

A&D Weighing Solutions

Balances / Scales / Peripheral Devices



Laboratory



Industrial



A&D
A&D Company, Ltd.

Discover Precision
www.aandd.jp

“Simple, Practical and of High Value...”

Congratulations: You’ve just picked up the right brochure.

A&D Company, Limited, Japan’s top manufacturer of electronic weighing instruments, is particularly proud of the unmatched width of our product portfolio, with innovations always aimed at providing users with high practical utility and high value for the price.

The fact is that no matter what industry you are in, whatever use you have in mind, or whatever solution you are looking for, you will likely find a product that precisely fits your requirements, within your budget!

Key Feature Index



Calibration with Internal Weight

Enables you to ensure balance accuracy with just one key press



Calibration with External Weight

Requires an external weight for calibration



Super Hybrid Sensor

Simultaneously achieves precision, speed and stability, as well as ease of maintenance



Reverse-backlit Liquid Crystal Display

Provides a bright, high contrast that is extremely easy to read and less stressful on the eyes



Vacuum Fluorescent Display

Provides clear and wide-angle visibility even in a dimly-lit area



LED Display

Provides a wide viewing angle and colorful display, allowing quick, intuitive judgments



Liquid Crystal Display with Backlight

Ensures visibility in a dimly-lit area



Liquid Crystal Display

Provides a sharp-cut, energy-saving display



Quick USB Interface

Transfers weighing data to a PC USB port (one way) requiring no special software installation



USB Interface

Enables bi-directional communication with a PC via USB port



USB Host Interface

Allows for use of an off-the-shelf USB flash drive to save weighing results in CSV format



Ethernet Interface (with WinCT-Plus software)

Enables acquiring data from and sending commands to multiple weighing instruments



RS-232C Serial Interface

Outputs data to and receives commands from a PC, printer, data logger, etc.



Wireless Communication

Supports connectivity with A&D's optional devices that use Bluetooth® technology



User Access Control

Password-protects the device to allow only authorized individuals to operate the device or change its settings



Clock and Calendar Function

Adds time and date information to output data



Impact Shock Detection Function

Indicates the magnitude/risk of an impact shock to the weight sensor



Electronically Controlled Load

Artificially generates a minute load for automatic repeatability and minimum weight calculation



Counting Function

Displays the number of pieces based on their individual unit weight



Animal Weighing (Average & Hold) Function

Helps measure and record the weight of a moving object such as an animal by averaging fluctuation



Accumulation (M+) Function

Sums the weighing results and displays the total value



Auto Power ON Function

Activates the weighing mode display automatically when plugged in



Underhook

Enables magnetic, hot, or contaminated materials to be hanged for weighing or for density measurements



Normal Battery Operation

Works with off-the-shelf battery cells



Universal Flexi Coms Function

Enables customization of printout content and layout



GLP/GMP/GCP/ISO Compliant Output

Outputs the manufacturer, model, serial number, ID number, space for signature, calibration records, etc., for documentation requirements



Data Memory Function

Stores weighing data, calibration results, unit masses, upper/lower limits, preset tares, etc., for easy recall or output



Flow Rate Display Function

Accurately calculates and displays/outputs flow rates



Counting Function with Automatic Counting Accuracy Improvement

Displays the number of pieces based on their individual unit weight while automatically optimizing the accuracy of the unit weight



Percentage Function

Displays the weight value as a percentage of a stored reference mass



Statistical Calculation Function

Displays and outputs statistical calculation data including number of data, sum, max, min, range (max – min), mean, standard deviation and coefficient of variation



Comparator Function

Indicates whether weight values are within designated limits



Auto Power OFF Function

Turns off the display automatically after a period of inactivity to save power



Rechargeable Battery Operation

Works with a built-in rechargeable battery unit



Smart Range Function

Automatically switches between the precision and standard ranges, and recovers the full precision range with a press of the RE-ZERO (tare) key



IP69K Dust and Waterproof

Withstands heavy-duty washdown with high-pressure (8,000 to 10,000 kPa) and high-temperature (80 ± 5 °C) water from up close (100 to 150 mm)



IP68 Dust and Waterproof

Permits no infiltration of water while immersed to a depth of 1 meter for 24 hours



IP67 Dust and Waterproof

Permits no infiltration of water while immersed to a depth of 1 meter for 30 minutes



IP65 Dust and Waterproof

Permits no infiltration of dust and withstands water jetting from any direction



Intrinsic Safety

Explosion-protected by limiting energy to a level insufficient to cause sparks or heat that can ignite flammable gases or vapors



NSF Compliant

Meets food protection and sanitation requirements as established by NSF International



Software

Data management software available

Abbreviations and Conversion Factors of Weighing Units

Abbreviation	Unit	Conversion factor (to gram)
g	Gram	1 g
mg	Milligram	0.001 g
kg	Kilogram	1000 g
oz	Ounce (avoir)	28.349523125 g
lb	Pound	453.59237 g
lb-oz	Pound-Ounce	1 lb = 16 oz 1 oz = 28.349523125 g
ozt	Troy ounce	31.1034768 g
ct	Metric carat	0.2 g
mom	Momme	3.75 g
dwt	Pennyweight	1.55517384 g
gr	Grain (UK)	0.06479891 g
tl	Tael (HK general, Singapore)	37.7994 g
	Tael (HK jewelry)	37.429 g
	Tael (Taiwan)	37.5 g
	Tael (China)	31.25 g
tol	Tola (India)	11.6638038 g
SG	Specific gravity	N/A
N	Newton	See below*

* Newton = (weight in gram) × (9.80665 m/s²) / 1000

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BM Series



Optional



- A built-in fanless ionizer that allows for instant removal of destabilizing static electricity from the sample and container
- Includes four 0.001 mg readability models to be selected for different purposes
- Comes equipped with the AD-1676 tabletop breeze break (medium) as standard (BM-5/5D)

- ✓ Antistatic glass breeze break with a transparent evaporated metal coating
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Automatic repeatability test function using the internal calibration weight for simple precision checks at the location
- ✓ Interlockable sliding doors that allow for efficient operation with both hands
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG (either tl or tol can be added upon request)
- ✓ Density determination function and an optional density determination kit (for BM-252/200/300/500 only)
- ✓ Comes standard with the handy AD-1688 weighing data logger, AD-1689 tweezers for calibration weight, and the AX-BM-033 dust cover for storage

BM-5D/22

Special pans/holder (provided as standard for BM-5/5D/20/22)



**Aluminum analytical pans
(10 pcs each)**

Ø8 mm (0.05 ml) / Ø12 mm (0.3 ml) /
Ø15 mm (0.8 ml)



**Weighing pans for particulate
matter (PM) filters**

Ø50 mm / Ø95 mm



**AX-BM-032 microtube
holder***

Ø12 mm

* AX-BM-032 reduces the capacity of BM-5/5D by approx. 2 g.



BM-014 pipette accuracy testing kit

The kit includes everything required for testing pipette accuracy (systematic error) and reproducibility (random error) quickly and easily by yourself.

Model	BM-5	BM-5D	BM-20	BM-22
Capacity	5.2 g	2.1 g / 5.2 g	22 g	5.1 g / 22 g
Readability	0.001 mg	0.001 mg / 0.01 mg	0.001 mg	0.001 mg / 0.01 mg
Repeatability (σ)	0.0012 mg (for 1 g)	0.004 mg (for 1 g) / 0.01 mg	0.0025 mg (for 1 g)	0.004 mg (for 1 g) / 0.01 mg
Minimum weight* (typ.)	2.0 mg	5.0 mg	3.0 mg	5.0 mg
Linearity	±0.010 mg	±0.010 mg / ±0.02 mg	±0.010 mg	±0.010 mg / ±0.02 mg
Weighing pan	Ø25 mm			

Model	BM-252	BM-200	BM-300	BM-500
Capacity	250 g	220 g	320 g	520 g
Readability	0.01 mg		0.1 mg	
Repeatability (σ)	0.03 mg (for 100 g)	0.1 mg	0.2 mg	
Minimum weight* (typ.)	20 mg		120 mg	
Linearity	±0.10 mg	±0.2 mg	±0.3 mg	±0.5 mg
Weighing pan	Ø90 mm			

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

AD-1653	Density determination kit (for BM-252/200/300/500 only)	AX-BM-032	Microtube holder for BM-5/5D/20/22
AD-1671	Anti-vibration table for balances	AX-BM-033	Dust cover for storage
AD-1672/AD-1672A	Tabletop breeze break (large)	AX-BM-034	Microtube holder for BM-252/200/300/500
AD-1676	Tabletop breeze break (medium) <i>Strongly recommended!</i>	AX-BM-NEEDLESET	Discharge electrode units for the ionizer (a set of 4 pcs)
BM-08	Ethernet interface with WinCT-Plus software	AX-ROUND-PAN-L	Round aluminum analytical pans (Ø15 mm, 0.8 ml, 100 pcs)
BM-014	Pipette accuracy testing kit	AX-ROUND-PAN-M	Round aluminum analytical pans (Ø12 mm, 0.3 ml, 100 pcs)
AX-BM-031	Display covers (5 pcs)	AX-ROUND-PAN-S	Round aluminum analytical pans (Ø8 mm, 0.05 ml, 100 pcs)

* BM-08 and Quick USB (standard) cannot be used at the same time.

** BM-014 cannot be used with BM-5/5D.

GH Series



Optional



- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Anti-static glass breeze break with a transparent evaporated metal coating
- ✓ Multiple weighing units: g, mg, pcs, %, oz, ozt, ct, mom, dwt, gr, SG (one more unit from either tl or tol can be added upon request)
- ✓ Density determination function and an optional density determination kit

Model	GH-252	GH-202	GH-120	GH-200	GH-300
Capacity	101 g / 250 g	51 g / 220 g	120 g	220 g	320 g
Readability	0.01 mg / 0.1 mg		0.1 mg		
Repeatability (σ)	0.03 mg / 0.1 mg	0.02 mg / 0.1 mg	0.1 mg		0.2 mg
Minimum weight* (typ.)	24 mg		120 mg		
Linearity	±0.1 mg / ±0.2 mg	±0.03 mg / ±0.2 mg	±0.2 mg		±0.3 mg
Weighing pan	Ø90 mm				

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

AD-1653 Density determination kit

GH-02 Quick USB interface with cable

GH-08 Ethernet interface with WinCT-Plus software

* GH-02 and GH-08 cannot be used at the same time.

