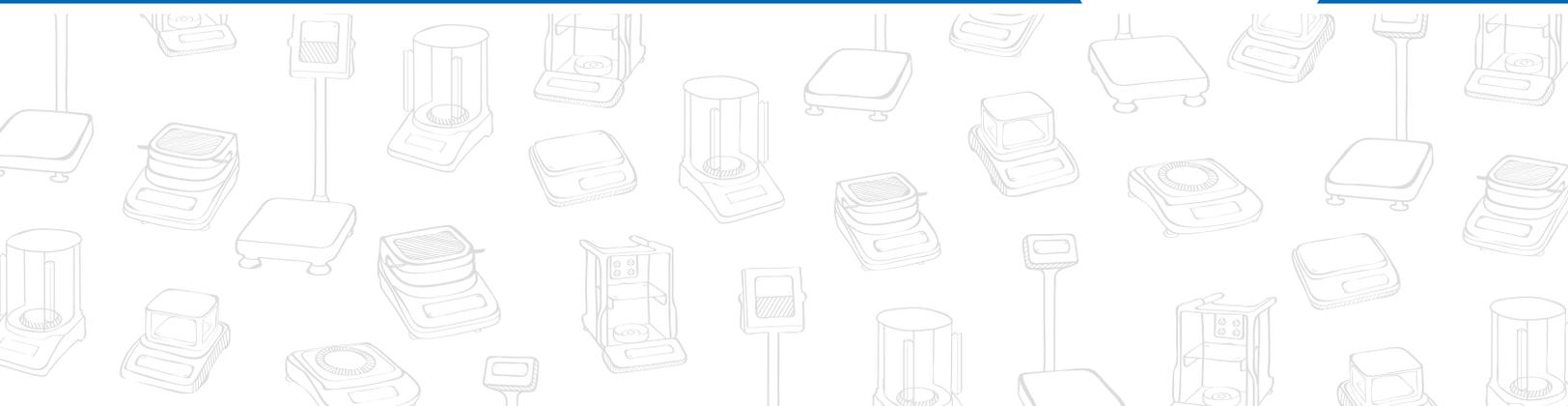# PRODUCT CATALOG

LABORATORY / INDUSTRIAL

AND

A&D Weighing

A&D Weighing has been providing industry-leading precision weighing and measurement equipment in both laboratories and manufacturing facilities across the world for over 40 years. We offer a complete line of electronic laboratory balances, industrial digital scales, weighing indicators and controllers, load cells, and non-destructive measurement equipment. We specialize in providing measurement solutions for a wide variety of industries such as, Academia, Food & Beverage, Cannabis, Chemical, Pharmaceutical and Manufacturing. Each piece of equipment passes through the highest of quality standards at our ISO 9001 certified facilities.

Visit www.andweighing.com/resources/catalogs to view the digital catalog.

A&D Weighing

Product Selector-Laboratory

● = Standard ○ = Option

Resolution (g)	Capacity (g)	Model	Page	Int. cal.	Ext. cal.	RS-232	Battery	IP Rating
0.001mg	22g	BM-20		●		● + USB		
0.01mg	42g	GR-202		●		●		
0.01mg	51g	HR-202i			●	●		
0.01mg	250g	BM-252		●		● + USB		
0.1mg	101g	GH-252		●		●		
0.1mg	102g	HR-100A			●	●	OPT Rec	
0.1mg	102g	HR-100AZ		●		●	OPT Rec	
0.1mg	120g	GH-120		●		●		
0.1mg	120g	GR-120		●		●		
0.1mg	152g	HR-150A			●	●	OPT Rec	
0.1mg	152g	HR-150AZ		●		●	OPT Rec	
0.1mg	220g	BM-200		●		● + USB		
0.1mg	210g	GH-200		●		●		
0.1mg	210g	GR-200		●		●		
0.1mg	220g	HR-202i			●	●		
0.1mg	252g	HR-250A			●	●	OPT Rec	
0.1mg	252g	HR-250AZ		●		●	OPT Rec	
0.1mg	62g	HR-251A			●	●	OPT Rec	
0.1mg	62g	HR-251AZ		●		●	OPT Rec	
0.1mg	320g	BM-300		●		● + USB		
0.1mg	310g	GH-300		●		●		
0.1mg	310g	GR-300		●		●		
0.1mg	320g	HR-300i			●	●		
0.1mg	520g	BM-500		●		● + USB		
0.1mg	1100g	MC-1000		●				
0.001g	252g	HR-251A			●	●	OPT Rec	
0.001g	252g	HR-251AZ		●		●	OPT Rec	
0.001g	120g	GF-123A			●	●		
0.001g	120g	EJ-123			●	●	Dry Cell	
0.001g	122g	FX-120i			●	○	OPT Rec	
0.001g	122g	FX-120iWP			●	○	OPT Rec	IP65
0.001g	122g	FZ-120i		●		●	OPT Rec	
0.001g	220g	GX-203A		●		●		
0.001g	220g	GF-203A			●	●		
0.001g	220g	FX-200i			●	●	OPT Rec	
0.001g	220g	FX-200iWP			●	●	OPT Rec	IP65
0.001g	310g	EJ-303			●	●	Dry Cell	
0.001g	320g	GX-303A		●		●		
0.001g	320g	GF-303A			●	●		
0.001g	320g	FX-300i			●	●	OPT Rec	
0.001g	320g	FX-300iWP			●	●	OPT Rec	IP65
0.001g	320g	FZ-300iWP		●		●	OPT Rec	IP65
0.001g	420g	GX-403A		●		●		
0.001g	420g	GF-403A			●	●		
0.001g	520g	FX-500i			●	●	OPT Rec	
0.001g	520g	FZ-500i		●		●	OPT Rec	
0.001g	620g	GX-603A		●		●		
0.001g	620g	GF-603A			●	●		
0.001g	1100g	GX-1003A		●		●		
0.001g	1100g	GF-1003A			●	●		
0.001g	1620g	GX-1603A		●		●		
0.001g	1620g	GF-1603A			●	●		
0.001g	6100g	MC-6100		●		●		
0.001g	10.1Kg	MC-10K		●		●		
0.01g	30g	EW-150i			●	●	OPT Rec	
0.01g	120g	EJ-120			●	●	Dry Cell	
0.01g	200g	EK-200i			●	●	OPT Rec	
0.01g	210g	EJ-200			●	●	Dry Cell	
0.01g	300g	EK-300i			●	●	OPT Rec	
0.01g	300g	EK-300EP			●		Dry Cell	FM
0.01g	310g	EJ-300			●	●	Dry Cell	
0.01g	400g	EK-410i			●	●	OPT Rec	
0.01g	410g	EJ-410			●	●	Dry Cell	
0.01g	610g	EJ-610			●	●	Dry Cell	
0.01g	1210g	GX-1202A		●		●		
0.01g	1210g	GF-1202A			●	●		
0.01g	1220g	FX-1200i			●	●		
0.01g	1220g	FX-1200iWP			●	●		IP65
0.01g	1220g	FZ-1200iWP		●		●		IP65
0.01g	2200g	GX-2002A		●		●		
0.01g	2200g	GF-2002A			●	●		
0.01g	2100g	GX-8K2		●		●		IP65
0.01g	2100g	GF-8K2			●	●		IP65
0.01g	2200g	FX-2000i			●	●	OPT Rec	
0.01g	2200g	FX-2000iWP			●	●	OPT Rec	IP65
0.01g	3200g	GF-3002A			●	●		
0.01g	3200g	FX-3000i			●	●	OPT Rec	
0.01g	5200g	FX-5000i			●	●	OPT Rec	
0.01g	5200g	FZ-5000i		●		●	OPT Rec	
0.01g	6200g	GX-6002A		●		●		
0.01g	6200g	GF-6002A			●	●		
0.01g	8100g	GX-8K		●		●		IP65
0.01g	8100g	GF-8K			●	●		IP65
0.01g	10.1Kg	GX-10K		●		●		IP65
0.01g	10.1Kg	GF-10K			●	●		IP65
0.01g	31Kg	MC-30K		●		●		
0.1g	300g	EW-1500i			●	●	OPT Rec	
0.1g	1200g	EK-1200i			●	●	OPT Rec	
0.1g	1500g	EJ-1500			●	●	Dry Cell	
0.1g	2000g	EK-2000i			●	●	OPT Rec	
0.1g	2100g	EJ-2000			●	●	Dry Cell	
0.1g	3000g	EK-3000i			●	●	OPT Rec	
0.1g	3000g	EK-30KL			●	●	OPT Rec	
0.1g	3000g	EK-3000EP			●		Dry Cell	FM
0.1g	3100g	EJ-3000			●	●	Dry Cell	
0.1g	4000g	EK-4100i			●	●	OPT Rec	
0.1g	4100g	EJ-4000			●	●	Dry Cell	
0.1g	6000g	EK-6100i			●	●	OPT Rec	
0.1g	6100g	EJ-6100			●	●	Dry Cell	
0.1g	6100g	GX-6001A		●		●		
0.1g	6100g	GF-6001A			●	●		
0.1g	6100g	GX-32K		●		●		IP65
0.1g	6100g	GF-32K			●	●		IP65
0.1g	6100g	GP-32KS		●		●		IP65
0.1g	8100g	GX-8K2		●		●		IP65
0.1g	8100g	GF-8K2			●	●		IP65
0.1g	12Kg	GX-12K		●		●		IP65
0.1g	12Kg	GF-12K			●	●		IP65
0.1g	21Kg	GX-20K		●		●		IP65
0.1g	21Kg	GF-20K			●	●		IP65
0.1g	31Kg	GX-30K		●		●		IP65
0.1g	31Kg	GF-30K			●	●		IP65
0.1g	31Kg	GP-30KS		●		●		IP65
0.1g	61Kg	GP-61K		●		●		IP65
0.1g	61Kg	GP-61KS		●		●		IP65
0.1g	101Kg	MC-100KS		●		●		
0.5g	41Kg	GP-40K		●		●		IP65
1g	3000g	EW-12Ki			●	●	OPT Rec	
1g	6000g	EK-6000i			●	●	OPT Rec	
1g	12Kg	EK-12Ki			●	●	OPT Rec	
1g	12Kg	EK-12KEP			●		Dry Cell	FM
1g	31Kg	GX-32K		●		●		IP65
1g	31Kg	GF-32K			●	●		IP65
1g	31Kg	GP-32KS		●		●		IP65
1g	61Kg	GP-60KS		●		●		IP65
1g	101Kg	GP-100KS		●		●		IP65

