



The Economical Choice of Balance for Routine Weighing Applications

The OHAUS Pioneer Series analytical and precision balances are designed for reliable routine weighing at an affordable price. Equipped to handle a variety of laboratory, industrial and education applications, the Pioneer balances are available in both external and internal calibration models. With a backlit LCD, new application modes and built-in environmental settings-these compact yet durable balances fit right in any work setting.

Standard Features Include:

- **Easy-to-Clean Draftshield Protects Samples from Contamination**
The draftshield features removable glass panels and three sliding doors which help to avoid sample contamination. These can be easily removed for cleaning the balance.
- **Backlit LCD Makes Viewing of Results Easier-Even in Low Light Conditions**
The Pioneer is equipped with a bright backlit LCD which enables clear viewing of results regardless of the lighting conditions-making it ideal for use in any work setting.
- **Selectable Environmental Settings Minimize External Influences & Ensure Accuracy**
Three filter modes and adjustable zero tracking help to adjust the balance's sensitivity to environmental disturbances, vibrations and slow filling applications, ensuring the accuracy of measurements.

Pioneer[®] Analytical and Precision Balances

Removable Doors Provide Convenient Access and Cleaning

To address the need for easy cleaning often expressed by routine users, the draftshield has been designed with easy-to-remove doors and panels. It takes only seconds to disassemble, and all of the balance's components including the housing can be quickly wiped clean. Periodic cleaning made easy helps to avoid sample contamination, and extends the product life.



Bright, Backlit Display Shows Results Clearly

The Pioneer balances are equipped with a bright backlit LCD which makes viewing of results very easy, even in laboratories with dim lighting—thereby, increasing the efficiency of workflow.

Selectable Environmental Settings for Working in Practically Any Condition

Pioneer is designed with selectable environmental settings, which help to adapt the balance to real life working conditions.

When working in harsh environments, the balance can be adjusted to compensate for vibrations and other disturbances. Conversely, the balance can also be adjusted when working in slow filling applications where sensitivity is an important factor.

A replaceable standard in-use cover is also available which provides additional protection against accidental spillage, dust and debris—and helps to minimize the chance of damage to the display and keypad.



Application Modes

- **Weighing**—Determines the weight of items on the pan in the selected unit of measure.
- **Parts Counting**—Counts the number of pieces on the pan using a uniform weight.
- **Percent Weighing**—Measures the weight of a sample displayed as a percentage of a pre-established reference weight.
- **Density Determination**—Determines density of solids or liquid. With the integrated weigh below hook, it is possible to perform specific gravity tests for objects that cannot be easily placed on the weighing pan.
- **Dynamic Weighing**—Weighs an unstable sample load. The balance takes an average of weights over a period of time.

Standard Features

Integral Security Bracket



Allows you to secure the balance to a workstation -preventing unwarranted movement or even theft

RS232 Interface

RS232 allows connection to an OHAUS printer or computer. Sends Balance ID plus spaces for recording User ID and Project ID

Integral Menu Lock

Is a combination of software and a mechanical switch which allows you to lock menus, including the calibration menu



Multiple Application Modes and Units

Features Basic Weighing, Parts Counting, Percent Weighing, Dynamic Weighing and Density Determination modes. 15 international weighing units plus one custom unit are also available.

Weigh Below Hook

The built-in weigh below hook enables you to suspend an item below the balance for density/specific gravity measurements



