



ION BM SERIES

Weighing Solutions for even the smallest of samples

Advanced Sensor Technology

The latest advancement in our super hybrid design, construction & algorithms

- Increased productivity via faster stabilization times ~8 second

Accurate solutions

- Instant and smooth static elimination using a built-in fanless ionizer to ensure stable weighing
- Automatic self calibration to maintain accuracy under temperature changes
- Embedded temperature, humidity and atmospheric pressure sensors
- Automatic Response Adjustment- adjusts its response characteristics (FAST, MID, or SLOW) by analyzing the influence of drafts or vibrations on the stability of the display value

Good Data Management

- Internal Calibration easy one touch button performs & documents calibration.
- Data Memory Function can store up to 200 weighing results (or 100 with timestamp) or 50 calibration/calibration test results.
- Password-Protect offers password-protection up to 11 users and 1 administrator via User access control (UAC) with key locks.
- GLP/GMP/GCP Compliance outputs manufacturer, model, serial number, ID, date, time, signature for full calibration report.

Practical functionality

- Easy to view reverse backlit LCD
- Large working space for better workflows and a wider range of applications
- Interlockable sliding doors allowing efficient operation with both hands
- Anti-static glass breeze break with a thin evaporated metal coating
- Quick USB & RS232 connectivity enables data transfer 21 CFR compliant Bidirectional commands available via RS232.



KEY FEATURES:



Super Hybrid Sensor



Internal (ASC) calibration



Ionizer



USB



RS-232C



Password Protect

Specifications

Model	BM-5	BM-5D	BM-20	BM-22	BM-252	BM-200	BM-300	BM-500
Weighing capacity	5.2 g	2.1 / 5.2 g*1	22 g	5.1 g / 22 g*1	250 g	220 g	320 g	520 g
Readability	0.001 mg	0.001/0.01 mg	0.001 mg	0.001 / 0.01 mg	0.01 mg	0.1 mg		
Repeatability (Standard Deviation)	0.0012 mg ²	0.01 / 0.04 mg ²	0.0025 mg ²	0.004 ² / 0.01 mg	0.03 mg (for 100 g)	0.1 mg	0.2 mg	
Linearity	±0.010 mg	±0.010 / ±0.02 mg	±0.010 mg	±0.010 / ±0.02 mg	±0.010 mg	±0.2 mg	±0.3 mg	±0.5 mg
Minimum weight (typical) ³	2.0 mg	5.0 mg	3.0 mg	5.0 mg	20 mg	120 mg		
Stabilization time (set to FAST)	~10 sec	~8 /10 sec	~10 sec	~8 /10 sec	~8 sec	~3.5 sec.		
Sensitivity drift (10 °C to 30 °C)	±2 ppm / °C (When automatic self calibration is not used)							
Operating temperature	5 °C to 40 °C (41 °F to 104 °F), 85% RH or less (non-condensation)							
Display refresh rate	5 times / sec or 10 times / sec							
Measurement Units (Display mode)	g, mg, oz, ozt, ct, momme, dwt, GN, tael ⁴ , tola ⁴ , messghal, pieces (counting mode), % (percent mode), Specific gravity							
Counting mode	Minimum unit mass = 0.1 mg / Number of samples = 10, 25, 50 or 100 pieces							
Percent mode	Minimum 100% ref. mass = 10.0 mg / Minimum 100% display = 0.01%, 0.1%, 1% (depends on the reference mass stored)							
Internal Memory	200 sets weighing data / 100 sets with date & time / 50 sets of calibration data							
External Data Logger	Store up to 5,000 weighing results with date & time to AD-1688 (standard)							
Data Output	GLP / GMP / GCP / ISO compliant. Outputs: balance manufacturer, model, s/n, balance identification number, data, time of calibration, mass used, and space for signature.							
Standard interface	RS-232C, Quick USB, External key plug for optional foot switch (SW:128)							
Internal calibration	Motor-driven internal calibration							
External calibration masses (g)	5, 2, 1		20, 10, 5, 2, 1		200, 100, 50, 20, 10	200, 100, 50	300, 200, 100, 50	500, 300, 200, 100, 50
Ionizer electrode pin life	~10,000 hours of continuous use. (User replaceable)							
Weighing pan diameter	25 mm (50 mm, 95 mm for weighing filter optional)				90 mm			
Power consumption	~30 VA (supplied by the AC adapter)							
External dimensions / Weight	690(W) × 860(D) × 630(H) mm 24kg (include AD-1676)		259 (W) × 466 (D) × 326 (H) mm / 10 kg					
Standard accessories	AD-1676 tabletop draft enclosure (BM5/5D only), Gold coated pans (Ø50 mm and Ø95 mm) for weighing filters, Aluminum pans 3 sizes - 10 each, AX-BM-032 microtube holder, AD-1688 weighing data logger, AD-1689 tweezers, AX-BM-033 dust storage cover				AD-1688 weighing data logger, AD-1689 tweezers × 1, AX-BM-033 dust storage cover			

