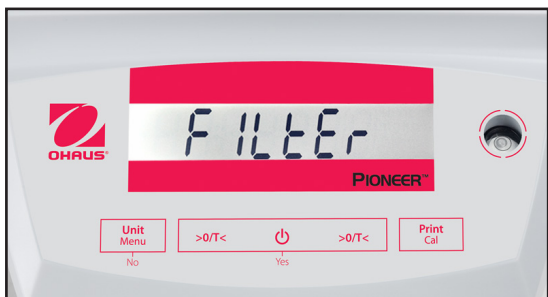
Periodic cleaning made easy helps avoid sample contamination and extends product life. In addition, a standard in-use cover provides added protection against accidental spillage and helps minimize the chance of damage to the display and keypad.

Should breakage occur, each replacement door or panel can be installed in seconds.



## Backlit Display Bolsters Visibility

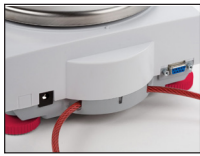
The bright backlit LCD display provides ample lighting, making the display very easy-to-view in laboratories with dim lighting.



## Selectable Environmental Settings For Working in Practically Any Condition

To help adapt the balance to real life working conditions, Pioneer is designed with selectable environmental settings. When working in harsh environments, the balance can be adjusted to compensate for vibrations and other disturbances. Conversely, the balance can be adjusted for working in slow filling applications where sensitivity is a must.

## Standard Features



### Integral Security Bracket

Allows you to secure your balance to a workstation to prevent unwarranted movement or theft

### RS232 Interface

Pioneer's RS232 allows connection to an Ohaus printer or a computer. Sends Balance ID plus spaces for recording User ID, Project ID, time and date

### Integral Menu Lock

A combination of software and a mechanical switch locks menus, including calibration



### Weigh-Below Hook

Pioneer's built-in weigh-below hook allows you to suspend an item below the balance to calculate density/specific gravity



### Multiple Application Modes and Units

Pioneer features basic weighing, parts counting and percent weighing, density weighing, and dynamic weighing and 15 international weighing units including one custom unit



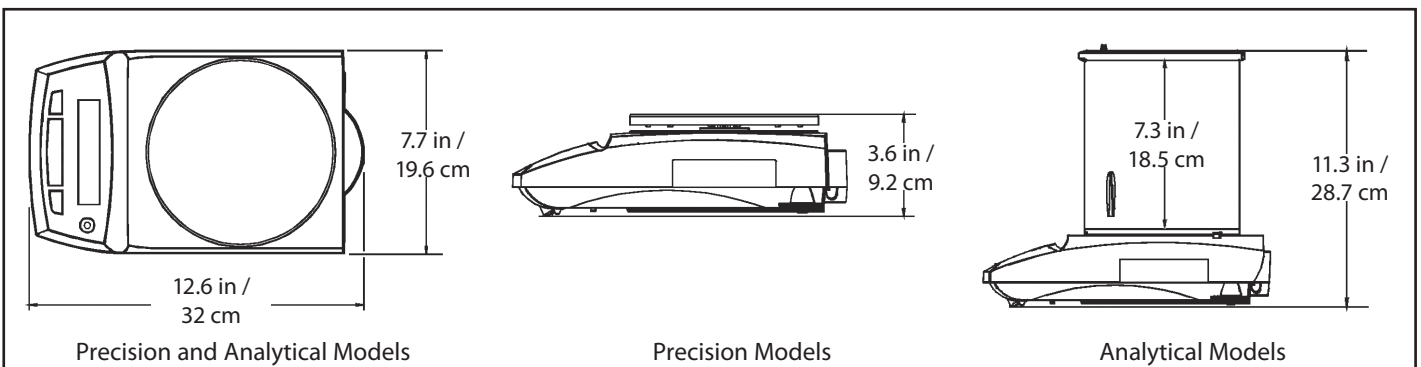
### Up-Front Level Indicator

A quick glance at the up-front level indicator helps to ensure that the balance is level prior to each use