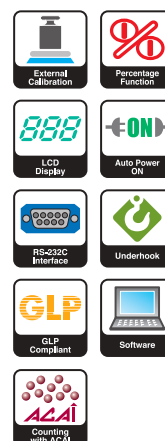
HR-i Series



- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Anti-static glass breeze break with a transparent evaporated metal coating
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr (either tl or tol can be added upon request)

Model	HR-202i	HR-300i
Capacity	51g / 220g	320 g
Readability	0.01 mg / 0.1 mg	0.1 mg
Repeatability (σ)	0.02 mg / 0.1 mg	0.2 mg
Minimum weight* (typ.)	24 mg	120 mg
Linearity	± 0.03 mg / ± 0.2 mg	± 0.3 mg
Weighing pan	$\varnothing 90$ mm	

* Pursuant to the United States Pharmacopeia (USP), Chapter 41



Semi-Micro Analytical Balances

GR Series



Open left or right side from front

- ✓ Handy lever on the front to open either side of the weighing chamber for quick and efficient access
- ✓ Small footprint of 249 mm by 330 mm to save space
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Anti-static glass breeze break with a transparent evaporated metal coating
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG (either tl or tol can be added upon request)
- ✓ Density determination function and an optional density determination kit (AD-1653)

Model	GR-202	GR-120	GR-200	GR-300
Capacity	42 g / 210 g	120 g	210 g	310 g
Readability	0.01 mg / 0.1 mg	0.1 mg		
Repeatability (σ)	0.02 mg / 0.1 mg	0.1 mg	0.2 mg	
Minimum weight* (typ.)	30 mg	120 mg		
Linearity	±0.03 mg / ±0.2 mg	±0.2 mg		±0.3 mg
Weighing pan	Ø85 mm			

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

AX-GR-034 Microtube holder



Apollo GX-AE/GX-A/GF-A Series



GX-AE/A



GF-A



GF-3002A



GX-1003A



GX-324AE

- **Impact Shock Detection (ISD)** that provides feedback to prevent damage to the weight sensor*
- **Electronically Controlled Load (ECL)** that enables precision management without using an external weight*
- **Flow Rate Display (FRD)** that makes calculating and recording flow rates easier and more accurate
- ✓ High-speed weighing with stabilization in 1.5 to 2 seconds for the 0.0001 g readability models and 1 second for the 0.001/0.01/0.1 g readability models**
- ✓ Built-in fanless ionizer with Quick Ion technology and external IR switch (GX-AE)
- ✓ Large and detachable, antistatic glass breeze break with a transparent evaporated metal coating for the 0.0001 g readability models
- ✓ Automatic minimum weight calculation with either ECL or an actual, external weight
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: mg, g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, SG, and a user-programmable unit for conversion applications (either tL, tol or N can be added upon request)***
- ✓ Tare memory function that saves the tare value in non-volatile memory
- ✓ Density determination function (optional density determination kits available for the 0.0001/0.001 g readability models)

* Patented

** Excludes the 1,620 g × 0.001 g and 10,200 g × 0.01 g models, with a typical stabilization time of 1.5 seconds.

*** mg is for the 0.0001 g readability models only while lb and lb-oz are for the 0.001/0.01/0.1 g readability models only.



Min-S Alert

The balance can display an alert until the sample amount reaches the value entered as the minimum weight.

Fly-Thumbwheel

The leveling feet can be adjusted up or down smoothly using large thumbwheels set in higher position.



Model	GX-124AE GX-124A GF-124A	GX-224AE GX-224A GF-224A	GX-324AE GX-324A GF-324A
Capacity	122 g	220 g	320 g
Readability	0.1 mg		
Repeatability (σ)	0.1 mg		0.2 mg (300 g) 0.1 mg (200 g)
Minimum weight* (typ.)	120 mg		
Linearity	± 0.2 mg		± 0.3 mg
Weighing pan	$\varnothing 90$ mm		

Model	GF-123A	GX-203A GF-203A	GX-303A GF-303A	GX-403A GF-403A	GX-603A GF-603A	GX-1003A GF-1003A	GX-1603A GF-1603A
Capacity	122 g	220 g	320 g	420 g	620 g	1100 g	1620 g
Readability	0.001 g						
Repeatability (σ)	0.001 g						0.002 g (1600 g) 0.001 g (1000 g)
Minimum weight* (typ.)	1.4 g						
Linearity	± 0.002 g						± 0.003 g
Weighing pan	128 × 128 mm						

Model	GF-1202A	GX-2002A GF-2002A	GX-3002A GF-3002A	GX-4002A GF-4002A	GX-6002A GF-6002A	GX-10002A GF-10002A	GX-6001A GF-6001A	GX-10001A GF-10001A
Capacity	1220 g	2200 g	3200 g	4200 g	6200 g	10200 g	6200 g	10200 g
Readability	0.01 g						0.1 g	
Repeatability (σ)	0.01 g					0.02 g (10000 g) 0.01 g (5000 g)	0.1 g	
Minimum weight* (typ.)	14 g						100 g	
Linearity	±0.02 g				±0.03 g		±0.1 g	
Weighing pan	165 × 165 mm							

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

GXA-03	2nd RS-232C interface	GXA-14	Density determination kit for the 0.0001 g readability models
GXA-04	Comparator relay output/buzzer/external key input interface	GXA-17	Large glass breeze break with built-in fanless ionizer and external IR switch
GXA-06	Analog output interface (factory-installed/dealer option)	GXA-23-PRINT	External key input interface + the AX-SW137-PRINT foot switch
FXi-08	Ethernet interface	GXA-23-REZERO	External key input interface + the AX-SW137-REZERO foot switch
GXA-09	Built-in rechargeable battery (factory-installed/dealer option)	GXA-23-PLUG	External key input interface + the AX-T-314A-S plug
GXA-10	Large glass breeze break	GXA-24	USB host interface (factory-installed/dealer option)
GXA-12	Animal weighing pan (for models of 320 g capacity or higher)	GXA-25	External fanless ionizer with Quick Ion technology
GXA-13	Density determination kit for the 0.001 g readability models	GXA-26	External IR switch

* Only one of GXA-03, GXA-04, GXA-06, FXi-08, GXA-09, GXA-17, GXA-23-PRINT/REZERO/PLUG, GXA-24, GXA-25 or GXA-26 can be installed.

** GXA-10 and GXA-17 are provided as standard for the 0.0001 readability models of the GX-A/GF-A series and all models of the GX-AE series respectively.

*** GXA-25 is an external ionizer and cannot be mounted inside the GXA-10 or breeze breaks of the 0.0001 g readability models of the GX-A/GF-A series.

Optional



GX-K/GF-K Series



GX-K



GF-K



GX-K



GX/GF-8K2
GX/GF-32K



GX-K



GF-K

- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations (GX-K: manual or automatic / GF-K: manual only)
- ✓ Automatic self calibration to maintain accuracy under temperature changes (GX-K)
- ✓ Multiple weighing units: g, kg, oz, lb, lb-oz, ozt, ct, mom, dwt, gr*, SG, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)
- ✓ Density determination function

* gr not available with GX-32K/GF-32K.



IP65 dust and waterproof

Model	GX-8K GF-8K	GX-8K2 GF-8K2	GX-10K GF-10K	GX-12K GF-12K	GX-20K GF-20K	GX-30K GF-30K	GX-32K GF-32K
Capacity	8.1 kg	2.1 kg/8.1 kg	10.1 kg	12 kg	21 kg	31 kg	6.1 kg/31 kg
Readability	0.01 g	0.01 g/0.1 g	0.01 g	0.1 g			0.1 g/1 g
Weighing pan	270 × 210 mm						

Options & Accessories

- GX-04K Comparator output with a buzzer/RS-232C/Current loop output
- GX-06K Analog output/Current loop output
- GX-07K Waterproof RS-232C cable (25P-9P, 5 m)
- GXK-012 Animal weighing pan
- GXK-015 Carrying case
- AX-GXK-31 Breeze Break for GX-K/GF-K

* Only one of GX-04K, GX-06K or the standard RS-232C can be used.

** The GX-K/GF-K series are not IP65 compliant with GX-04K or GX-06K.

GP Series



- ✓ Adjustable swing arm display (models with detached display stand also available)
- ✓ Adjustable (manual or automatic) response characteristics to help cope with the effect of drafts and vibrations
- ✓ Automatic self calibration to maintain accuracy under temperature changes
- ✓ Multiple weighing units: g*, kg, oz, lb, lb-oz, ozt, ct*, mom*, dwt, SG, and a user-programmable unit for conversion applications (either tl or tol can be added upon request)
- ✓ Density determination function

* g, ct, mom not available with GP-102K.



Swing arm display

Model	GP-12K	GP-20K	GP-30K GP-30KS	GP-32K GP-32KS	GP-40K	GP-61K GP-61KS	GP-60K GP-60KS	GP-100K GP-100KS	GP-102K
Capacity	12 kg	21 g	31 kg	6.1 kg/31 kg	41 kg	61 kg	61 kg	101 kg	61 kg/101 kg
Readability		0.1 g		0.1 g/1 g	0.5 g	0.1 g		1 g	1 g/10 g
Weighing pan			384 × 344 mm					386 × 346 mm	

Options & Accessories

- GP-04 Comparator output with a buzzer/RS-232C/Current loop output
- GP-06 Analog output/Current loop output
- GP-07 5-meter extension cable (for GP-30KS/32KS/61KS/60KS/100KS)
- GP-12 Animal weighing pan

- GP-16 Printer support for AD-8127
- GP-20 Underhook (for GP-12K/20K/30K/30KS/32K/32KS/40K)
- GP-21 Underhook (for GP-60K/60KS/61K/61KS/100K/100KS/102K)

* Only one of GP-04, GP-06 or the standard RS-232C can be used.
** GP-07 is a factory-installed option.



Optional



HR-AZ/HR-A Series



HR-AZ



HR-A



HR-AZ



HR-251AZ/A



HR-AZ



HR-A

- ✓ High-speed weighing with 2-second stabilization
- ✓ Removable, shatterproof breeze break with antistatic coating
- ✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)
- ✓ Rotary sliding doors requiring no extra space at the rear
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, mg, oz, ozt, ct, mom, dwt, gr, SG, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)
- ✓ Density determination function and an optional density determination kit

Model	HR-100AZ HR-100A	HR-150AZ HR-150A	HR-250AZ HR-250A	HR-251AZ HR-251A
Capacity	102 g	152 g	252 g	62 g / 252 g
Readability	0.1 mg			0.1 mg / 1 mg
Repeatability (σ)	0.1 mg		0 to 200 g: 0.1 mg 200 to 252 g: 0.2 mg	0.1 mg / 0.5 mg
Minimum weight* (typ.)	140 mg			
Linearity	±0.2 mg		±0.3 mg	±0.3 mg / ±1 mg
Weighing pan	Ø90 mm			

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Optional



Options & Accessories

- AD-1654 Density determination kit
- FXi-02 Quick USB interface with cable
- FXi-08 Ethernet interface with WinCT-Plus software
- FXi-09 Built-in rechargeable battery (factory-installed/dealer option)
- FXi-10 Small breeze break
- FXi-11 Large breeze break
- AX-FXi-31 Display covers (5 pcs)

* Only one of FXi-02, FXi-08 or FXi-09 can be installed.