Product Selector-Industrial

● = Standard   ○ = Option

Resolution (lbs/g)	Capacity (lbs/g)	Model	Page	Legal for Trade	RS-232	Battery	IP Rating	NSF
0.001mg	21g	AD-4212B-23			●			
0.01mg	31g	AD-4212B-101			●			
0.01mg	110g	AD-4212B-102			●			
0.1mg	51g	AD-4212C-301			●		IP65	
0.1mg	110g	AD-4212A-100			●			
0.1mg	110g	AD-4212B-101			●			
0.1mg	210g	AD-4212B-201			●			
0.1mg	310g	AD-4212B-301			●			
0.001g	210g	AD-4212A-200			●			
0.001g	320g	AD-4212C-301			●		IP65	
0.001g	320g	AD-4212C-300			●		IP65	
0.001g	510g	AD-4212C-3100			●		IP65	
0.001g	610g	AD-4212A-600			●			
0.001g	620g	AD-4212C-600			●		IP65	
0.001g	1100g	AD-4212A-1000			●			
0.01g	120g	HT-120				Dry Cell		
0.01g	3200g	AD-4212C-3100			●		IP65	
0.01g	3200g	AD-4212C-3000			●		IP65	
0.01g	6200g	AD-4212C-6000			●		IP65	
0.00005lb/0.02g	1lb/500g	FC-500Si			●+○	OPT Rec		
0.0001lb/0.05g	1lb/500g	FC-500i			●+○	OPT Rec		
0.1g	100g	PV-100				Dry Cell		
0.1g	150g	HJ-150				Dry Cell		
0.1g	200g	PV-200				Dry Cell		
0.1g	200g	HL-200i/VP				Dry Cell		
0.1g	300g	HL-300WP				Dry Cell	IP65	NSF
0.1g	310g	HT-300/CL				Dry Cell		
0.1g	500g	PV-500				Dry Cell		
0.1g	510g	HT-500/CL				Dry Cell		
0.0002lb/0.1g	2lb/1000g	FC-1000i			●+○	OPT Rec		
0.0002lb/0.1g	6.6lb/3000g	SJ-3000WP		Winter 2019		Dry Cell	IP67	NSF
/0.1g	15Kg	EK-15KL			●	OPT Rec		
0.0005lb/0.2g	5lb/2000g	FC-2000i			●+○	OPT Rec		
0.0005lb/0.2g	10lb/5000g	FC-5000Si			●+○	OPT Rec		
0.0005lb/0.2g	13lb/6000g	SJ-6000WP		Winter 2019		Dry Cell	IP67	NSF
0.001lb/0.5g	2.2lb/1000g	SJ-1000HS				Dry Cell		NSF
0.001lb/0.5g	2.2lb/1000g	HL-1000WP				Dry Cell	IP65	NSF
0.001lb/0.5g	2.2lb/1000g	SK-1000WP		NTEP/MC		Dry Cell	IP65	NSF
0.001lb/0.5g	6lb/3000g	HC-3Ki			○	OPT Rec		
0.001lb/0.5g	10lb/5000g	FC-5000i			●+○	OPT Rec		
0.001lb/0.5g	15lb/6000g	FS-6Ki		NTEP/MC	○	OPT Rec	IP65	NSF
0.001lb/0.5g	33lb/15kg	SJ-15KWP		Winter 2019		Dry Cell	IP67	NSF
0.002lb/1g	4.4lb/2000g	SJ-2000HS				Dry Cell		NSF
1g	2000g	HL-2000i/VP				Dry Cell		
0.002lb/1g	4.4lb/2000g	SK-2000WP		NTEP/MC		Dry Cell	IP65	NSF
0.002lb/1g	6.6lb/3000g	HL-3000(L)WP				Dry Cell	IP65	NSF
0.002lb/1g	6.6lb/3000g	HL-3000(L)WPN				Dry Cell	IP65	NSF
1g	3100g	HT-3000/CL				Dry Cell		
0.002lb/1g	11lb/5000g	SJ-5001HS				Dry Cell		NSF
1g	5000g	SK-5001WP		NTEP/MC		Dry Cell	IP65	NSF
1g	5100g	HT-5000/CL				Dry Cell		

