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.

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

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

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

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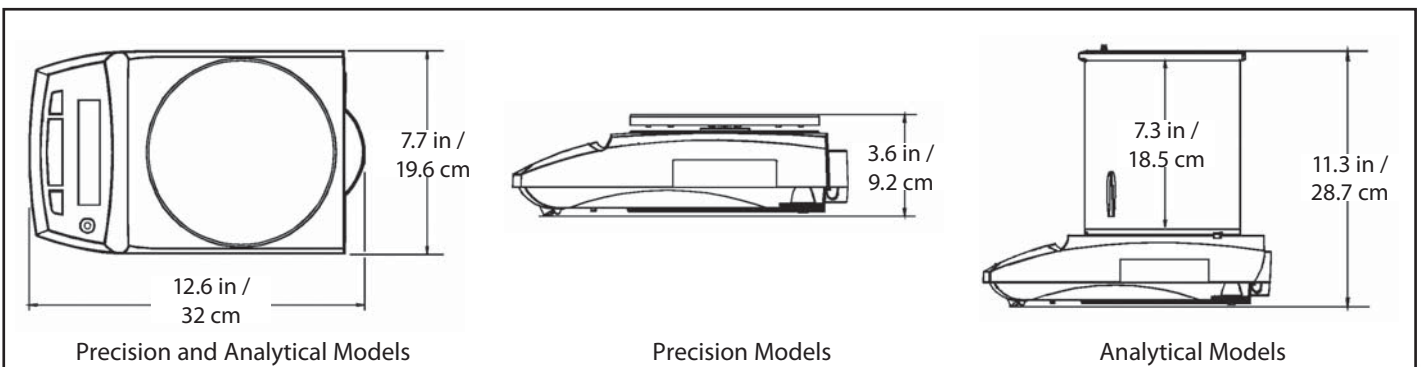
Multiple Application Modes and Units
Pioneer features basic weighing, parts counting and percent weighing, density weighing, and dynamic weighing and 15 international weighing units including one custom unit

Backlit Display
Enables optimal viewing of results in various lighting conditions

Outline Dimensions

7.7 in / 19.6 cm	3.6 in / 9.2 cm	7.3 in / 18.5 cm
12.6 in / 32 cm		11.3 in / 28.7 cm
Precision and Analytical Models	Precision Models	Analytical Models

Pioneer® Series *Analytical and Precision Balances*

Specifications

Models with Internal Calibration	PA64C	PA114C	PA214C	PA213C	PA413C	PA512C	PA2102C	PA4102C	PA4101C
Models without Internal Calibration	**PA64**	**PA114**	**PA214**	**PA213**	**PA413**	**PA512**	**PA2102**	**PA4102**	**PA4101**
Capacity (g)	65	110	210	210	410	510	2100	4100	4100
Repeatability (Std Dev) mg	0.1			1		10			100
Readability d (g)	0.0001			0.001		0.01			0.1
Linearity (mg)	0.2		0.3	2		20		30	100
Application Modes	Weighing, Parts Counting, Percent								
Weighing Units	mg, g, ct, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, teals, custom					g, lb, ct, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, teals, custom	g, kg ct, lb, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, teals, custom		g, kg ct, lb, oz, dwt, tical, tola, mommes, baht, grain, mesghal, Newton, ozt, teals, custom
Platform Size (mm)	90 dia.			120 dia.		180 dia.			
Cal Weight-Span (g)	50g or 60g	50g or 100g	100g or 200g	100g or 200g	200g or 400g	200g or 500g	1kg or 2kg	2kg or 4kg	2kg or 4kg
Cal Weight-Linearity (g)	20g + 50g	50g + 100g	100g + 200g		200g + 400g	200g + 500g	1kg + 2kg	2kg + 4kg	
Taring Time	1 Second								
Stabilization Time	3 Seconds								
Gross Weight (kg)	4.5kg					3.3kg			
Shipping Weight (kg)	6.9kg					5.4kg			
Balance Dimensions W x H x D (cm)	19.6 x 28.7 x 32cm					19.6 x 9.2 x 32cm			
Carton Dimensions L x W x H (cm)	49.5 x 39.5 x 52.2cm					49.5 x 39.5 x 32.7cm			
Draftshield	Yes					None			
Operating Conditions	10℃ to 40℃ at 10% to 80% relative humidity, non-condensing, up to 4000m above sea level								
Storage Temp.	-40°C to 70℃ at 10% to 80% relative humidity, non-condensing.								

Specifications

Models with OIML Approval	PA64CM	PA114CM	PA214CM	PA213CM	PA413CM	PA512CM	PA2102CM	PA4102CM	PA4101CM
Capacity (g)	65	110	210	210	410	510	2100	4100	4100
Application Modes	Weighing								
Weighing Units	mg, kg, g, ct								
Verification scale interval e (mg)	1			10		100			

Pioneer® Series *Analytical and Precision Balances*

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

- **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

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.