FZ-i/FX-i Series



FZ-i



FX-i

- ✓ High-speed weighing with 1-second stabilization
- ✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)
- ✓ Protection mechanism against vertical and transverse overloading
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)

Model	FZ-120i FX-120i	FZ-200i FX-200i	FZ-300i FX-300i	FZ-500i FX-500i	FZ-1200i FX-1200i	FZ-2000i FX-2000i	FZ-3000i FX-3000i	FZ-5000i FX-5000i
Capacity	122 g	220 g	320 g	520 g	1220 g	2200 g	3200 g	5200 g
Readability	0.001 g				0.01 g			
Repeatability (σ)	0.001 g				0.01 g			
Minimum weight* (typ.)	1.4 g				14 g			
Linearity	±0.002 g				±0.02 g			
Weighing pan	Ø130 mm				Ø150 mm			

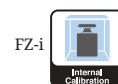
* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

- FXi-02 Quick USB interface with cable
- FXi-08 Ethernet interface with WinCT-Plus software
- FXi-09 Built-in rechargeable battery (factory-installed/dealer option)
- FXi-10 Small breeze break
- FXi-11 Large breeze break
- FXi-12 Animal weighing pan (for the 0.01 g readability models only)
- FXi-15 Carrying case

AX-FXi-31 Main unit cover (5 pcs)

* Only one of FX-02, FXi-08 or FXi-09 can be installed.



Optional



FZ-iWP/FX-iWP Series



FZ-iWP

FX-iWP

FZ-iWP



FZ-iWP



FX-iWP

- ✓ High-speed weighing with 1-second stabilization
- ✓ Compact foot print: 198 mm × 294 mm (smaller than an A4 sheet of paper)
- ✓ Protection mechanism against vertical and transverse overloading
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, and a user-programmable unit for conversion applications (either tl, tol or N can be added upon request)



Model	FZ-120iWP FX-120iWP	FZ-200iWP FX-200iWP	FZ-300iWP FX-300iWP	FZ-1200iWP FX-1200iWP	FZ-2000iWP FX-2000iWP	FZ-3000iWP FX-3000iWP
Capacity	122 g	220 g	320 g	1220 g	2200 g	3200 g
Readability		0.001 g			0.01 g	
Repeatability (σ)		0.001 g			0.01 g	
Minimum weight* (typ.)		1.4 g			14 g	
Linearity		±0.002 g			±0.02 g	
Weighing pan		Ø130 mm			Ø150 mm	

* Pursuant to the United States Pharmacopeia (USP), Chapter 41

Options & Accessories

FXi-02	Quick USB interface with cable
FXi-08	Ethernet interface with WinCT-Plus software
FXi-09	Built-in rechargeable battery (factory-installed/dealer option)
FXi-WP-10	Small breeze break
FXi-WP-11	Large breeze break
FXi-12	Animal weighing pan (for the 0.01 g readability models only)
FXi-15	Carrying case
AX-FXi-31	Main unit cover (5 pcs)
AX-KO2737-500	Waterproof RS-232C cable (5 m)

* Only one of FXi-02, FXi-08 or FXi-09 can be installed.

** The FZ/X-iWP series is not IP65 compliant with FXi-02, FXi-08 or FXi-09.

Optional



EJ Series



EJ-03 is required



Optional



- ✓ High resolution (1/120,000 - 1/310,000) load cell as the weight sensor
- ✓ Breeze break with anti-static coating (for EJ-54D2/123/303)
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan
- ✓ Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr, N, SG (either tl or tol can be added upon request, and lb is not available with EJ-54D2/123/303)
- ✓ Density determination function and an optional density determination kit (for EJ-123/303 only)
- ✓ Security slot in the rear of the balance to accommodate an anti-theft lock



Density determination kit (EJ-13)

Model	EJ-54D2		EJ-123	EJ-303	EJ-1202	EJ-3002
Capacity	22 g*	52 g*	120 g	310 g	1200 g	3100 g
Readability	0.0002 g*	0.001 g*	0.001 g		0.01 g	
Weighing pan	Ø50 mm		Ø110 mm		127 × 140 mm	

* The EJ-54D2 is a dual range model having two weighing ranges with different capacities and readabilities.
Each range extends from zero to its capacity.

Options & Accessories

EJ-02 Quick USB interface

EJ-03 RS-232C interface

EJ-13 Density determination kit (for EJ-123/303 only)

EJ-27 Wireless communication interface for EJ

* Only one of EJ-02, EJ-03 or EJ-27 can be installed.

** EJ-27 is to be paired with either the AD-8541-PC or AD-8931 (see P.47 for the details of these products).

EK-i/EW-i Series



Optional



For capacity of 4000 g or larger



EK-i



EW-i

- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr (either tl, tol or N can be added upon request)
- ✓ Security ring for wire-locking the balance to prevent theft

Model	EK-120i	EK-200i	EK-300i	EK-410i	EK-610i
Capacity	120 g	200 g	300 g	400 g	600 g
Readability	0.01 g				
Weighing pan	ø110 mm				

Model	EK-600i	EK-1200i	EK-2000i	EK-3000i	EK-4100i	EK-6100i
Capacity	600 g	1200 g	2000 g	3000 g	4000 g	6000 g
Readability	0.1 g					
Weighing pan	170 × 133 mm					

Model	EK-6000i	EK-12Ki	EW-150i		
Capacity	6000 g	12000 g	30 g	60 g	150 g
Readability	1 g		0.01 g	0.02 g	0.05 g
Weighing pan	170 × 133 mm		ø110 mm		

Model	EW-1500i			EW-12Ki		
Capacity	300 g	600 g	1500 g	3000 g	6000 g	12000 g
Readability	0.1 g	0.2 g	0.5 g	1 g	2 g	5 g
Weighing pan	170 × 133 mm					

Options & Accessories

EKW-04i	Comparator relay output
EKW-07i	Underhook (for EK-4100i/6000i/6100i/12Ki, EW-12Ki only)
EKW-09i	Rechargeable battery pack (Ni-MH)
EJ-12	Carrying case
AX-3005824-5S	Protective cover (5 pcs)

* EKW-04i and EKW-09i cannot be used at the same time.

EK-AEP Series



EK-3000AEP



EK-300AEP

- ✓ Extremely affordable while providing excellent explosion protection
- ✓ Equipped with an optical connector for data output via optical fiber cable and an AD-1611 optical communication adapter (both sold separately)
- ✓ Battery operation* (approx. 250 hours with backlight OFF) for optimal portability without the need for complicated wiring via a safety barrier
- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr, N, SG (either tl or tol can be added upon request)
- ✓ Security ring for wire-locking the balance to prevent theft

* To be used only with four DURACELL AA alkaline MN1500 LR6, ENERGIZER AA E91 alkaline LR6 AM3, or Panasonic AA alkaline LR6 (XJ) 1.5V batteries

Model	EK-300AEP	EK-3000AEP	EK-12KAEP
Capacity	300 g	3000 g	12 kg
Readability	0.01 g	0.1 g	1 g
RWeighing pan	Ø110 mm	133 × 170 mm	



Optical Communication Adapter

AD-1611



- ✓ Receives optical data from a balance/scale with an optical connector (e.g. EK-AEP series) and transmits electric signals to an external device such as a printer or PC through RS-232C or USB*
- ✓ Requires no AC adapter for power supply when connected to a PC via USB

* The communication is unidirectional and AD-1611 cannot transmit commands from the external device/PC to the balance/scale. AD-1611 itself isn't explosion-protected.

Three optical fiber cable lengths available (sold separately)

AX-KS5456-010 Optical fiber cable (10 m)

AX-KS5456-030 Optical fiber cable (30 m)

AX-KS5456-060 Optical fiber cable (60 m)



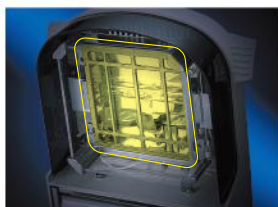
AX-KS5456-030

MS-70/MX-50 MF-50/ML-50



- Low moisture content measurement at 10 ppm (0.001%) resolution (MS-70)
- Fast and uniform heating with halogen lamp and innovative Secondary Radiation Assist (SRA) technology
- Accuracy verification with Sodium Tartrate Dihydrate (standard with MS-70, MX-50, and MF-50)

- ✓ Calibration function for heating temperature (for MS-70 and MX-50 only)
- ✓ Five different measurement programs
- ✓ Selectable heating patterns
- ✓ Translucent window enabling progress check
- ✓ Memory function for measurement conditions
- ✓ Quick reference card provided



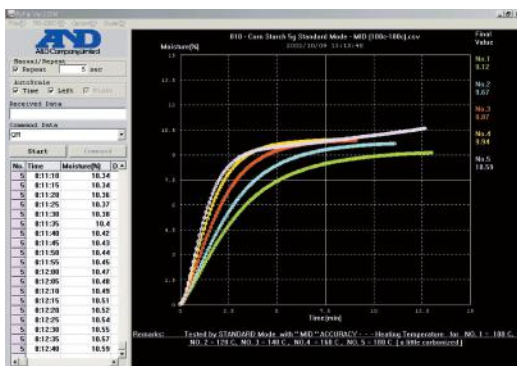
Secondary Radiation Assist (SRA)

The thermally conductive glass spreads the heat evenly over the sample, realizing more efficient and accurate measurement. It also protects the halogen lamp from soiling from the volatile components of samples.

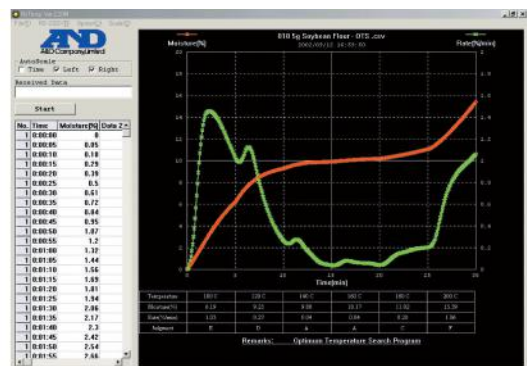
Special Software “WinCT-Moisture”

(Standard with MS-70 and MX-50)

- Displays moisture rate changes over time in a graph (RsFig)
- Quickly and automatically suggests the most suitable heating conditions for first-time samples (RsTemp)
- ✓ Calculates measurement data statistics
- ✓ Saves the recorded data in CSV format
- ✓ Detects other changes to the sample material in addition to moisture rate
- ✓ Includes sample data summary



RsFig (Corn starch)



RsTemp (Soybean flour)

Model		MS-70	MX-50	MF-50	ML-50
Measurement method		400 W straight halogen lamp heating system with SRA filter and SHS weighing technology			
Maximum sample weight capacity		71 g	51 g		
Readability	Moisture content	0.001% / 0.01% / 0.1%	0.01% / 0.1%	0.05% / 0.1% / 1%	0.1% / 1%
	Weight	0.0001 g	0.001 g	0.002 g	0.005 g
Repeatability (σ)	Moisture content (over 1 g)	0.05%	0.1%	0.2%	0.5%
	Moisture content (over 5 g)	0.01%	0.02%	0.05%	0.1%
	Weight	0.0005 g	0.001 g	0.002 g	0.005 g
Drying temperature		30 to 200 °C	50 to 200 °C		
Measurement unit		Wet base / Dry base / Dry content / Ratio / Weight			
Sample pan size		Ø85 mm			

Options & Accessories

AX-MX-30	Disposable aluminum pan (100 pcs)	AX-MX-37	Spoon (2 pcs)
AX-MX-31	Sample pan (100 pcs)	AX-MX-38	Display cover (2 pcs)
AX-MX-32-1	Filtration glass fiber sheet (100 sheets)	AX-MX-39	Dust cover
AX-MX-32-2	Glass fiber sheet (100 sheets)	AX-MX-40	RS-232C cable (25P-9P, 2 m)
AX-MX-33	Sodium Tartrate Dihydrate (30 g × 12 pcs)	AX-MX-41	Calibration weight (20 g)
AX-MX-34-120V	Halogen lamp (AC 100 to 120 V)	AX-MX-42	WinCT-Moisture
AX-MX-34-240V	Halogen lamp (AC 200 to 240 V)	AX-MX-43	Temperature calibrator (for MS-70 and MX-50 only)
AX-MX-35	Pan handle (2 pcs)	AX-USB-25P	Serial/USB converter with cable
AX-MX-36	Tweezers (2 pairs)		

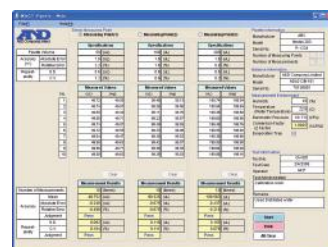
AD-4212B-PT AD-4212A-PT FX-300i-PT



AD-4212B-PT



*Pipette is not included.