Resolution (lbs/g)	Capacity (lbs/g)	Model	Page	Legal for Trade	RS-232	Battery	IP Rating	NSF
0.002lb/1g	15lb/6000g	HC-6Ki			○	OPT Rec		
0.002lb/1g	13lb/6000g	SW-6K		NTEP/MC	○	Dry Cell / OPT Rec	IP69K	NSF
0.002lb/1g	20lb/10Kg	FC-10Ki			●+○	OPT Rec		
0.002lb/1g	20lb/10Kg	HW-10KCEP				Dry Cell	IP65 (Platform)	
0.002lb/1g	35lb/15Kg	FS-15Ki		NTEP/MC	○	OPT Rec	IP65	NSF
1g	30Kg	EK-30KL			●	OPT Rec		
0.002lb/1g	66lb/30Kg	SJ-30KWP		Winter 2019		Dry Cell	IP67	NSF
0.005lb/2g	11lb/5000g	SJ-5000HS				Dry Cell		NSF
0.005lb/2g	11lb/5000g	SK-5000WP		NTEP/MC		Dry Cell	IP65	NSF
0.005lb/2g	30lb/12Kg	HD-12K			○	OPT Rec		
0.005lb/2g	30lb/15Kg	HC-15Ki			○	OPT Rec		
0.005lb/2g	33lb/15Kg	SW-15K		NTEP/MC	○	Dry Cell / OPT Rec	IP69K	NSF
0.005lb/2g	50lb/20Kg	FC-20Ki			●+○	OPT Rec		
0.005lb/2g	60lb/30Kg	FG-30KBM/KAM			○	Dry Cell		
0.005lb/2g	70lb/30Kg	FS-30Ki		NTEP/MC	○	OPT Rec	IP65	NSF
0.01lb/5g	22lb/10Kg	SK-10KWP		NTEP/MC		Dry Cell	IP65	NSF
0.01lb/5g	26lb/12Kg	SJ-12KHS				Dry Cell		NSF
0.01lb/5g	60lb/30Kg	HC-30Ki			○	OPT Rec		
0.01lb/5g	60lb/30kg	HD-30K			○	OPT Rec		
0.01lb/5g	66lb/30Kg	SE-30K		NTEP/MC	○	Dry Cell	IP68	
0.01lb/5g	66lb/30Kg	SC-30K		NTEP/MC	○	Dry Cell	IP68	
0.01lb/5g	66lb/30Kg	SW-30K		NTEP/MC	○	Dry Cell / OPT Rec	IP69K	NSF
0.01lb/5g	100lb/50Kg	FC-50Ki			●+○	OPT Rec		
0.01lb/5g	150lb/60Kg	FG-60KBM/KAM/KAL			○	Dry Cell		
0.01lb/5g	150lb/60Kg	HW-60KCEP				Dry Cell	IP65 (Platform)	
0.02lb/10g	44lb/20kg	SK-20KWP		NTEP/MC		Dry Cell	IP65	NSF
0.02lb/10g	44lb/20Kg	SJ-20KHS				Dry Cell		NSF
0.02lb/10g	60lb/30Kg	FG-30KBMN/KAMN		NTEP/MC	○	Dry Cell		
0.02lb/10g	120lb/60kg	HD-60K			○	OPT Rec		
0.02lb/10g	130lb/60Kg	SE-60K		NTEP/MC	○	Dry Cell	IP68	
0.02lb/10g	130lb/60Kg	SC-60K		NTEP/MC	○	Dry Cell	IP68	
0.02lb/10g	130lb/60Kg	SW-60K		NTEP/MC	○	Dry Cell / OPT Rec	IP69K	NSF
0.02lb/10g	200lb/100Kg	HW-100KCEP				Dry Cell	IP65 (Platform)	
0.02lb/10g	300lb/150Kg	FG-150KBM/KAM/KAL			○	Dry Cell		
0.02lb/10g	400lb/200kg	FG-200KAL			○	Dry Cell		
0.05lb/20g	66lb/30Kg	SJ-30KHS				Dry Cell		NSF
0.05lb/20g	150lb/60Kg	FG-60KBMN/KAMN/KALN		NTEP/MC	○	Dry Cell		
0.05lb/20g	330lb/150Kg	SW-150K		NTEP/MC	○	Dry Cell / OPT Rec	IP69K	NSF
0.05lb/20g	330lb/150Kg	SE-150K		NTEP/MC	○	Dry Cell	IP68	
0.05lb/20g	330lb/150Kg	SC-150K		NTEP/MC	○	Dry Cell	IP68	
0.05lb/20g	500lb/200Kg	HW-200KCEP				Dry Cell	IP65 (Platform)	
0.1lb/50g	300lb/150Kg	FG-150KBMN/KAMN/KALN		NTEP/MC	○	Dry Cell		
0.1lb/50g	400lb/200Kg	FG-200KALN		NTEP/MC	○	Dry Cell		

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All trademark and brand names belong to their respective owners. A&D reserves the right to modify this catalogue and product specifications without incurring any obligation.
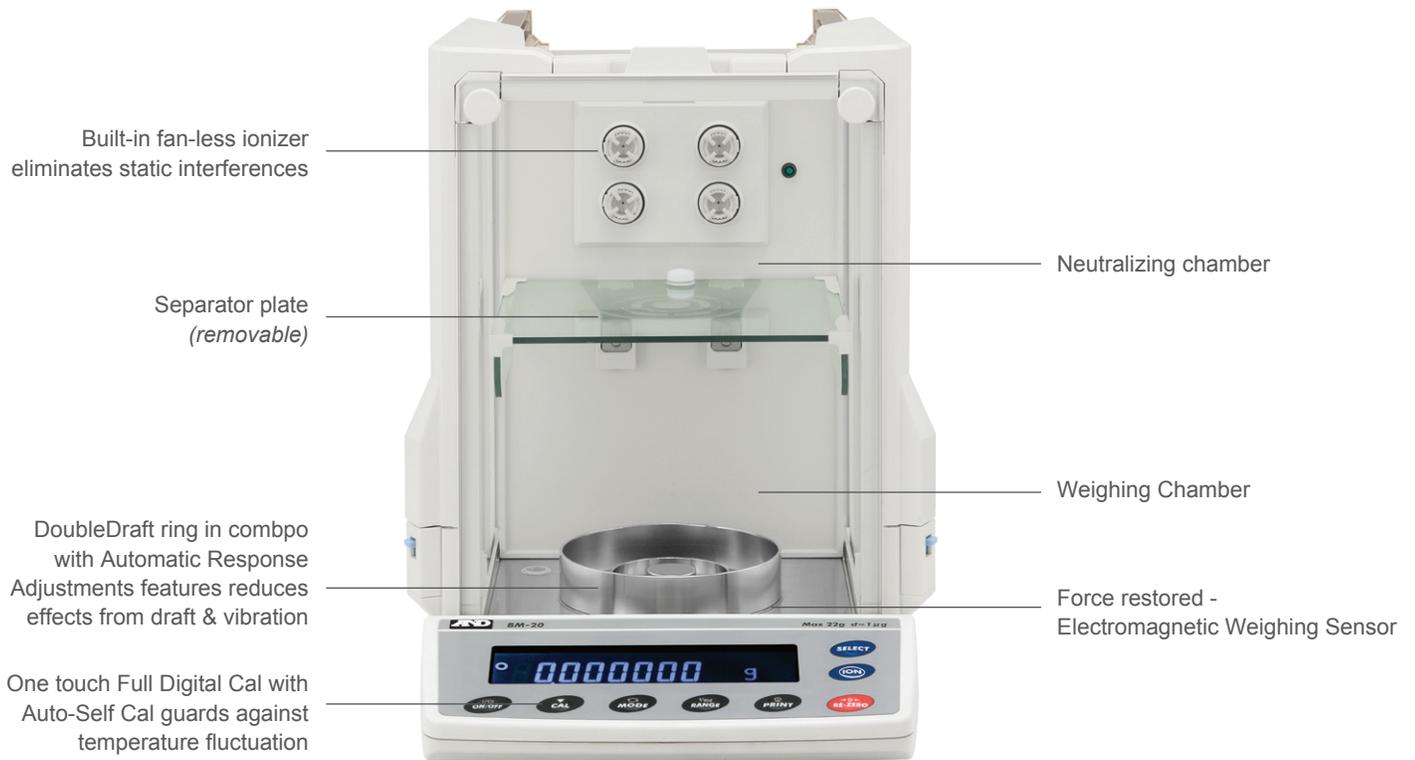
LABORATORY
WEIGHING