### Backlit Display

Enables optimal viewing of results in various lighting conditions

## Outline Dimensions



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Excal Model	PA84	PA124	PA224	PA163	PA323	PA523	PA1602	PA2202	PA3202	PA4202	PA2201	PA4201
Incal Model	PA84C	PA124C	PA224C	PA163C	PA323C	PA523C	PA1602C	PA2202C	PA3202C	PA4202C	PA2201C	PA4201C
Capacity (g)	85	120	220	160	320	520	1600	2200	3200	4200	2200	4200
Readability d	0.1mg			1mg			10mg				100mg	
Repeatability (Std Dev)	0.1mg			1mg			10mg				100mg	
Linearity	0.2mg		0.3mg	2mg			20mg				100mg	
Application Modes	Weighing, Parts Counting, Percent Weighing, Animal/Dynamic Weighing, Density Determination											
Weighing Units	mg, g, ct, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, custom unit						g, kg, lb, ct, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, custom unit					
Platform Size	3.54 in / 9 cm diameter			4.72 in / 12 cm diameter			7.1 in / 18 cm diameter					
Cal Weight-Span	50,80g	50,100g	100,200g	100,150g	200g,300g	200,500g	1,1.5kg	1,2kg	2,3kg	2,4kg	1,2kg	2,4kg
Cal Weight-Linearity	20/60	50/100g	100/200g	100/150g	150/300g	200/500g	1/1.5kg	1/2kg	1.5/3kg	2/4kg	1/2kg	2/kg
Taring Time	1 second											
Stabilization Time	3 seconds											
Draftshield	7.3 in / 18.5 cm inside height						N/A					
Operating Conditions	50° F / 10° C to 104° F / 40° C at 10% to 80% relative humidity, non-condensing, up to 4000m above sea level											
Storage Temperature	-40° F / -40° C to 158° F / 70° C at 10% to 80% relative humidity, non-condensing											
Net Weight	10.0 lb / 4.5 kg						7.3 lb / 3.3 kg					
Shipping Weight	15.2 lb / 6.9 kg						11.8 lb / 5.4 kg					
Balance Dimensions W × H × D	7.7 × 11.3 × 12.6 in / 19.6 × 28.7 × 32 cm						7.7 × 3.6 × 12.6 in / 19.6 × 9.2 × 32 cm					
Carton Dimensions L × W × H	19.5 × 15.5 × 20.6 in / 49.5 × 39.5 × 52.2 cm						19.5 × 15.5 × 12.8 in / 49.5 × 39.5 × 32.7 cm					

## Other Standard Features and Equipment

Fixed integral weigh below hook, user selectable span calibration points, software rest menu, stability indicator, auto tare, user selectable communication setting, user selectable printing options, up-front level indicator, menu and calibration locks, mechanical and software overload/underload protection, integral weigh below hook, security bracket, stainless steel platform, backlit LCD

## Compliance

Safety: FCC (Part 15 Class A), CE (EN 61326 Class A, Criteria A) C Tick N13123 (AS/NZS4251.1, AS/NZS4252.1)

## Accessories

<b>Dot Matrix Printer (SF40A)</b> .....	30064203
<b>Cable to connect SF40A to Pioneer</b> .....	12122603
<b>Paper for SF40A</b> .....	12120799
<b>Ink Ribbon for SF40A</b> .....	12120798
<b>Thermal Printer</b> .....	80251992
<b>Paper for Thermal Printer</b> .....	80251931
<b>Cable kit to connect Thermal Printer to Pioneer</b> .....	80252581
<b>TAL Software WinWedge</b> .....	80850080
<b>RS232 Cable, PC 9 Pin to Pioneer</b> .....	80500525
<b>RS232 Cable, PC 25 Pin to Pioneer</b> .....	80500524
<b>Auxiliary Display Kit for Pioneer</b> .....	80251396
<b>Security Device for Pioneer</b> .....	76288-01
<b>Density Determination Kit for Pioneer (0.1mg and 1mg)</b> .....	80253384

## Industry Leading Quality and Support

All OHAUS Pioneer balances are manufactured under an ISO 9001:2008 Registered Quality Management System. Our rugged construction and stringent quality control have been hallmarks of all OHAUS products for over a century.

### OHAUS CORPORATION

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*With offices throughout  
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