DENVER
INSTRUMENT

New Pinnacle Series

Precision Analytical and Toploading Balances

New Pinnacle Series Precision Balances

Latest advances in weighing technology with a superior, yet simple, user interface

Denver Instrument's New Pinnacle Series balances offer simple menu-driven operation, easy-to-read display, an extensive list of applications and the most comprehensive standard serial interfacing available.

Large, Powerful Display. The Pinnacle Series balances feature an extra-large, back-lit display that has 0.7" high numerals. Choose two weigh units to display simultaneously. The display also shows time and date as well as the capacity indicator.

Easy Navigation. Changing the operating parameters of the balance is simple. Once you enter the menu, the current settings are listed on the screen. Using the navigational arrows, simply highlight the desired change and press enter.

DenverCal® included on PI-Series. DenverCal provides three options for internal calibration. Calibration will automatically engage at factory-defined time intervals or when the ambient temperature changes significantly. Or, the user defines the regularity of the internal calibration. Internal calibration can also be executed with precision internal weights, with the press of the calibration key. All Pinnacle models will also recognize and calibrate to various external weights.

Multiple Weigh Modes. Choose from 16 weigh units including grams, milligrams, kilograms, ounces, troy ounces, pounds, grains, pennyweight and carats.

Parts Counting. When high-precision piece counting is a must, the versatile Pinnacle Series is ideal for use in inventory control applications.

Animal Weighing. For maximum accuracy, these balances can be programmed to average readings over a set period of time– ideal for weighing lab animals or for work in unstable environments.

Moisture Weighing. The balance automatically calculates loss on drying methods. This application determines the change in weight of the sample as well as reports the percent solids and percent moisture.

Tare Weights. Allows the weight of up to 9 containers to be stored. Perfect for sieve methods or any other application where the weight of a container is constant.

Density Determination. Determine the density of a desired material. The density of products plays an important role in the average weight control of prepackaged products, in those cases where a package is filled by weight but must carry a label indicating the contents in volume. Density can indicate a change in the composition of a material, or a defect in a product. The easy-to-use prompts allow you to collect the weight of the material in air and then weight of material in solution (water) and then let the balance calculate density. The Denver Density Determination Kit accessory is highly recommend when using this feature (analytical models only).

Built-in Statistics. Store up to 250 results in the data log. At the touch of a key, retrieve statistical information: number of samples, total weight, average weight, minimum weight, maximum weight, and standard deviation.

Meets ISO/GLP Requirements. RS232 port transmits data to a printer or computer. ISO/GLP header can be printed with each data point and includes balance model and serial number, time and date, sample number, and user defined operator and sample/batch ID. Last calibration information is stored and can be printed upon demand.

Ethernet and USB ports also standard. Free software allows data to be downloaded into a text file or worksheet. Assign the Pinnacle an IP address and view the balance anywhere on the network when attached via the Ethernet port.

Programmable Environmental Settings. Adjustable environmental settings provide superior performance in difficult production environments or stable laboratory conditions, alike.

Sturdy Construction. The Pinnacle Series has a rugged die-cast aluminum base that supports a durable stainless-steel weighing pan. Overload protection reduces the possibility of damage due to misuse of the balance. Other features include easy-to-see leveling bubble, chemically-resistant keypad sealed for protection against spills and a weigh-below port (requires optional weigh-below device).

Analytical Models:
P/PI-114, P/PI-214, P/PI-314,
PI-225D
Includes Standard Draft Shield

MDS Models:
P/PI-203MDS,P/PI-403MDS
P/PI-603MDS
Includes Mini Draft Shield

Toploading Models:
P/PI-203, P/PI-403*, P/PI-603D*,*
P/PI-402, P/PI-602
**Includes Draft Ring*