A&D Weighing

Ion BM Series
Micro-Balances

Built-in fan-less ionizer eliminates static interferences

Neutralizing chamber

Separator plate *(removable)*

Weighing Chamber

DoubleDraft ring in combpo with Automatic Response Adjustments features reduces effects from draft & vibration

Force restored - Electromagnetic Weighing Sensor

One touch Full Digital Cal with Auto-Self Cal guards against temperature fluctuation

- Easy, fanless elimination of static electricity using a built-in ionizer
- Anti-static breeze break
- Large weighing chamber for improved usability
- Built-in temperature, humidity, and atmospheric pressure sensors
- Interlockable slide doors allowing efficient operation with both hands
- Motorized calibration with an internal mass:
  - » Automatically triggered based on temperature variation
  - » Triggered by operator
- Clearly visible, white-backlit LCD
- Memory: up to 200 data sets
- AD-1688 as standard accessory: dedicated USB key to record weighing data as well as environmental parameters into MS Excel readable files
- 12 weighing units: g, mg, oz, ozt, ct, mom, dwt, GN, tael, tola, pcs (counting), %.
- Special pans/holders for BM-20/22:
  - » Small pans for sampling minute amounts
  - » Holders for PM filters
  - » Holders for microfuge tubes
  - » Optional pipette accuracy testing kit
- Interfaces:
  - » RS-232C (standard)
  - » Quick USB (standard)
  - » Ethernet (optional)

To block drafts, A&D adopted a double ring structure around the weighing pan and two vertical shields under the separation plate. This offers more space and easier operation.

The removable separator plate enables to have one large chamber if needed.

Model	Capacity	Resolution	Pan Size
BM-20	22g	1µg	Ø 25mm
BM-22	22g/5.1g	0.01mg/1µg	(50 and 95mm for filter pans)

Ion BM Series
Micro-Balances

PREMIUM
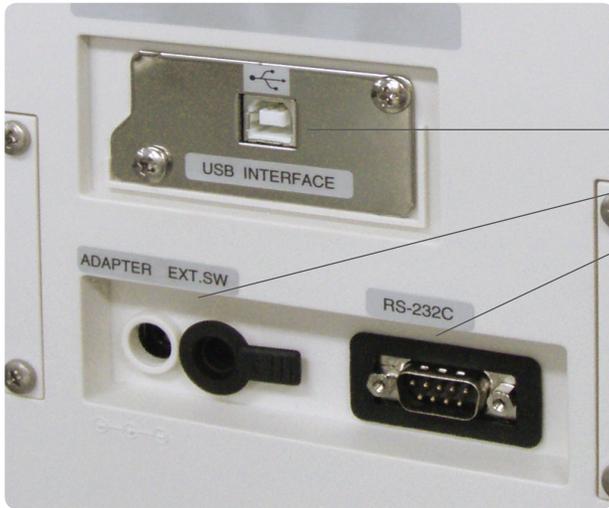
Three interfaces are delivered as standard with the BM:

USB to PC

Digital input signal

Bidirectional RS-232C
(Ethernet option available)

Example of connections to various peripherals:

Special pans for weighing PM filters

Aluminium analytical pans

Holders for micro tubes

LAN Ethernet Network

WinCT Plus

HUB Ethernet

BM   BM   BM

- WinCT Plus – LAN Ethernet network
  - » LAN-Ethernet interface (BM-08, optional) with WinCT-Plus software: You can send commands for controlling and acquiring data to multiple balances

- BM-014: Pipette accuracy testing kit (for BM-20/22): Evaporation trap, special tubes, software for pipette control according to ISO8655, and related equipment. All comes in a carrying case.

Standard functions

| Internal Calibration | Reverse Backlit LCD | Quick USB | RS-232C Interface | GLP Compliant | Date & Time | Memory Function | Software |

| Optimizing Unit Weights | Percentage Function | Auto Power On | Underhook | SmartRange |

(BM-22)

Optional

LAN-Ethernet Interface

A&D-MEET
A&D Measurement Environment Evaluation Tool

Data acquisition from BM

Recovering data in MS Excel on PC

BM has built in sensors to monitor weighing conditions:

Humidity   Temperature   Atmospheric Pressure

AD-1688

The goal is to characterize, qualify, and optimize your weighing environment in order to enable accurate micro weighing.

In conjunction with the AD-1688 data logger (supplied as standard) performance and environmental data can be recorded over a 24 hour period in order to characterize the weighing environment.

Saved data includes weight (utilising the internal calibration system) temperature, atmospheric pressure and humidity. Recorded data can then be emailed to A&D for analysis and reporting. An A&D representative will be able to provide an objective assessment of the weighing environment and discuss possible solutions with the end user where required.

Examples of graphs generated/AND-MEET with AD-1688
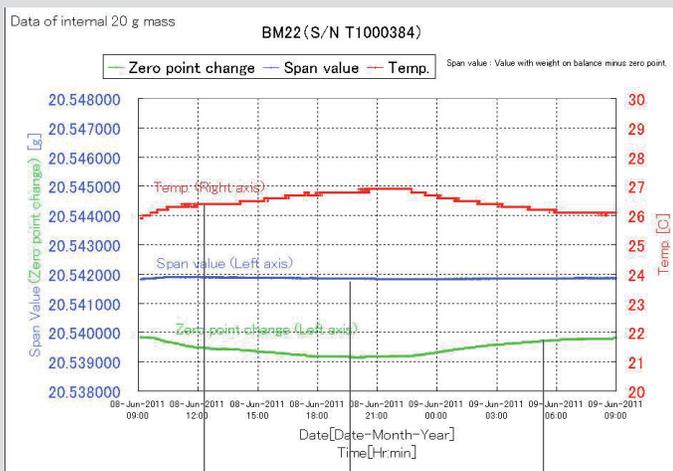
Temperature   Span value   Zero point change
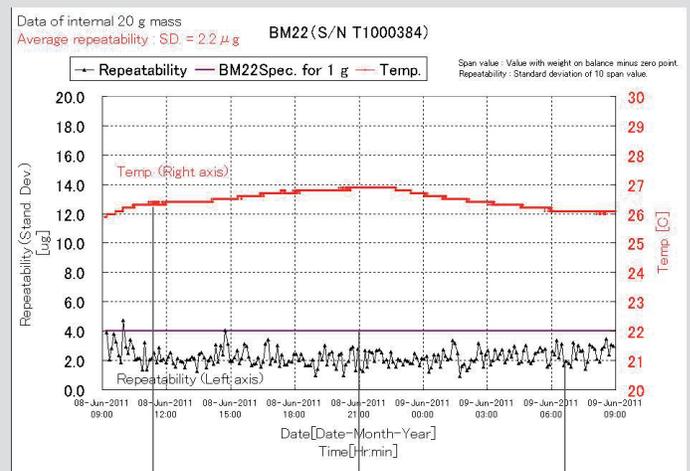
Temperature   Nominal value of standard deviation   Evolution of standard deviation over time