WinCT-Pipette

- ✓ Automatic mass-to-volume conversion and accuracy judgment using the special “WinCT-Pipette” software
- ✓ Judgment by your preferred criteria – manufacturer specifications, ISO8655, or your own
- ✓ Evaporation trap to minimize errors due to evaporation
- ✓ Portable carrying case for testing easily on-site*
- ✓ Printing function for GLP documentation requirements, etc.

* Not advisable with 0.001 mg readability

Model	AD-4212B-PT	AD-4212A-PT	FX-300i-PT
Capacity	5.1 g / 31 g / 110 g*	110 g	320 g
Readability	0.001 mg / 0.01 mg / 0.1 mg	0.1 mg	1 mg
Repeatability (σ)	0.015 mg / 0.05 mg / 0.1 mg	0.15 mg	1 mg
Linearity	± 0.05 mg / ± 0.05 mg / ± 0.2 mg	± 0.3 mg	± 2 mg

* Smart range. Please select BM-20/22 + BM-014 (cf. P. 9) if you will mainly use the 0.001 mg range, as it will provide much greater stability.

Leak Tester

AD-1690



*Pipette is not included.

- ✓ Takes only 5 seconds to determine if a pipette has a leak
- ✓ Leak detection by depressurization ($-20\text{kPa} \pm 20\%$) ensuring no contamination (e.g. dust) enters the pipette being tested
- ✓ RS-232C interface to output data to a PC, etc.

Options & Accessories

- AD-1690-01 Replacement tube set (adapter $\times 1$, attachment $\times 4$)
- AD-1690-02 Replacement filter set (filter unit $\times 1$, filter element $\times 10$)
- AD-1690-015 Carrying case

MC Series



MC-6100



MC-10K



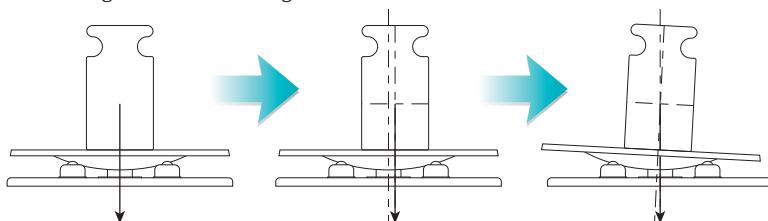
MC-100KS

- ✓ Stabilizing filter to minimize errors due to drafts or vibrations
- ✓ Extra decimal place that also makes it possible to monitor fine weight changes with heavy tare weights
- ✓ Multiple weighing units: g, kg*, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, SG, and a user-programmable unit for conversion applications (either tl or tol can be added upon request)

* kg for MC-100KS only

Auto-centering pan (available for MC-1000/6100/10K/30K)

The auto-centering pan realizes mass comparison with higher accuracy by correcting eccentric loadings.



Model	MC-1000	MC-6100	MC-10K	MC-30K	MC-100KS
Capacity	1100 g	6100 g	10.1 kg	31 kg	101 kg
Readability	0.0001 g	0.001 g		0.01 g	0.1 g
Repeatability (σ)*	0.0005 g (for 1 kg) 0.0004 g (for 500 g)	0.004 g (for 5 kg) 0.0015 g (for 2 kg)	0.005 g (for 10 kg) 0.004 g (for 5 kg)	0.015 g (for 20 kg)	0.2 g (for 100 kg) 0.1 g (for 60 kg)
Linearity	± 0.003 g	± 0.03 g		± 0.2 g	± 2 g
Weighing pan	128 × 128 mm	165 × 165 mm	270 × 210 mm		386 × 346 mm

*Repeatability when the auto-centering pan or an automatic loading machine is used under good ambient conditions.

Options & Accessories

AX-MC1000PAN	Auto-centering pan (for MC-1000)
AX-MC6100PAN	Auto-centering pan (for MC-6100)
AX-MC10K/30KPAN	Auto-centering pan (for MC-10K/30K)
GX-02	Quick USB interface with cable (for MC-1000/6100)
GX-04	Comparator output with a buzzer/RS-232C/Current loop output (for MC-1000/6100)
GX-06	Analog output/Current loop output (for MC-1000/6100)
GX-12	Animal weighing pan (for MC-1000/6100)
GX-13	Density determination kit (for MC-1000)

* Only one of GX-02, GX-04, GX-06 or the standard RS-232C interface can be used. GX-04 and GX-06 are factory-installed options.

** Please refer to the GX-K and GP series for options for MC-10K/30K and MC-100KS respectively.

MC-10K
/30K
/100KS



MC-10K
/30K
/100KS



Optional for
MC-100KS



Optional
MC-1000/6100



AD-1671



- ✓ Isolates a highly sensitive analytical balance from minute vibrations that seriously affect the stability of weighing

Max. loading capacity	Approx. 40 kg
Dimensions	460 (W) × 400 (D) × 71 (H) mm
Weight	Approx. 27 kg

Tabletop Breeze Breaks

AD-1672(A)/AD-1675/AD-1676

- ✓ Shields a highly sensitive analytical balance from breezes and minute temperature changes caused by air conditioning, people passing by, or operators themselves
- ✓ Consists of antistatic plastic panels to minimize the effect of static electricity on the balance

AD-1672(A) Tabletop Breeze Break (Large)

Allows for enclosing a peripheral device such as the AD-8922A remote controller together with an analytical balance



AD-1672



AD-1672A

Dimensions	680 (W) × 600 (D) × 720 (H) mm
Weight	Approx. 10 kg

AD-1675 Tabletop Breeze Break (Small)

Suitable for weigh modules such as the AD-4212D series

Dimensions	237 (W) × 371 (D) × 238 (H) mm
Weight	Approx. 2 kg



AD-1675

AD-1676 Tabletop Breeze Break (Medium)

Suitable for standard analytical balances* such as the BM series

Dimensions	368 (W) × 514 (D) × 350 (H) mm (incl. the handles)
Weight	Approx. 4 kg

* Excluding the GR series; its keys will be difficult to operate in the AD-1676.



AD-1676

AD-1687



- ✓ Simultaneously logs temperature, humidity, barometric pressure, and vibration with weighing data from a balance/scale
- ✓ Large memory capacity of 10,000 data sets
- ✓ Instant data saving to a PC requiring no special software
- ✓ No battery required when connected to either a balance/scale or PC
- ✓ Trend graph mode to display chronological changes in graph format
- ✓ Interval time setting for environmental data recording
- ✓ Portable size of 127 × 90 × 36 mm (including the protective cover)
- ✓ IP65 dust and waterproof (with the protective cover on)

Sensor	Readability	Measurement range	Accuracy
Temperature	0.1 °C 0.1 °F	0 to 60 °C 32 to 140 °F	±0.5 °C (20 to 30 °C) ±0.9 °F (68 to 86 °F)
Humidity	0.1% RH	0 to 100% RH	±3% (20 to 80%)
Barometric pressure	0.1 hPa	500 to 1100 hPa	±4 hPa (0 to 50 °C)
Vibration	1 Gal	0 to 2000 Gal	±20 %, static acceleration

Endorectal probes for measuring animal body temperatures (sold separately)

The round-shaped tips minimize the stress and pain felt by animals.



For mice



For rats

Options & Accessories

AD-1687-22	Desktop/wall-mount stand
AX-KO3986-150	Waterproof extension cable (1.5 m) for the thermo-hygrometer
AX-KO3994-100	External temperature sensor – mounting type (cable length: 1.0 m)
AX-KO3995-100	External temperature sensor – grip type (cable length: 1.0 m)
AX-KO4746-100	Endorectal probe for mice (Ø1.6 mm)
AX-KO4747-100	Endorectal probe for rats (Ø3.2 mm)

Air Flow Logger

AD-1641



- ✓ Precisely captures low-velocity air flows of 0 to 1.00 m/s—together with temperature, humidity, barometric pressure and vibration
- ✓ Alarm for abnormal values (comparator function)

Sensor	Readability	Measurement range	Accuracy
Air flow	0.01 m/s	0 to 1.00 m/s	±0.05 m/s (0.10 to 1.00 m/s)

* Please see the specifications of the AD-1687 for the temperature, humidity, barometric pressure, and vibration sensors.