Toploading Models:
P/PI-2002, P/PI-4002, P/PI-4002D,
P-8002D, P/PI-6001, P-8001

Models	**P/PI-114**	**P/PI-214**	**P/PI-314**	**PI-225D**
Capacity	110g	210g	310g	60/220g
Readability	0.1mg	0.1mg	0.1mg	0.01/0.1mg
Taring Range	0 to 110g	0 to 210g	0 to 310g	0 to 60/220g
Repeatability, (s)	0.1mg	0.1mg	0.1mg	0.02/0.1mg
Linearity	0.2mg	0.2mg	0.3mg	0.03/0.2mg
Pan Size	3.1" dia. (79mm)	3.1" dia. (79mm)	3.1" dia. (79mm)	3.1" dia. (79mm)

Models	**P/PI-203**	**P/PI-403**	**P/PI-603D**	**P/PI-203MDS**	**P/PI-403MDS**	**P/PI-603DMDS**
Capacity	200g	400g	100/600g	200g	400g	100/600g
Readability	0.001g	0.001g	0.001/0.01g	0.001g	0.001g	0.001/0.01g
Taring Range	0 to 200g	0 to 400g	0 to 600g	0 to 200g	0 to 400g	0 to 600g
Repeatability, (s)	0.001g	0.001g	0.002/0.01g	0.001g	0.001g	0.002/0.01g
Linearity	0.002g	0.002g	0.003/0.02g	00.002g	0.002g	0.003/0.02g
Pan Size	4.5 " dia. (114mm)	4.5 " dia. (114mm)	4.5 " dia. (114mm)	4.5 " dia. (114mm)	4.5 " dia. (114mm)	4.5 " dia. (114mm)

Models	**P/PI-402**	**P/PI-602**	**P/PI-2002**	**P/PI-4002**	**P/PI-4002D**	**P-8002D**
Capacity	400g	600g	2000g	4000g	400/4000g	800/8000g
Readability	0.01g	0.01g	0.01g	0.01g	0.01/0.1g	0.01/0.1g
Taring Range	0 to 400g	0 to 600g	0 to 2000g	0 to 4000g	0 to 4000g	0 to 8000g
Repeatability, (s)	0.01g	0.01g	0.01g	0.01g	0.02/0.1g	0.02/0.1g
Linearity	0.02g	0.02g	0.02g	0.02g	0.03/0.2g	0.03/0.2g
Pan Size	4.5 " dia. (114mm)	4.5 " dia. (114mm)	7.0 x 7.0" (178 x 178mm)	7.0 x 7.0" (178 x 178mm)	7.0 x 7.0" (178 x 178mm)	7.0 x 7.0" (178 x 178mm)

Models	**P/PI-6001**	**P-8001**
Capacity	6000g	8000g
Readability	0.1g	0.1g
Taring Range	0 to 6000g	0 to 8000g
Repeatability, (s)	0.1g	0.1g
Linearity	0.2g	0.2g
Pan Size	7.0 x 7.0" (178 x 178mm)	7.0 x 7.0" (178 x 178mm)

Common Specifications

Stabilization Time (Average):	3 seconds, 4 seconds (Dual-Range)
Dimensions (LxWxH) Analyticals:	14.6 x 9.4 x 13.3" (371 x 239 x 338mm)
Dimensions (LxWxH) Toploaders:	14.6 x 9.4 x 3.8" (371 x 239 x 97mm)
Standard Draft Shield Dimensions:	6.1 x 9.4 x 8.0" (155 x 239 x 203mm) Height Above Pan: 8.6" (218mm)
Mini Draft Shield Dimensions:	6.1 x 6.5 x 8.0" (155 x 165 x 203mm) Height Above Pan: 6.1" (155mm)
Operating Temperature:	10° - 30°C (50° - 86°F)
Humidity:	< 90% RH
Net Weight (Analyticals):	15 lbs (6.80kg)
Net Weight (Toploaders):	10 lbs (4.54kg)
Electrical Requirements:	115V at 100mA, Center Pin (-), Adapter Included

DENVER INSTRUMENT
Precision laboratory instruments since 1880

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