Ion BM Series
Semi-Micro Analytical

The BM analytical models have the same functional characteristics as the BM micro models. Eliminates risk with smart weighing features.

BM-252

Large weighing chamber *(separator plate is easy to remove).*

Model	Capacity	Resolution	Pan Size
BM-252	250g	0.01mg	Ø 90mm
BM-200	220g	0.1mg	Ø 90mm
BM-300	320g	0.1mg	Ø 90mm
BM-500	520g	0.1mg	Ø 90mm

Standard functions

Internal Calibration | Reverse Backlit LCD | Quick USB | RS-232C Interface | GLP Compliant | Date & Time | Memory Function | Software

Optimizing Unit Weights | Percentage Function | Auto Power On | Underhook

Optional

LAN-Ethernet Interface

Options & Accessories	Model
Ethernet interface with WinCT-Plus software*	BM-08
Pipette testing kit (all models)	BM-14
Density measurement kit (BM-252, 200, 300, 500)	AD-1653
Kasota Balance Table 24x35x32	BT-3135
Kasota Balance Tabletop Slab 20x15x3	BT-3136
Table top breeze break	AD-1672
Electrostatic field meter	AD-1684
Weighing Environment Logger	AD-1687
Weighing Data Logger	AD-1688
Tweezers for calibration weight	AD-1689
Display working covers (5pcs)	AX-BM-031
Centrifuge tube holder	AX-BM-032
Ioniser electrode needles (4pcs)	AX-BM-NEEDLESET
Aluminium analytical pan (0.05ml, 8mm dia.) 100pcs	AX-PAN-0.05ML
Aluminium analytical pan (0.3ml, 12mm dia.) 100pcs	AX-PAN-0.3ML
Aluminium analytical pan (0.8ml, 15mm dia.) 100pcs	AX-PAN-0.8ML
Foot switch	SW:128
Compact Printer	AD-1192
Multi-function Printer	AD-8121B
Universal Remote Display	AD-8920A
Remote Controller	AD-8922A
AC Adapter (120V / 220V) (AC adapter comes standard with unit)	TB-648
9 pin RS-232 to USB Converter with cable	AX-USB-2920-9P

* BM-08 and the standard Quick USB interface cannot be used at the same time

Phoenix™ GH Series
Semi-Micro Analytical

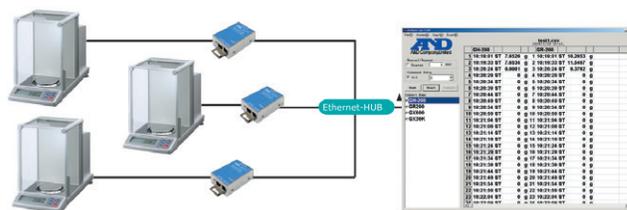## High performance balance to fit your workflow needs

GH-252

- Ordinal Electromagnetic Sensor (OES) weighing technology provides the best accuracy & precision

Network Capability
With Option 08 (GH and HR-i Series)
or Ethernet Adapter AD-8526

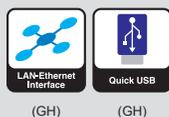| Model	Capacity	Resolution	Verification Value	Pan Size
GH-252*	250g/101g	0.1/0.01mg	1mg	Ø 90mm
GH-202	220g/51g	0.1/0.01mg	1mg	Ø 90mm
GH-300	320g	0.1mg	1mg	Ø 90mm
GH-200	220g	0.1mg	1mg	Ø 90mm
GH-120	120g	0.1mg	1mg	Ø 90mm

*Dual range

- Wide weighing range for 0.01mg resolution: 101g for GH-252 and 51g for HR-202i
- Antistatic glass
- One-touch auto self calibration by motor driven internal calibration mass (GH only)
- Automatic calibration when the ambient temperature changes (GH only)
- Standard RS-232C interface for printer, PC or other peripherals
- GLP, GMP and ISO compliant
- Data memory function (GH only)
- ID number for GLP output
- Auto power OFF function
- Large weighing chamber of: 183mm (W) × 148.5mm (D) × 251mm (H)
- WinCT Communications software (download)

Options & Accessories	Model
Quick USB interface (GH)	GH-OP-02
Ethernet interface (GH)	GH-OP-08
RS-232C/Ethernet converter	AD-8526
Protective Cover (5 pcs) (GH/HR-i)	AX-074016035-S
Density measurement kit	AD-1653
Rechargeable, portable power supply (external)	AD-1682
Static eliminator	AD-1683
Remote controller	AD-8922A
Remote display	AD-8920A
Ethernet Option for GH	GH-08
Anti-theft Device G	AD-100-2
Density Determination Kit	AD-1653
Rechargeable Battery Pack (external)	AD-1682
Universal Remote Display	AD-8920A
Remote Controller	AD-8922A
Static Eliminator	AD-1683
Calibration Weight Tweezers (Pack of 5)	AD-1689
Foot Switch	SW:128
AC Adapter (120V / 220V) (AC adapter comes standard with unit)	TB:648
USB to 9 pin RS-232 Converter	AX-USB-2920-9P

Standard functions

Internal Calibration | Counting Function | LCD Display | RS-232C Interface | GLP Compliant | Software | Memory Function | Underhook

Optimizing Unit Weights | Percentage Function | Auto Power On | Date & Time

Optional

LAN-Ethernet Interface | Quick USB
(GH) | (GH)

Gemini GR Series
Semi-Micro Analytical

Dependable and durable to meet your standard weighing operations

- Electromagnetic weighing technology allows consistent results
- Count on core functionality with large LCD display & space saving features
- Easy to operate, clean, and maintain

Quick reference card

- Fully automatic self calibration with one push of the CAL key or triggered by temperature change
- Easy access door with a front lever for quick and efficient access to the weighing chamber
- Automatic adjustable environment settings
- Multiple weighing units
- Standard RS-232C communication with PC
- Underhook weighing
- WinCT software (download)
- Large memory for weighing data
- Approx. 30% smaller footprint than other analytical balances
- GLP compliant

Model	Capacity	Resolution	Pan Size
GR-202*	210/42g	0.1/0.01mg	Ø 85mm
GR-120	120g	0.1mg	Ø 85mm
GR-200	210g	0.1mg	Ø 85mm
GR-300	310g	0.1mg	Ø 85mm