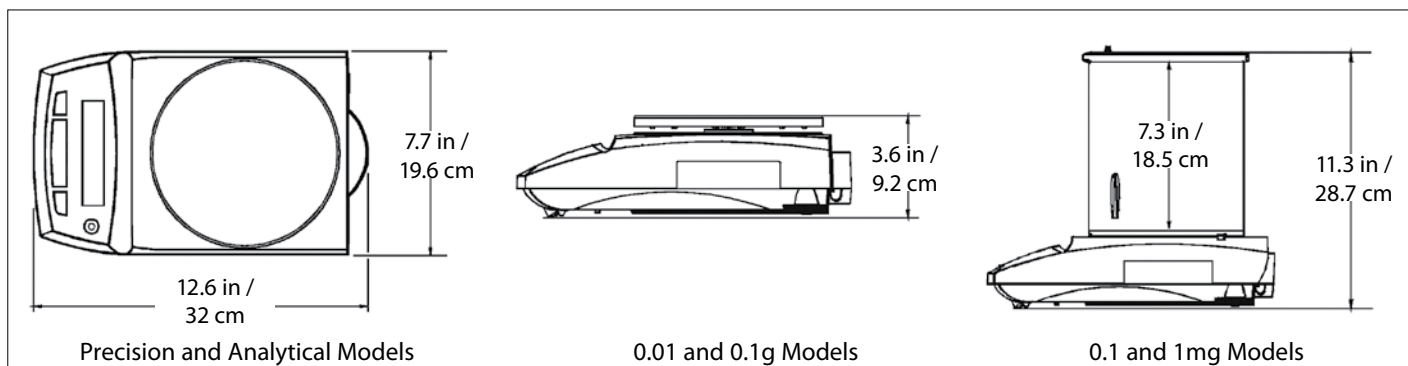
Up-Front Level Indicator

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



Pioneer[®] Analytical and Precision Balances

Model	PA84C	PA124C	PA224C	PA163C	PA323C	PA523C	PA1602C	PA2202C	PA3202C	PA4202C	PA2201C	PA4201C
External Calibration Model	PA84	PA124	PA224	PA163	PA323	PA523	PA1602	PA2202	PA3202	PA4202	PA2201	PA4201
Capacity (g)	85	120	220	162	320	520	1620	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	Ø 3.54 in / Ø 90 mm			Ø 4.72 in / Ø 120 mm			Ø 7.1 in / Ø 180 mm					
Cal Weight-Span	50 g, 80 g	50 g, 100 g	100 g, 200 g	100 g, 150 g	200 g, 300 g	200 g, 500 g	1 kg, 1.5 kg	1 kg, 2 kg	2 kg, 3 kg	2 kg, 4 kg	1 kg, 2 kg	2 kg, 4 kg
Cal Weight-Linearity	20 g/60 g	50 g/100 g	100 g/200 g	100 g/150 g	150 g/300 g	200 g/500 g	1 kg/1.5 kg	1 kg/2 kg	1.5 kg/3 kg	2 kg/4 kg	1 kg/2 kg	2 kg/4 kg
Taring Time	1 second											
Stabilization Time	3 seconds			2 seconds						1 seconds		
Draftshield	7.3 in / 18.5 cm inside height						N/A					
Operating Conditions	50° F / 10° C to 86° F / 30° C at 10% to 80% relative humidity, non-condensing, up to 2000m above sea level											
Storage Temperature	-40° F / -40° C to 131° F / 55° C at 10% to 80% relative humidity, non-condensing											
Net Weight	10.1 lb / 4.6 kg (except for External Calibration Model: 8.8 lb / 4 kg)						9.9 lb / 4.5 kg (except for External Calibration Model: 7.5 lb / 3.4 kg)					
Shipping Weight	16.5 lb / 7.5 kg (except for External Calibration Model: 15.2 lb / 6.9 kg)						13.9 lb / 6.3 kg (except for External Calibration Model: 11.8 lb / 5.4 kg)					
Balance Dimensions W x H x D	7.7 x 11.3 x 12.6 in / 19.6 x 28.7 x 32 cm						7.7 x 3.6 x 12.6 in / 19.6 x 9.2 x 32 cm					
Carton Dimensions L x W x H	19.5 x 15.5 x 20.6 in / 49.5 x 39.5 x 52.2 cm						19.5 x 15.5 x 12.8 in / 49.5 x 39.5 x 32.7 cm					

For specifications related to the Unites States Pharmacopoeia (USP) minimum weight standard visit www.Ohaus.com/USPMinWeight

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

- **Electromagnetic Compatibility:** FCC (Part 15 Class A); Industry Canada (ICES-003 Class A); CE (EN 61326-1:2006 Class B emissions, basic immunity); C-tick (AS/NZS 61000.6.3: 2007 Class B)
- **Product Safety:** cCSAus (CAN/CSA-C22.2 No. 61010-1-04, UL Std. No. 61010-1 2nd Edition); CE (EN 61010-1:2010)

Accessories

Dot Matrix Printer (SF40A)	30064203
Cable to connect SF40A to Pioneer	12122603
Paper for SF40A	12120799
Ink Ribbon for SF40A	12120798
Thermal Printer	80251992
Paper for Thermal Printer	80251931
Cable kit to connect Thermal Printer to Pioneer	80252581
TAL Software WinWedge	80850080
RS232 Cable, PC 9 Pin to Pioneer	80500525
RS232 Cable, PC 25 Pin to Pioneer	80500524
Auxiliary Display Kit for Pioneer	80251396
Security Device for Pioneer	80850000
Density Determination Kit for Pioneer (0.1mg and 1mg)	80253384
In-use Cover	83020221

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.

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