AD-1688



- ✓ Stores up to 5,000 weighing results, including time and date added by its internal clock and calendar
- ✓ Dual interface – RS-232C to an A&D balance/scale and USB to a PC
- ✓ Highly portable, pocket size of 55 × 103 × 16.5 mm
- ✓ IP65 dust and waterproof (with the casing cover on)
- ✓ Receives power supply directly from the balance/scale or PC, requiring no battery



Quick USB Adapter

AD-8527



- ✓ Enables plug-and-play, real-time transmission of weighing data from an A&D balance/scale RS-232C interface to a PC USB port
- ✓ Internal clock and calendar to add time and date to the weighing results
- ✓ Highly portable, pocket size of 55 × 103 × 16.5 mm
- ✓ IP65 dust and waterproof (with the casing cover on)
- ✓ Receives power supply directly from the balance/scale or PC, requiring no battery

Compact Printer

AD-8127



- ✓ Easy setting and operation with a numeric keypad and LCD display
- ✓ Built-in clock and calendar for printing time and date at any time
- ✓ Sends re-zero and weighing data request commands to the balance/scale
- ✓ Clear, visible, and long-lasting dot matrix printing
- ✓ Password lock function to protect clock, calendar and function settings
- ✓ Dust-free paper (AX-PP173-S) available for use in clean rooms

AD-1682

- ✓ Allows for use of a balance/scale in the field without AC power
- ✓ Gives you peace of mind when stable power supply is not guaranteed

Applicable product	Duration of continuous operation (typical)
GX-K/GF-K, GP	6 hours
BM	7 hours
GH, HR-i, GR, MC, AD-1690	8 hours

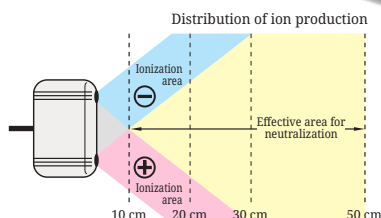


Battery type Nickel-Metal-Hydride (Ni-MH)
 Charging time Approx. 15 hours
 Dimensions 96 (W) × 140 (D) × 58 (H) mm

Static Eliminator

AD-1683

- ✓ Enables quick removal of static electricity to ensure stable weighing
- ✓ Adopts the direct-current (DC) method, which causes no breeze and is therefore ideal for fine powder samples
- ✓ Long-life (approx. 10,000 hours) discharge electrode pins
- ✓ Compact size of 112 (W) × 92 (D) × 60 (H) mm for use on either a desktop or production line



Electrostatic Field Meter

AD-1684A

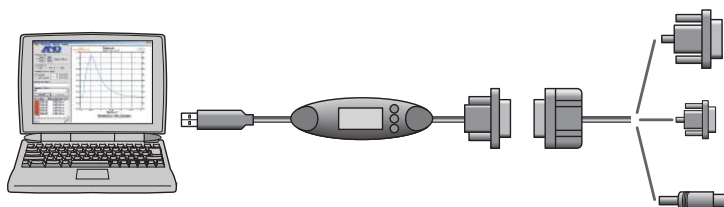
- ✓ Detects the presence of static electricity, which is often the cause of unstable weighing
- ✓ Compact (123 × 73 × 25 mm) and lightweight (approx. 170 g)



Serial/USB Converters (with Cable)

AX-USB-25P/9P/DIN

- ✓ Converts the RS-232C output from a balance/scale and sends it to a PC USB port
- ✓ Enables sending of commands from a PC to a balance/scale, and receiving of GLP outputs, etc. via USB



* Please select either D-Sub 25 pin, D-Sub 9 pin, or DIN depending on your balance/scale.

AD-8526



- ✓ Converts the RS-232C output from a balance/scale and sends it to Ethernet
- ✓ Realizes communication between a PC and multiple balances/scales when used with an Ethernet hub
- ✓ Comes with the WinCT-Plus software on CD-ROM (also downloadable from the A&D website)

Bluetooth® Converters

AD-8529PC/PR-W

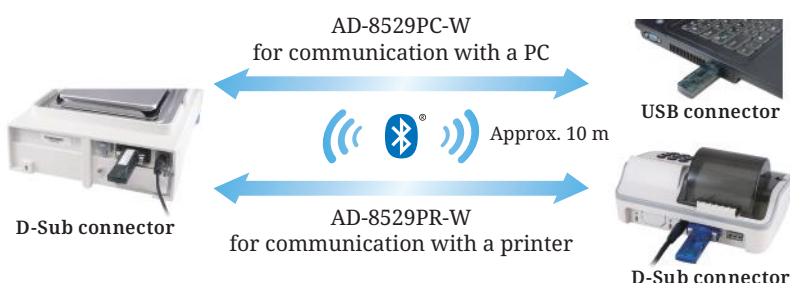


AD-8529PR-W



AD-8529PC-W

- ✓ Enables wireless communication between a balance/scale and a PC/printer using Bluetooth® technology
- ✓ Eliminates spacing/cabling problems and risk of contamination in places such as fume hoods, safety enclosures and glove boxes
- ✓ Prevents substances from adhering to printer paper by isolating the balance from the printer



Foot Switches

AX-SW137-PRINT/REZERO



AX-SW137-PRINT AX-SW137-REZERO

- ✓ Allows for use of the PRINT or RE-ZERO command by depressing
- ✓ Convenient when you can't or don't want to press the key on the balance/scale directly by hand
- ✓ Can be used with the BM, GH, HR-i, GR, FC-Si/FC-i, and HV-C(P)/HW-C(P) series

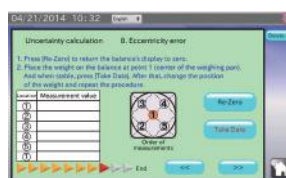
* HVW-04C is required for the HV-C(P)/HW-C(P) series.

** For Apollo (GX-AE/GX-A/GF-A series), GXA-23-PRINT/REZERO are available as options.

AD-1691

- ✓ Supports daily and periodic checks of balance quality and performance
- ✓ Calculates on the spot the expanded uncertainty of calibration based on seven uncertainty components
- ✓ Determines the minimum weight at the actual location of measurement in accordance with the United States Pharmacopeia (USP), Chapter 41
- ✓ Equipped with the A&D Measurement Environment Evaluation Tool (AND-MEET)* to help improve balance repeatability
- ✓ Quickly outputs the results in report format
- ✓ Can be used as a separate touch-panel display for an A&D balance

* Patent pending



Eccentricity error test



Remote control

Remote Display

AD-8920A

- ✓ Shows weighing results to others away from the balance/scale (over the counter, etc.)
- ✓ Receives power supply directly from the balance/scale

Dimensions 128 (W) × 102 (D) × 76 (H) mm
Communication Approx. 1 m (optional 5 or 10-meter extension cable available)



Remote Controller

AD-8922A

- ✓ Remotely controls a balance/scale with key operations
- ✓ Outputs weighing data to another external device such as a PC or printer via RS-232C connection

Dimensions 238 (W) × 132 (D) × 170 (H) mm
Communication Approx. 2 m

Options & Accessories

- AD-8922A-01 BCD output
- AD-8922A-04 Comparator output
- AD-8922A-05 Current loop input
- AD-8922A-06 Analog output



AD-1612



Options & Accessories

AD1612-14 Pole mounting bracket

- ✓ Can be connected to an A&D balance/scale with a comparator relay output
- ✓ Enables quicker and more accurate checkweighing or grading with buzzer beeps in addition to red, yellow and green LED lights
- ✓ Six different beep types (incl. mute) that can be freely set for each comparator step
- ✓ Uses the AC adapter of the balance/scale to operate while also supplying power to the balance/scale via the provided DC cable at the same time
- ✓ Instant data saving to a PC requiring no special software
- ✓ Adjustable buzzer volume and LED brightness

Density Determination Kits for Analytical Balances

AD-1653/1654



- ✓ Makes it easy to perform measurements required for calculating the density of a solid or a liquid

Model	Applicable product
AD-1653	BM-252/200/300/500, GH, HR-i, GR
AD-1654	HR-AZ/HR-A, FZ-i/FX-i, FZ-iWP/FX-iWP

Sample Cup Holder Set

AX-HOLDER-SET



- ✓ Handy for holding sample cups such as test tubes, micro tubes, flasks or vials on the weighing pan
- ✓ Consists of three holders of different sizes (S, M and L) that can be used creatively, depending on the size and/or desired angle of the sample cup

Material	Silicon (antistatic treated)
Dimensions	Large size: 67 (W) × 67 (D) × 40 (H) mm Medium size: 56 (W) × 56 (D) × 36 (H) mm Small size: 40 (W) × 40 (D) × 32 (H) mm
Weight	Large size: 45.2 g Medium size: 30.8 g Small size: 15.7 g

AD-4212A/AD-4212B Series



- ✓ Protection mechanism against vertical and transverse overloading due to actuator malfunctions, etc.
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations
- ✓ Multiple weighing units*: g, mg, oz, ozt, ct, mom, dwt, gr, (either tl or tol can be added upon request)
- ✓ Automatic zero display after data output
- ✓ Wall/panel-mountable display unit
- ✓ Allows for designing and attaching your preferred weighing pan/receptacle
- ✓ Comparator contact output with buzzer (AD-4212A: 3 level / AD-4212B: 3 or 5 level)
- ✓ Chemically resistant stainless steel** sensor unit (AD-4212B)
- ✓ Comes with a free calibration weight (OIML Class E2 equivalent)

* A user programmable unit is also available with the AD-4212A series

** SUS304 for the body and SUS316 for the weighing pan

Model	AD-4212A-100	AD-4212A-200	AD-4212A-600	AD-4212A-1000
Capacity	110 g	210 g	610 g	1100 g
Readability	0.1 mg		1 mg	
Stabilization time*	0-30 g: 1.1 sec 30-110 g: 1.3 sec	0-30 g: 0.8 sec 30-210 g: 1.0 sec	0-30 g: 0.9 sec 30-610 g: 1.1 sec	0-30 g: 0.9 sec 30-1100 g: 1.1 sec
Weighing pan	50 × 50 mm		70 × 70 mm	

Model	AD-4212B-101	AD-4212B-102	AD-4212B-201	AD-4212B-301
Capacity	31 g / 110 g	110 g	210 g	310 g
Readability	0.01 mg / 0.1 mg	0.01 mg	0.1 mg	
Stabilization time*	4.0 sec / 2.5 sec	4.0 sec	2.5 sec	
Weighing pan	Ø34 mm		50 × 50 mm	

*Typical when set to FAST

Options & Accessories

- AD-4212A-01 BCD output/external contact input
 AD-4212A-04 5-level comparator contact output (for AD-4212A)
 AD-4212A-07 Extension cable (3 m)

- AD-4212A-08 Ethernet interface with WinCT-Plus software
 AD-4212A-19 Stainless steel breeze break (comes as standard with AD-4212A-100 and all AD-4212B models)
 AD-4212A-20 Metal leveling foot

* Only one of AD-4212A-01, AD-4212A-04, AD-4212A-08, or the standard interface can be used.



AD-4212A

AD-4212B

AD-4212A

AD-4212A

AD-4212B-101

Optional

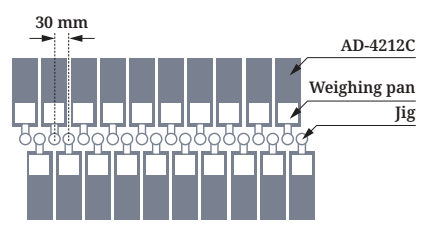
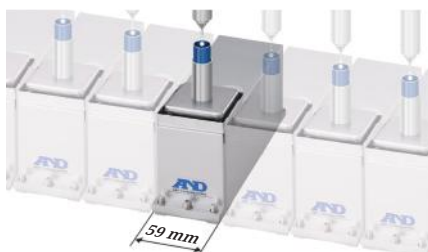


AD-4212C Series



AD-4212C-301
/3100

Installation images



- ✓ Direct digital data output to a panel computer, PLC, or PC via RS-232C
- ✓ High-speed data transmission of up to 50 times/second
- ✓ IP65 dust and waterproof construction
- ✓ Protection mechanism against vertical and transverse overloading due to actuator malfunctions, etc.
- ✓ Removable leveling feet for direct attachment on the mounting base
- ✓ Free WinCT-AD4212C software for easy calibration and more detailed response settings
- ✓ Comes with a free calibration weight (OIML Class E2 equivalent)
- ✓ CC-Link connection to a PLC through the optional AD-8923-CC remote controller (AD-8923-BCD for BCD output is also available)

AD-8923-CC (sold separately)

Receives power directly from the connected AD-4212C (or the other way around)