*Dual range

Options & Accessories	Model
Rechargeable portable power supply	AD-1682
Density measurement kit	AD-1653
Static eliminator	AD-1683
Remote controller	AD-8922A
Remote display	AD-8920
RS-232C/Ethernet converter	AD-8526
Anti-theft device	AD-100-2

Standard functions

Internal Calibration | Counting Function | Optimizing Unit Weights | Percentage Function | GLP Compliant | Software | Memory Function | RS-232C Interface

Underhook | LCD Display | Auto Power On

Galaxy HR-A/AZ Series
Analytical Balances

Small but mighty - a user friendly balance that fits any budget

Large breeze break with rotary sliding doors

HR-250A

"HR-A": external calibration
"HR-AZ": internal calibration

HR-250AZ

Model	Capacity	Resolution	Pan Size
HR-100A	102g	0.1mg	Ø 90mm
HR-150A	152g	0.1mg	Ø 90mm
HR-250A	252g	0.1mg	Ø 90mm
HR-100AZ	102g	0.1mg	Ø 90mm
HR-150AZ	152g	0.1mg	Ø 90mm
HR-250AZ	252g	0.1mg	Ø 90mm

- Robust construction, strong protection against dust & water
- Built-in internal calibration at the touch of a button (HR-AZ)
- Shock absorber function
- Auto power ON/OFF function
- B5 size footprint for use in narrow space
- Reverse backlit LCD display for easy to read weighing results
- SCF - Statistical calculation function
- Standard RS-232C
- Fast compact SHS sensor, response time of about 2 seconds
- Quick USB interface – no driver installation required (optional)
- LAN – Ethernet interface with WinCT-Plus software (optional)
- Easily removable large breeze break
- Built-in rechargeable NiMH battery pack (optional)

Standard functions

| Internal Calibration (HR-AZ) | External Calibration (HR-A) | Counting Function | Optimizing Unit Weights | Percentage Function | Comparator Function | Animal Weighing | Statistical Calculation |

| Date & Time (HR-AZ) | Underhook | Reverse Backlit LCD | GLP Compliant | Buzzer | RS-232C Interface | Software | SmartRange (HR-251A/AZ) |

| Auto Power On | Auto Power Off | Super Hybrid Sensor |

Optional

| Rechargeable Battery | LAN-Ethernet Interface | Quick USB |

Galaxy HR-A/AZ Series
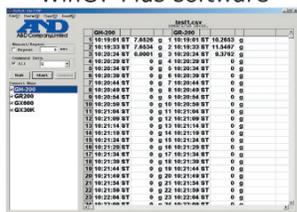## Analytical Balances

Easily removable breeze break for easy cleaning or weighing in restricted spaces
e.g. glove boxes

Easy removable breeze break

Density measurement kit

WinCT-Plus software

LAN / Ethernet network

Plug & play connectivity with our Quick USB interface (optional). Direct transfer of weighing results into your applications. No driver or add-on software needed.

FXi-02 USB

Ethernet interface (optional). Manage multiple balances through your LAN network

FXi-08 LAN

Options & Accessories	Model
Quick USB interface with cable*	FXi-OP-02
LAN Ethernet output*	FXi-OP-08
NiMH Battery pack*	FXi-OP-09
Transparent plastic covers (5 pcs)	AX-FX-31i
Density measurement kit	AD-1654

* OP-02, OP-08 and OP-09 cannot be installed at the same time.
Note: Connectors of optional OP-02, OP-08 and OP-09 are not IP65.

Apollo GX-A/GF-A Series
Precision Balances

Taking Precision and Protection to New Heights

GX-1003A

GF-1003A

GX-A: ASC internal calibration

GF-A: external calibration

Model	Capacity	Resolution	Pan Size
GF-123A	120g	0.001g	128 × 128mm
GF-203A	220g	0.001g	128 × 128mm
GF-303A	320g	0.001g	128 × 128mm
GF-403A	420g	0.001g	128 × 128mm
GF-603A	620g	0.001g	128 × 128mm
GF-1003A	1100g	0.001g	128 × 128mm
GF-1603A	1620g	0.001g	128 × 128mm
GF-1202A	1200g	0.01g	165 × 165mm
GF-2002A	2200g	0.01g	165 × 165mm
GF-3002A	3200g	0.01g	165 × 165mm
GF-4002A	4200g	0.01g	165 × 165mm
GF-6002A	6200g	0.01g	165 × 165mm
GF-10002A	10200g	0.01g	165 × 165mm
GF-6001A	6200g	0.1g	165 × 165mm
GF-10001A	10200g	0.1g	165 × 165mm

- **Advanced Weighing Technology Smart SHS weighing sensor:** Faster Performance, Higher maintainability (low cost), Service Accessibility
- **Improved Construction:** New Reverse Backlit LCD Display, Full Metal Housing, Antistatic Breeze break, Security slot
- **Multi-functional Connectivity:** USB & RS232 (9pin) - Bluetooth accessory
- **Easy Leveling:** Level me indicator, Bright-Bub (lit bubble),
- Ergo-adjustable fly-thumbwheels
- **Accuracy Management:** One-touch cal, Autoself Cal,
- **Precision Management with Electronically Controlled Load (ECL) technology:** allows for Diagnostic check, QuickMin-S, MinS-Alert
- **Protection Management:** Impact Shock Detection (ISD) allows for Impact-Alert, Shock Log , Overload protection, FR-Secure
- **Good Data Management:** Full GLP compliance, password protection, keylock, UFC for label printing

Apollo GX-A/GF-A Series
Precision Balances

Blinking minimum weight alert

No impact shock

Level 4 impact shock

GX-1003A and GXA-10

Model	Capacity	Resolution	Pan Size
GX-203A	220g	0.001g	128 × 128mm
GX-303A	320g	0.001g	128 × 128mm
GX-403A	420g	0.001g	128 × 128mm
GX-603A	620g	0.001g	128 × 128mm
GX-1003A	1100g	0.001g	128 × 128mm
GX-1603A	1620g	0.001g	128 × 128mm
GX-2002A	2200g	0.01g	165 × 165mm
GX-3002A	3200g	0.01g	165 × 165mm
GX-4002A	4200g	0.01g	165 × 165mm
GX-6002A	6200g	0.01g	165 × 165mm
GX-10002A	10200g	0.01g	165 × 165mm
GX-6001A	6200g	0.1g	165 × 165mm
GX-10001A	10200g	0.1g	165 × 165mm

Options & Accessories	Model
2nd RS-232C interface	GXA-03
Comparator relay output/buzzer/external key input	GXA-04
Analog output (0V~1V or 0.2V~1V)	GXA-06
Ethernet Interface	FX-OP-08i
Built in rechargeable battery (14 hours operation, dealer fit)	GXA-09
Large breeze break	GXA-10
Animal weighing pan (320g models and above)	GXA-12
Density determination kit (1mg models only)	GXA-13
Large breeze break with built-in fanless ionizer	GXA-17
External key input (print function)	GXA-23-PRINT
External key input (re-zero function)	GXA-23-REZERO
USB host interface (for USB flash drives and data storage, dealer fit)	GXA-24
External Fanless ionizer (IR activation, dealer fit)	GXA-25
External IR switch (Print and Tare operation)	GXA-26
Main unit cover (5pcs)	AX-GXA-31