1 Smart range function: The minimum weighing value switches to 0.01 mg automatically when the display value exceeds 5.1 g but returns to 0.001 mg by pressing the RE-ZERO (tare) key.

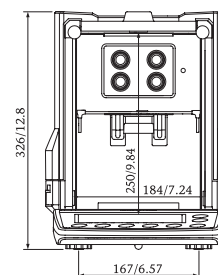
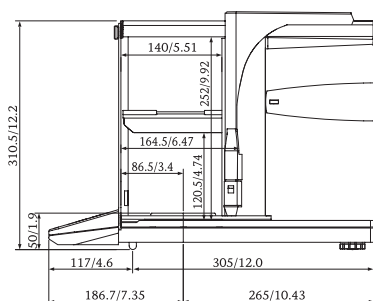
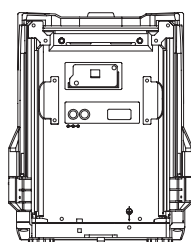
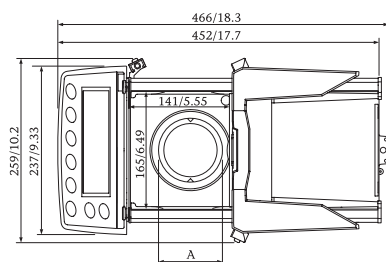
2 Repeatability using a 1gram weight within the weighing capacity

3 Pursuant to the United States Pharmacopoeia (USP), Chapter 41

4 Can be added upon request

Dimensions (mm/inches)

Models with readability 0.001 mg to 0.2 mg



Accessories

Product code	Description
AD-1676	External draft enclosure
AD-1653	Density determination kit
BT-3135	Katsota Balance Table 24x35x32
BT-3136	Katsota Tabletop Slab 20x15x3
AD-1682	Rechargeable battery unit
AD-1687	Weighing environment logger
AD-1689	Long Rubber tipped Tweezers for calibration weight
AD-1691	Weighing environment analyzer
AX-BM-031	In-use covers (5 pcs)
AX-BM-032	Microtube holder for the BM-5/5D/20/22 ¹
AX-BM-033	Dust cover for storage
AX-BM-034	Microtube holder for the BM-252/200/300/500
AX-BM-035	Slide breeze break (for the BM-5/5D/20/22 only)
AX-BM-NEEDLESET	Discharge electrode units for the ionizer (a set of 4 pcs)

Product code	Description
AX-HOLDER-SET	Sample cup holder set
AX-ROUND-PAN-L	Round aluminum analytical pans (Ø15 mm, 0.8 ml, 100 pcs)
AX-ROUND-PAN-M	Round aluminum analytical pans (Ø12 mm, 0.3 ml, 100 pcs)
AX-ROUND-PAN-S	Round aluminum analytical pans (Ø8 mm, 0.05 ml, 100 pcs)
AD-1192	Compact dot matrix printer
AD-8121B	Multi functional Printer
AD-8920A	Universal remote display
AD-8922A	Remote controller
TB-648	AC Adapter (120V/220V)

Options

Product code	Description
BM-08	Ethernet interface with WinCT-Plus software ²
BM-14	Pipette accessory testing kit ³

1 BM-5/5D microtube holder is heavier than the standard weighing pan by approx. 2 g, leaving only approx. 3 g for weighing sample.
 2 BM-08 and Quick USB (standard) cannot be used at the same time.
 3 Cannot be used with the BM-5/5D



AD-1676



AX-BM-032 microtube holder



AX-ROUND-PAN Aluminum pans



AD-1687



Option BM-14