Model	AD-4212C-301	AD-4212C-300	AD-4212C-600	AD-4212C-3100	AD-4212C-3000	AD-4212C-6000
Capacity	51 g / 320 g	320 g	620 g	510 g / 3200 g	3200 g	6200 g
Readability	0.0001 g / 0.001 g	0.001 g		0.001 g / 0.01 g	0.01 g	
Stabilization time*	d = 0.0001 g: 1.3 sec d = 0.001 g: 1.0 sec	0 - 30 g: 0.5 sec 30 - 320 g: 1.0 sec	0 - 30 g: 0.5 sec 30 - 620 g: 1.0 sec	d = 0.001 g: 1.3 sec d = 0.01 g: 1.0 sec	0 - 300 g: 0.5 sec 300 - 3200 g: 1.0 sec	0 - 300 g: 0.5 sec 300 - 6200 g: 1.0 sec
Weighing pan	50 × 50 mm					

* Typical when set to FAST

Options & Accessories

AD-8923-BCD Remote controller (BCD)

AD-8923-CC Remote controller (CC-Link)

AD-4212D Series



AD-4212D-32

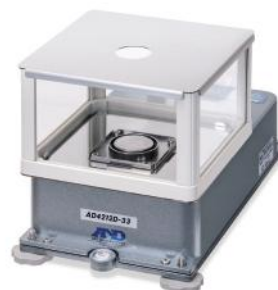
- ✓ Compact size and resistance to vacuum state ideal for use in a glove box
- ✓ Capable of direct digital data output to a panel computer, PLC, or PC via RS-232C
- ✓ Stable measurement in a fume hood*
- ✓ Protection mechanism against vertical and transverse overloading due to actuator malfunctions, etc.
- ✓ Removable leveling feet for direct attachment on the mounting base
- ✓ Adjustable response characteristics to help cope with the effects of drafts and vibrations
- ✓ Automatic zero display after data output
- ✓ Allows for designing and attaching your preferred weighing pan/receptacle
- ✓ Water-resistant cap for cleaning**
- ✓ Free WinCT-AD4212D software for displaying the weighing value and changing the internal settings of the weigh module on your PC
- ✓ CC-Link connection to a PLC through the optional AD-8923-CC remote controller (AD-8923-BCD for BCD output is also available)

* For 0.1 mg readability. Stable measurement at 0.01 mg readability will also be possible when used with the AD-1675 tabletop breeze break (small).

** The AD-4212D series has an IP65 rating when the cap is put on the pan support boss (after removing the weighing pan and pan support).

Equipped with a small breeze break

Depending on the use, you can choose to remove one of the side panels instead of the lid to access the weighing pan from the side.



Model	AD-4212D-33	AD-4212D-32	AD-4212D-302	AD-4212D-301
Capacity	32 g	5.1 g / 32 g	320 g	320 g
Readability	0.001 mg	0.001 mg / 0.01 mg	0.01 mg	0.1 mg
Stabilization time*	7 sec			3 sec
Weighing pan	Ø34 mm		Ø50 mm	

*Typical when set to FAST

Options & Accessories

AD-8923-BCD Remote controller (BCD)

AD-8923-CC Remote controller (CC-Link)

SW Series



Optional



High pressure, high temperature washdown



Withstands extremely damp environments



Stainless steel frame and load cell

- ✓ Ultimate protection against the effects of condensation as well as water*
- ✓ Streamlined construction for easy cleaning of food-processing residues
- ✓ Stainless steel weighing pan, frame and load cell**
- ✓ Rugged and adjustable (0°, 30°, 60° or 90°) indicator bracket
- ✓ Touch sensitive capacitive keys to prevent damage from sharp objects
- ✓ Auto-tare function to facilitate consecutive check weighing
- ✓ Three sizes of base units, which are also available separately
- ✓ Pole stand attachable to either the short or long side of the platform

* Both IP69K and IP68 compliant

** Weighing pan and frame = SUS304
Load cell = SUS630

The display unit as an IP69K indicator (SW-D)

You can purchase the SW display unit (SW-D) separately and use it as an IP69K (as well as IP68) indicator with platforms (load cells) other than A&D's.



Model	SW-6KS	SW-15KS	SW-15KM	SW-30KM	SW-60KM	SW-150KM	SW-60KL	SW-150KL
Capacity	6 kg	15 kg	15 kg	30 kg	60 kg	150 kg	60 kg	150 kg
Readability (switchable)	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
	0.001 kg	0.002 kg	0.002 kg	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
	0.0005 kg	0.001 kg	0.001 kg	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Weighing pan	250 × 250 mm		300 × 380 mm				390 × 530 mm	

*g, oz, lb and lb-oz also available (g not available for SW-60K/150K)

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6 V, 4 Ah)

SW-03 RS-232C + comparator relay output

SW-04 RS-422/485 interface

SW-09 Short pole stand (for SW-6KS/15KS only)

SW-10 Long pole stand

SW-11 Desktop/wall-mount stand

* SW-03 and SW-04 cannot be used at the same time. ** The SW series is not IP69K compliant with SW-03 or SW-04.

SC/SE Series



Easy cleaning



Washdown construction

- ✓ Submersible and fit for extremely wet work environments
- ✓ 5,000 hours of continuous operation with six D alkaline batteries
- ✓ High-speed weighing with 1-second stabilization
- ✓ Supersized LCD display with 39 mm character height
- ✓ Stainless steel weighing pan (SC: SUS304 / SE: SUS430)
- ✓ Waterproof and corrosion-resistant load cell*
- ✓ Battery life indicator

* Aluminum anodized and coated with epoxy resin with protective silicon over wiring



SC: stainless steel (SUS304) frame and column



SE: steel frame and column



Easily removable battery unit



Optional



Model	SC-30KAM SE-30KAM	SC-60KAM SE-60KAM	SC-150KAM SE-150KAM	SC-60KAL SE-60KAL	SC-150KAL SE-150KAL
Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Readability (switchable)	0.01 kg 0.005 kg	0.02 kg 0.01 kg	0.05 kg 0.02 kg	0.02 kg 0.01 kg	0.05 kg 0.02 kg
Weighing pan	300 × 380 mm			390 × 530 mm	

* oz and lb also available

Options & Accessories

SCE-02 Quick USB interface

SCE-03 RS-232C + comparator relay output

* SCE-02 and SCE-03 cannot be used at the same time.

** The SC/SE series is not IP68 compliant with SCE-02 or SCE-03.

FS-i Series



Optional



- ✓ Ultra high-speed weighing with 0.5-second stabilization
- ✓ Distinct tricolor LEDs for fast and error-free comparator judgment
- ✓ Auto-tare and negative comparison functions that enable take-away check weighing
- ✓ Washable and hygienic stainless steel (SUS304) display unit and weighing pan
- ✓ Waterproof and corrosion-resistant load cell*
- ✓ Fast data acquisition with a refresh rate of 20 times/second
- ✓ Large memory of 100 comparator settings
- ✓ 60-segment analog sweep (horizontal bar) display for intuitive filling control
- ✓ Simple operation mode to prevent accidental changes to the settings

* Aluminum anodized and coated with epoxy resin with protective silicon over wiring



The display unit as a waterproof indicator for checkweighing scales (FS-D)

The FS-i display unit, or FS-D, has eight preset capacities with three selectable resolutions, and can be used with platforms other than A&D's.

Model	FS-6Ki	FS-15Ki	FS-30Ki
Capacity	6 kg	15 kg	30 kg
Readability (switchable)	0.002 kg	0.005 kg	0.01 kg
	0.001 kg	0.002 kg	0.005 kg
	0.0005 kg	0.001 kg	0.002 kg
Weighing pan	250 × 250 mm		380 × 300 mm

* g, lb, oz, and lb-oz also available

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6V, 4Ah)

FS-03i RS-232C + comparator relay output

FS-04i RS-422/485 + comparator relay output

* FS-03i and FS-04i cannot be used at the same time.

HV-CWP/HW-CWP Series



- ✓ Washable and hygienic stainless steel (SUS304) surface
- ✓ High-speed measurement—response in 1 second or less (typical for the HV-CWP series)*
- ✓ Bright and multi-colored 5-step LED comparator lights
- ✓ Auto-tare and negative comparison functions that enable take-away check weighing
- ✓ Quick and easy settings using the alphanumeric keypad
- ✓ Two slots for optional data communication interfaces
- ✓ Detachable/wall-mountable display unit (optional holder is required)

* With the HW-CWP series, response typically takes not more than 1.5 seconds.

Model	HV-15KCWP			HV-60KCWP			HV-200KCWP		
Capacity*	3 kg	6 kg	15 kg	15 kg	30 kg	60 kg	60 kg	150 kg	220 kg
Readability*	0.001 kg	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.02 kg	0.05 kg	0.1 kg
Power supply	AC main								
Weighing pan	250 × 250 mm			330 × 424 mm			390 × 530 mm		

* Multi-interval: The lighter the target object, the finer the readability.

Model	HW-10KCWP	HW-60KCWP	HW-100KCWP	HW-200KCWP
Capacity	10 kg	60 kg	100 kg	220 kg
Readability	0.001 kg	0.005 kg	0.01 kg	0.02 kg
Power supply	AC main			
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm	

Options & Accessories

HVW-02BCWP	USB interface (bi-directional, type mini-B)
HVW-03CWP	RS-232C interface (terminal block)
HVW-04CWP	Comparator relay output/buzzer interface
HVW-13	Large roller conveyor (for the 100 to 200 kg capacity models)
HVW-14	Medium-size roller conveyor (for the 60 kg capacity models)

AX-043005266	Indicator holder/wall-mount kit
AX-KO6430-5M	Waterproof extension cable (5 m)
AX-TMBOXTS-6	Waterproof junction box

* Recalibration is required after connecting the extension cable via the junction box.



Optional



HV-CEP/HW-CEP Series



Platform only



- ✓ Extremely affordable while providing excellent explosion protection
- ✓ Waterproof base unit with stainless steel (SUS430) pan
- ✓ High-speed measurement—response in 1 second or less (typical for the HV-CEP series)*
- ✓ Bright and multi-colored 5-step LED comparator lights
- ✓ Auto-tare and negative comparison functions that enable take-away check weighing
- ✓ Quick and easy settings using the alphanumeric keypad
- ✓ Operation with four D batteries** (approx. 1,500 hours with LED and backlight OFF) for optimal portability without the need for complicated wiring via a safety barrier

* With the HW-CEP series, response typically takes not more than 1.5 seconds.

** Only DURACELL MN1300, ENERGIZER E95, or Panasonic LR20 (XJ) can be used (but not mixed).

Model	HV-15KCEP			HV-60KCEP			HV-200KCEP		
Capacity*	3 kg	6 kg	15 kg	15 kg	30 kg	60 kg	60 kg	150 kg	220 kg
Readability*	0.001 kg	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.02 kg	0.05 kg	0.1 kg
Power supply	Four D-size, alkaline, 1.5 V batteries								
Weighing pan	250 × 250 mm			330 × 424 mm			390 × 530 mm		

* Multi-interval: The lighter the target object, the finer the readability.