Standard functions

Internal Calibration (GX-A) | Memory Function | Optimizing Unit Weights | Percentage Function | Impact Shock Detection | Flow Rate Display | Electronically Controlled Load | Animal Weighing

Statistical Calculation | Super Hybrid Sensor | Comparator Function | Reverse Backlit LCD | Auto Power On | Quick USB | USB Interface | Underhook

RS-232C Interface | Ticket Formatting | User Access Control | Software | GLP Compliant | Date & Time | Auto Power Off

Optional

Rechargeable Battery | LAN-Ethernet Interface | USB Host Interface

GF-N & P Series
Legal for Trade

GF-6000N

GF-200N

Model	Capacity	Resolution	Verification Value		Pan Size
			e	d	
GF-200N	210g	0.001g	0.01g	0.001g	5.04x 5.04"
GF-300N	310g	0.001g	0.01g	0.001g	5.04x 5.04"
GF-1200N	1210g	0.01g	0.1g	0.01g	6.5x 6.5"
GF-2000N	2100g	0.01g	0.1g	0.01g	6.5x 6.5"
GF-3000N	3100g	0.01g	0.1g	0.01g	6.5x 6.5"
GF-6000N	6100g	0.1g	1g	0.1g	6.5x 6.5"
GF-200P	210g	0.001g	0.01g	0.001g	5.04x 5.04"
GF-300P	310g	0.001g	0.01g	0.001g	5.04x 5.04"

*GF-N: NTEP CC#03-005 and MC AM-5587
 GF-P: NTEP CC#04-077

- Meets Handbook 44 for a "Class A" NTEP Class II for 0.001 g (d) value/0.01 g (e) value
- Fits application in Cannabis, Jewelery, Grain & Pharmacy
- GLP/GMP/ISO compliance
- Pharmacy "P" versions Ideal for Pill Counting & Compounding
- Counting feature for prescription filling only

Options & Accessories	Model
USB Option (Uni-Directional) with cable	GX-02
Comparator Output	GX-04
Analog Output; Factory Installed Only	GX-06
Glass Breeze Break for GF-200/300/400/600/800/1000 (8.2" / 21 cm high)	GX-10
Glass Breeze Break for GF-1200/2000/3000/4000/6100/6000/8000 (8.2" / 21 cm high)	GX-11
Animal Weighing Pan for all GF/GX models except GX-200 and GF-200	GX-12
Density Determination Kit for GF- 200/300/400/600/800/1000	GX-13
Rechargeable Battery Pack (external)	AD-1682
Ethernet Adapter D-Sub 25	AD-8526-25
Universal Remote Display	AD-8920A
Anti-Theft Device	AD-100-2
Foot Switch	SW:128
Protective In-use Cover for GF-200/300/400/600 (each)	AX:073003691-S
Protective In-use Cover for GF-1200/2000/30004000/6100/6000/8000 (each)	AX:073003692-S
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

FZ/FX Series
Milligram & Precision Balances

Pay for what matters, reliable and accurate weighing

FX-3000i

FZ-i and FZ-i-WP: internal calibration

FX-i and FX-i-WP: external calibration

FZ-i-WP and FXi-WP: IP65 dust & water proof

Legal for trade N version available

FZ-300iWP with standard breeze break

Model	Capacity	Resolution	Verification Value	Pan Size
FZ-120i FZ-120i-WP	122g	0.001g	0.01g	Ø 130mm
FZ-200i FZ-200i-WP	220g	0.001g	0.01g	Ø 130mm
FZ-300i FZ-300i-WP	320g	0.001g	0.01g	Ø 130mm
FZ-500i	520g	0.001g	-	Ø 130mm
FZ-1200i FZ-1200i-WP	1220g	0.01g	0.1g	Ø 150mm
FZ-2000i FZ-2000iWP	2200g	0.01g	0.1g	Ø 150mm
FZ-3000i FZ-3000i-WP	3200g	0.01g	0.1g	Ø 150mm
FZ-5000i	5200g	0.01g	-	Ø 150mm
FX-120i FX-120i-WP	122g	0.001g	-	Ø 130mm
FX-200i FX-200i-WP	220g	0.001g	-	Ø 130mm
FX-300i FX-300i-WP	320g	0.001g	-	Ø 130mm
FX-500i	520g	0.01g	-	Ø 130mm
FX-1200i FX-1200i-WP	1220g	0.01g	-	Ø 150mm
FX-2000i FX-2000i-WP	2200g	0.01g	-	Ø 150mm

Model	Capacity	Resolution	Verification Value	Pan Size
FX-3000i FX-3000i-WP	3200g	0.01g	-	Ø 150mm
FX-5000i	5200g	0.01g	-	Ø 150mm

- IP65 water/dust proof (WP)
- Built-in internal calibration at the touch of a button (FZ-i and FZ-i-WP)
- Shock absorber function
- Auto power ON/OFF function
- B5 size footprint for use in narrow spaces
- VFD Display for easy to read weighing results
- SCF - Statistical Calculation Function
- Standard RS-232C
- Fast compact SHS sensor, response time only 1 second
- Quick USB interface – no driver installation required (optional)
- LAN – Ethernet interface with WinCT-Plus software (optional)
- Animal weighing pan (optional)
- Large breeze break (optional)
- Small breeze break included on 1mg models
- Built-in rechargeable NiMH battery pack (optional)

FX-iN/NC Series
Legal for Trade

Pay for what matters, reliable and accurate weighing

FX-3000iN

NTEP and Measurement Canada Approved
Class II, CC# 08-045A3, AM-5692
Legal for trade N version available

FX-300iWPN with standard breeze break

Model	Capacity	Resolution	Verification Value		Pan Size
			e	d	
FX-120iN FX-120iNC FX-120i-WPN	122g	0.001g	0.01g	0.001g	Ø 130mm
FX-200iN FX-200iNC FX-200i-WPN	220g	0.001g	0.01g	0.001g	Ø 130mm
FX-300iN FX-300iNC FX-300i-WPN	320g	0.001g	0.01g	0.001g	Ø 130mm
FX-1200iN FX-1200iNC FX-1200i-WPN	1220g	0.01g	0.1g	0.01g	Ø 150mm
FX-2000iN FX-2000iNC FX-2000i-WPN	2200g	0.01g	0.1g	0.01g	Ø 150mm
FX-3000iN FX-3000iNC FX-3000i-WPN	3200g	0.01g	0.1g	0.01g	Ø 150mm

*N=NTEP, NC=Measurement Canada
FX-iN: NTEP CC# 08-045A2
FXiNC: MC AM# AM-5692

- IP65 water/dust proof (WP)
- Built-in internal calibration at the touch of a button
- Auto power ON/OFF function
- VFD Display for easy to read weighing results
- Standard RS-232C
- Fast compact SHS sensor, response time only 1 second
- Quick USB interface – no driver installation required (optional)
- LAN – Ethernet interface with WinCT-Plus software (optional)
- Animal weighing pan (optional)
- Large breeze break (optional)
- Small breeze break included on 1mg models
- Built-in rechargeable NiMH battery pack (optional)