Model	HW-10KCEP	HW-60KCEP	HW-100KCEP	HW-200KCEP
Capacity	10 kg	60 kg	100 kg	220 kg
Readability	0.001 kg	0.005 kg	0.01 kg	0.02 kg
Power supply	Four D-size, alkaline, 1.5 V batteries			
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm	

HV-C(P)/HW-C(P) Series



LED comparator lights

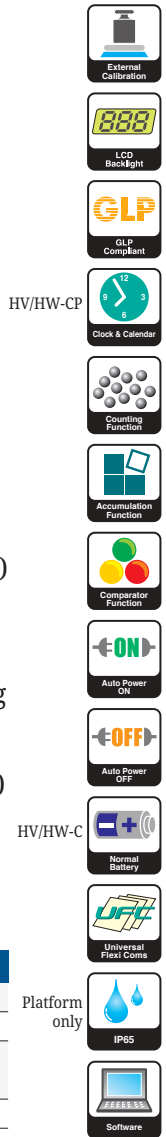


LCD display with white backlight



Alphanumeric keypad

Built-in printer (for the HV/HW-CP series)



- ✓ High-speed measurement—response in 1 second or less (typical for the HV-C(P) series)*
- ✓ Bright and multi-colored 5-step LED comparator lights
- ✓ Auto-tare and negative comparison functions that enable take-away check weighing
- ✓ Quick and easy settings using the alphanumeric keypad
- ✓ Built-in printer for creating paper-based records on the spot (HV/HW-CP series)
- ✓ Waterproof base unit with stainless steel (SUS430) pan
- ✓ Three slots for optional data communication interfaces

* With the HW-C(P) series, response typically takes not more than 1.5 seconds.

Model	HV-15KC(P)			HV-60KC(P)			HV-200KC(P)		
Capacity*	3 kg	6 kg	15 kg	15 kg	30 kg	60 kg	60 kg	150 kg	220 kg
Readability*	0.001 kg	0.002 kg	0.005 kg	0.005 kg	0.01 kg	0.02 kg	0.02 kg	0.05 kg	0.1 kg
Power supply	HV-C series: AC adapter or four D batteries (1200 hours) HV-CP series: AC adapter								
Weighing pan	250 × 250 mm			330 × 424 mm			390 × 530 mm		

*Multi-interval: The lighter the target object, the finer the readability.

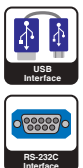
Model	HW-10KC(P)	HW-60KC(P)	HW-100KC(P)	HW-200KC(P)
Capacity	10 kg	60 kg	100 kg	220 kg
Readability	0.001 kg	0.005 kg	0.01 kg	0.02 kg
Power supply	HV-C series: AC adapter or four D batteries (1200 hours) HW-CP series: AC adapter			
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm	

Options & Accessories

HVW-02CB USB interface (for bi-directional communication, type-B)
 HVW-03C RS-232C interface (D-Sub 9P)
 HVW-04C Comparator relay output/buzzer/contact input interface
 HVW-08C Extension cable (5 m)*
 HVW-11C Wall-mount bracket
 HVW-12C Printer support for AD-8127

HVW-13 Large roller conveyer (for the 100 to 200 kg capacity models)
 HVW-14 Medium-size roller conveyer (for the 60 kg capacity models)
 AX-PP147-S Paper for the built-in printer (5 rolls)
 *Recalibration is required after connecting the extension cable.

Optional



FG Series



Optional



FG-150KAL

- ✓ High-speed weighing with 1-second stabilization
- ✓ Display unit either on a column (FG-KAM/KAL) or attached directly to the platform (FG-KBM)
- ✓ Washable stainless steel (SUS430) weighing pan
- ✓ Two types of power supplies: AC adapter or normal batteries



FG-60KBM

Model	FG-30KAM FG-30KBM	FG-60KAM FG-60KBM	FG-150KAM FG-150KBM	FG-60KAL	FG-150KAL
Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Readability (switchable)	0.01 kg 0.005 kg 0.002 kg	0.02 kg 0.01 kg 0.005 kg	0.05 kg 0.02 kg 0.01 kg	0.02 kg 0.01 kg 0.005 kg	0.05 kg 0.02 kg 0.01 kg
Weighing pan	300 × 380 mm			390 × 530 mm	

Options & Accessories

FG-23 RS-232C interface

FG-24 RS-232C + comparator relay output

HVW-02G Extension cable (5 m)

HVW-12C

Printer support for AD-8127

AX-3007527-5S Protective cover (5 pcs)

* FG-23 and FG-24 cannot be used at the same time.

Portable Bench Scales

SA Series



Optional



- ✓ One scale for both precise (0.001 kg/1 g readability*) and high-capacity weighing
- ✓ Easy to carry around and/or take aboard a vehicle to use at various locations
- ✓ Low profile (approx. 73 mm) that can be stored in narrow spaces or propped against a wall
- ✓ Two types of power supplies: AC adapter (provided as standard) or normal batteries

* Up to 3 kg/3000 g (smart range)

Model	SA-30K	SA-60K	SA-150K
Capacity	30 kg	60 kg	150 kg
Readability (selectable)	Range 1	0.1 kg	
	Range 2	0.01 kg	
	Range 3	0.001 kg (0 to 3 kg) / 0.01 kg (greater than 3 kg)	
	Range 4	1 g (0 to 3000 g) / 0.01 kg (greater than 3 kg)	
Weighing pan	330 × 330 mm		

Options & Accessories

SA-03 RS-232C interface

EK-L Series



- ✓ EK-15KL: Ideal for use where large capacity and high readability are simultaneously required
- ✓ EK-30KL: Especially useful when the gross weight exceeds 15 kg, yet 0.1 g readability is necessary to measure the net weight
- ✓ Scratch-resistant and hygienic stainless steel (SUS430) weighing pan
- ✓ Multiple weighing units: g, kg, oz, lb, ozt (tl can be added upon request)
- ✓ Security ring for wire-locking the scale to prevent theft



EK-30KL

Model	EK-15KL	EK-30KL
Capacity	15 kg	3 kg / 30 kg
Readability	0.1 g	0.1 g / 1 g
Weighing pan	300 × 210 mm	

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6V, 4Ah)

Optional

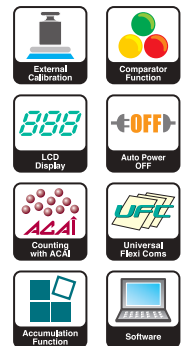


Counting Scales

HC-i Series



- ✓ Beginner-friendly unit weight registering navigator
- ✓ Audible Weighing Assist (AWA) beep function
- ✓ Detachable display unit
- ✓ Scratch-resistant and hygienic stainless steel (SUS430) weighing pan
- ✓ Memory capacity for up to 99 items
- ✓ Simple operation mode to avoid any unwanted operational mistakes



Optional



Model	HC-3Ki	HC-6Ki	HC-15Ki	HC-30Ki
Min. unit weight	Normal mode	0.1 g	0.2 g	0.4 g
	Fine mode	0.005 g	0.01 g	0.02 g
Capacity	3 kg	6 kg	15 kg	30 kg
Readability	0.5 g	1 g	2 g	5 g
Max. count display	600,000		750,000	600,000
Weighing pan	300 × 210 mm			

Options & Accessories

HC-02i Sealed lead acid rechargeable battery (6V, 4Ah)

HC-03i RS-232C interface

* HC-03i and HC-04i cannot be used at the same time.

HC-04i RS-232C + comparator relay output

HC-08i Extension cable (2 m)

FC-Si/FC-i Series



FC-Si



Optional



- ✓ Beginner-friendly unit weight registering navigator
- ✓ High internal resolution (FC-Si: 1/10,000,000 / FC-i: 1/1,000,000) for extremely accurate counting
- ✓ Large memory capacity for up to 500 items
- ✓ Scratch-resistant and hygienic stainless steel (SUS304) weighing pan
- ✓ Simple operation mode to avoid any unwanted operational mistakes



Two scale operation

You can connect a separately-sold remote scale to count articles that require a larger capacity than that of the FC-Si/FC-i series.

Remote scales (sold separately)

Model	SB-15K10 SA337	SB-60K11 SA337	SB-100K12 SA337	SB-200K12 SA337
Capacity	15 kg	60 kg	100 kg	220 kg
Weighing pan	250 × 250 mm	330 × 424 mm	390 × 530 mm	

Model	FC-09-300K4	FC-09-600K4	FC-09-600K3	FC-09-1200K3
Capacity	300 kg	600 kg		1200 kg
Weighing pan	700 × 600 mm		1000 × 1000 mm	

Model	FC-500Si	FC-5000Si
Min. unit weight	Normal mode 0.001 g	0.01 g
	Fine mode 0.00005 g	0.0005 g
Capacity	500 g	5000 g
Readability	0.02 g	0.2 g
Max. count display	9,999,999	
Weighing pan	128 × 128 mm	165 × 165 mm

Options & Accessories

- FC-01i Barcode reader
 - FC-02i Built-in rechargeable battery pack (Ni-MH)
 - FC-03i RS-232C × 2 ch
 - FC-04i RS-232C × 1 ch + comparator relay output
 - FC-05i Interface for a remote scale
- * FC-03i and FC-04i cannot be used at the same time.

Model	FC-500i	FC-1000i	FC-2000i	FC-5000i	FC-10Ki	FC-20Ki	FC-50Ki
Min. unit weight	Normal mode 0.01 g	0.02 g	0.04 g	0.1 g	0.2 g	0.4 g	1 g
	Fine mode 0.0005 g	0.001 g	0.002 g	0.005 g	0.01 g	0.02 g	0.05 g
Capacity	500 g	1 kg	2 kg	5 kg	10 kg	20 kg	50 kg
Readability	0.05 g	0.1 g	0.2 g	0.5 g	1 g	2 g	5 g
Max. count display	1,000,000						
Weighing pan	205 × 152 mm			300 × 280 mm			

SK-WP Series



- ✓ Washable and hygienic stainless steel (SUS304) construction
- ✓ Long battery life of approx. 1200 hours (with alkaline batteries)
- ✓ Large and wide-angle LCD display with 25 mm character height

Model	SK-1000WP	SK-2000WP	SK-5000WP	SK-5001WP	SK-10KWP	SK-20KWP	SK-30KWP
Capacity	1000 g	2000 g	5000 g	5000 g	10 kg	20 kg	30 kg
Readability	0.5 g	1 g	2 g	1 g	5 g	10 g	20 g
Weighing pan	232 × 192 mm						

Options & Accessories AC adapter (The SK-WP series is not IP65 compliant with the AC adapter.)



Waterproof Compact Scales

HL-WP Series



- ✓ Washable and hygienic stainless steel (SUS304) construction
- ✓ Battery life of approx. 200 hours (with alkaline batteries)
- ✓ Version with a larger pan size available (HL-3000LWP)

Model	HL-300WP	HL-1000WP	HL-3000WP	HL-3000LWP
Capacity	300 g	1000 g	3000 g	3000 g
Readability	0.1 g	0.5 g	1 g	1 g
Weighing pan	128 × 128 mm			174 × 137 mm

Options & Accessories AC adapter (The HL-WP series is not IP65 compliant with the AC adapter.)



SJ-WP/SJ-WP-BT Series



SJ-WP-BT



- ✓ Bright and multi-colored 5-step LED comparator lights
- ✓ Externally mounted load cell to realize fast stabilization (0.5 seconds)
- ✓ Wireless communication with a PC* or the AD-8931 remote display using Bluetooth® technology (SJ-WP-BT)
- ✓ Unparalleled, 5000-hour** continuous operation with normal batteries (with LED and backlight OFF)
- ✓ Auto-tare and negative comparison functions that enable take-away check weighing
- ✓ Scratch-resistant and hygienic stainless steel (SUS304) weighing pan
- ✓ Removable, transparent pan support with overhanging panels to shield the load cell
- ✓ Waterproof and anti-corrosive load cell with integrated overload protection mechanism
- ✓ Multiple weighing units: g, kg, oz, lb, lb-oz, ozt, tl, tol, N
- ✓ Adjustable response characteristics to help cope with the effect of drafts and vibrations

* The AD-8541-PC wireless communication interface for PC is required.

** For the SJ-WP series (2500-hour for the SJ-WP-BT series)

LED comparator lights to reduce overfilled packs and increase packing speed



Quantity too small



Quantity just right



Quantity too large



People respond to these signals much faster and more correctly than just looking at numbers.

Model	SJ-3000WP SJ-3000WP-BT	SJ-6000WP SJ-6000WP-BT	SJ-15KWP SJ-15KWP-BT	SJ-30KWP SJ-30KWP-BT
Capacity	3 kg	6 kg	15 kg	30 kg
Readability (switchable)	0.001 kg	0.002 kg	0.005 kg	0.01 kg
	0.0005 kg	0.001 kg	0.002 kg	0.005 kg
	0.0002 kg	0.0005 kg	0.001 kg	0.002 kg
	0.0001 kg	0.0002 kg	0.0005 kg	0.001 kg
Weighing pan	232 × 192 mm			

Wireless Communication Interface for PC

AD-8541-PC

- ✓ Enables a PC (with communication software such as WinCT installed) to wirelessly receive data from and send commands to a Bluetooth® compatible scale such as the SJ-WP-BT series through its USB port
- ✓ Requires no cable connection, which can compromise the sealing of a waterproof scale



Wireless Remote Display

AD-8931

- ✓ Wirelessly receives and displays weighing results from a Bluetooth® compatible scale such as the SJ-WP-BT series
- ✓ Props to stand on its own and holes so that it can be mounted on a wall to suit your needs
- ✓ Runs on either four AAA batteries (for approx. 200 hours with alkaline batteries, backlight off) or a USB power supply.



HT Series



HT-120

HT-300/500
/3000/5000



Name plate holder



Stackable carrying case

Takes up less space for storage

- ✓ Three color bars to sort scales easily
- ✓ Long battery life of approx. 450 hours (with alkaline batteries)
- ✓ Security slot in the rear of the scale to accommodate an anti-theft lock
- ✓ Multiple weighing units: g, oz, lb-oz*, ozt, tl, tol, N
- ✓ Optional stainless steel (SUS304) weighing pan

* lb-oz not available with HT-300

Compact Precision Scale **HT-120**

- ✓ High readability of 0.01 g with excellent repeatability of 0.01 g (σ)
- ✓ Unparalleled battery life of 500 hours (with alkaline batteries, backlight off)
- ✓ Hygienic and chemically resistant stainless steel (SUS304) weighing pan and protector plate
- ✓ Stackable carrying case that economizes space for storage
- ✓ Security slot in the rear of the scale to accommodate an anti-theft lock
- ✓ Multiple weighing units: g, oz, ozt, ct, mom, dwt, gr, tl, tol, N



Model	HT-120	HT-300	HT-500	HT-3000	HT-5000
Capacity	120 g	310 g	510 g	3100 g	5100 g
Readability	0.01 g	0.1 g		1 g	
Weighing pan	Ø70 mm	132 × 130 mm			

Options & Accessories

Stainless steel (SUS304) pan for HT-300/500/3000/5000 (HT-10)

AC adapter

HT-CL Series

- ✓ Bright and multi-colored LED comparator lights
- ✓ Comes standard in a stackable carrying case with three color bars and an AC adapter
- ✓ Multiple weighing units: g, oz, lb-oz, ozt, ct, dwt, tl, tol, N*
- ✓ Security slot in the rear of the scale to accommodate an anti-theft lock

* The comparator function cannot be used with lb-oz or tl, and lb-oz is not available with HT-300CL.

Model	HT-300CL	HT-500CL	HT-3000CL	HT-5000CL
Capacity	310 g	510 g	3100 g	5100 g
Readability	0.1 g		1 g	
Weighing pan	132 × 130 mm			

Options & Accessories

Stainless steel (SUS304) pan (HT-10)



Bench Scales

SJ-HS Series

- ✓ Hygienic and chemically-resistant stainless steel (SUS304) weighing pan
- ✓ High-speed weighing with 1-second stabilization
- ✓ Long battery life of approx. 2000 hours (with alkaline batteries)
- ✓ Multiple weighing units: g, oz, lb, lb-oz
- ✓ Two side handles for easy carrying of the scale

Model	SJ-1000HS	SJ-2000HS	SJ-5000HS	SJ-5001HS	SJ-12KHS	SJ-20KHS	SJ-30KHS
Capacity	1000 g	2000 g	5000 g	5000 g	12 kg	20 kg	30 kg
Readability	0.5 g	1 g	2 g	1 g	5 g	10 g	20 g
Weighing pan	230 × 190 mm						

Options & Accessories

AC adapter



Compact Scales

HL-i Series

- ✓ Compact, and storable on side or back to save space
- ✓ Long battery life of approx. 1000 hours (with alkaline batteries)
- ✓ Multiple weighing units: g, oz, tl and ct (HL-200i) or lb-oz (HL-2000i)
- ✓ Optional stainless steel weighing (SUS304) pan and carrying case

Model	HL-200i	HL-2000i
Capacity	200 g	2000 g
Readability	0.1 g	1 g
Weighing pan	Ø130 mm	

Options & Accessories

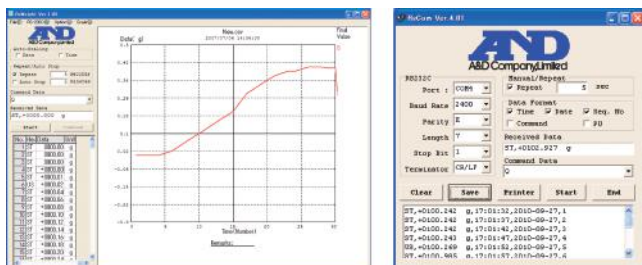
Stainless steel (SUS304) pan (AX-043008052)

Carrying case (AX-093008304)

AC adapter

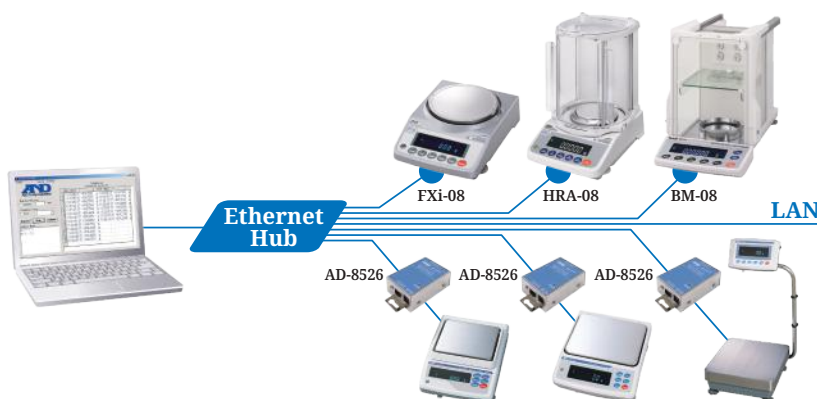


WinCT



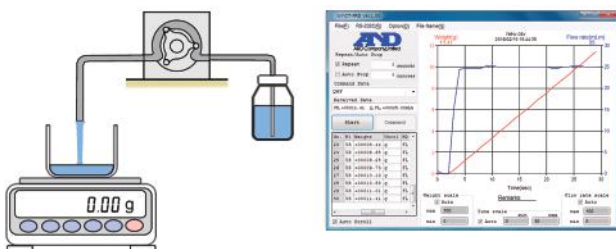
- ✓ Receives data in a text file format from a balance/scale, plots graphs, and/or allows exporting data directly to another application (e.g. Microsoft Excel) on a PC
- ✓ Sends commands to control a balance/scale

WinCT-Plus



- ✓ Sends commands for controlling and acquiring data from multiple balances/scales

WinCT-FRD

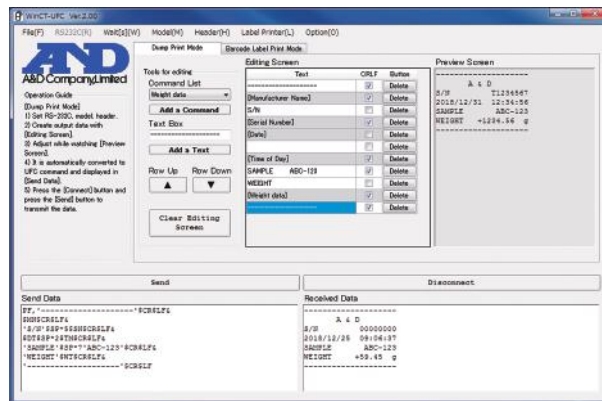


* A balance that has the flow rate display (FRD) function such as the Apollo GX-AE/GX-A/GF-A series

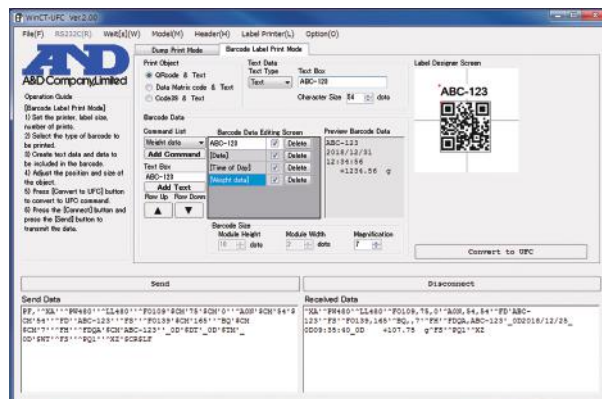
- ✓ Simultaneously displays the weight and flow rate values transmitted from the balance* on a two axis graph so that changes can be seen in real time
- ✓ Automatic as well as manual graph scaling according to the received data
- ✓ Allows for either printing graphs with a printer or saving them as image files
- ✓ Saves recorded data in CSV or TXT format

- ** Following the UFC setting commands, the balance/scale produces data in the created UFC output format to be sent to a printer.**

For editing formats/commands for data to be output to a printer capable of dump printing, such as the AD-8127 compact printer



For editing formats/commands for data to be output to a label printer that supports Zebra Programming Language (ZPL®/ZPL II®) for barcode printing***



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