FX & FX-WP, FZ & FZ-WP
Milligram & Precision Balances

Robust, Durable, Accurate

Firmly Sealed Pan Support with protective membrane (-WP IP65 models)
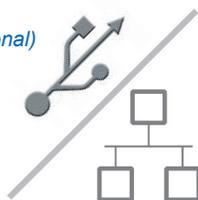

Water Proof RS-232C (optional)

Large Breeze Break (optional)

USB (optional)

Ethernet (optional)

Animal weighing plate (optional)

Options & Accessories	Model
Quick USB interface with cable*	FXi-OP-02
LAN Ethernet output*	FXi-OP-08
NiMH battery pack*	FXi-OP-09
Small breeze break (not WP models)	FXi-OP-10
Small breeze break (WP models)	FXi-WP-10
Large breeze break (not WP models)	FXi-OP-11
Large breeze break (WP models)	FXi-WP-11
Animal weighing pan (0.01 models only)	FXi-OP-12
Transparent plastic covers (5 pcs)	AX-FX-31i
Carat weighing pan - silver	AX-Caratpan-WEX
Carat weighing pan - black	AX-Caratpan-BEX
Waterproof RS-232C cable (5m)	AX-KO2737-500

* OP-02, OP-08 and OP-09 cannot be installed at the same time.
The connectors of optional OP-02, OP-08 and OP-09 are not IP65.

Enables the measurement of liquid or powder at 1mg resolution, eliminating any worries about damage to the balance

Standard functions

IP 65	Internal Calibration	External Calibration	Counting Function	Percentage Function	RS-232C Interface	Comparator Function	Animal Weighing
(FX-WP, FZ-WP)	(FZ, FZ-WP)	(FX, FX-WP)					

Date & Time	Underhook	Super Hybrid Sensor	GLP Compliant	VFD Display	Optimizing Unit Weights	Software	Statistical Calculation

Auto Power On	Auto Power Off	Buzzer

Optional

Rechargeable Battery	LAN-Ethernet Interface	Quick USB

Newton EJ Series
Portable Scales

Precision weighing made simple and versatile.

EJ-1500

EJ-123

EJ-12

EJ-13
Density measurement kit

EJ-11 Breeze break
(optional for EJ-123/303)

Stackable body for easy storage
and saving space

Model	Capacity	Resolution	Pan Size
EJ-123	120g	0.001g	Ø 110mm
EJ-303	310g	0.001g	Ø 110mm
EJ-120	120g	0.01g	Ø 110mm
EJ-200	210g	0.01g	Ø 110mm
EJ-300	310g	0.01g	Ø 110mm
EJ-410	410g	0.01g	Ø 110mm
EJ-610	610g	0.01g	Ø 110mm
EJ-1202	1200g	0.01g	127 × 140mm
EJ-1500	1500g	0.1g	127 × 140mm
EJ-2000	2100g	0.1g	127 × 140mm
EJ-3000	3100g	0.1g	127 × 140mm
EJ-3002	3100g	0.01g	127 × 140mm
EJ-4100	4100g	0.1g	127 × 140mm
EJ-6100	6100g	0.1g	127 × 140mm

Options & Accessories	Model
Quick USB interface with Cable 5ft unidirectional	EJ-02C
RS-232 interface with cable 6ft (9Pin-9Pin)	EJ-03C
Underhook for EJ-3000/EJ-4100/EJ-6100	EJ-07
Underhook for EJ-1500/EJ-2000	EJ-08
Breeze break (standard on EJ-123/EJ-303)	EJ-11
Carrying case	EJ-12
Density measurement kit	EJ-13

- Unique design
- External calibration
- Backlit display
- Supports multiple weighing units like counting, % weighing, comparator...
- Calculates density automatically (option EJ-13)
- Hygienic and rustproof stainless steel pan
- Security slot at the back for wire-locking to prevent theft
- Stackable body to save storage space
- Power supply: AC adapter or 4 AA size dry batteries (batteries are not included)
- Low battery indicator

Standard functions

External Calibration | LCD Backlight | Counting Function | Percentage Function | Accumulation Function | Normal Battery | GLP Compliant | Optimizing Unit Weights

Software

Optional

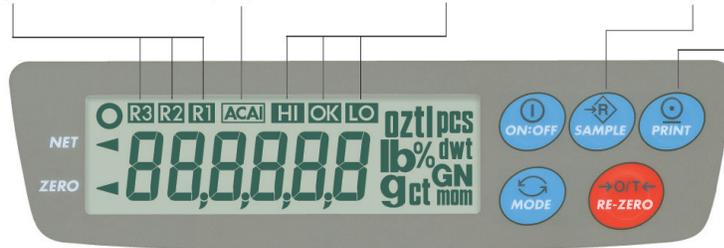
Quick USB | RS-232C Interface

EW-1500i

Weighing Range
(EW-i series only)
Triple range indication

ACAI
Automatic Counting
Accuracy Improvement

HI/OK/LO
Comparator Result

Sample
Register a sample count or
100% in percentage

Print
Transmit data to printer
or computer

Multi weighing units

oz	Ounce (av)	g	Gram
ozt	Troy Ounce	ct	Carat
tl	Tael	mom	Momme
lb	Livre (av)	pcs	Pieces
GN	Grain unit	%	Percent
dwt	Pennyweight		

Options & Accessories	Model
Comparator/relay output	EK/Wi-OP-04
Underhook (EK-6000i/EK-12Ki)	EK/Wi-OP-07
Rechargeable battery pack	EK/Wi-OP-09
Carrying case	EJ-12
Transparent plastic covers (5pcs.)	AX-3005824-5S

Model	Capacity	Resolution	Verification Value=d(g)	Pan Size
EW-150i*	30g	0.01g		Ø 110mm
	60g	0.02g		
	150g	0.05g		
EW-1500i	300g	0.1g	0.1g	133 × 170mm
	600g	0.2g	0.2g	
	1500g	0.5g	0.5g	
EW-12Ki	3000g	1g	1g	133 × 170mm
	6000g	2g	2g	
	12000g	5g	5g	

NTEP Class III 1500i and 12Ki, CC# 04-019A1
* Triple range

Everest EK/EW-i Series
Compact Balances

Options & accessories

Dot Matrix compact statistical printer AD-8121B

Carrying case EJ-12

```
              A & D
MODEL    EK-300i
S/N      1234567
ID        ABCDEF
DATE     02/05/17
03:15:40 PM
CAL.TEST<EXT.>
ACTUAL
              0.00   g
          +300.01   g
TARGET
          +300.00   g
SIGNATURE
```

GLP Printout with balance I.D. number allows calibration output verification print out

Ni-MH Battery Pack
EKW-09i, for complete portability and use in areas without power

Model	Capacity	Resolution	Verification Value	Pan Size
EK-120i	120g	0.01g		Ø 110mm
EK-200i	200g	0.01g		Ø 110mm
EK-300i	300g	0.01g		Ø 110mm
EK-410i	400g	0.01g		Ø 110mm
EK-610i	600g	0.01g		Ø 110mm
EK-600i	600g	0.1g	0.1g	Ø 110mm
EK-1200i	1200g	0.1g	0.1g	133 × 170mm
EK-2000i	2000g	0.1g		133 × 170mm
EK-3000i	3000g	0.1g		133 × 170mm
EK-4100i	4000g	0.1g		133 × 170mm
EK-6100i	6000g	0.1g		133 × 170mm
EK-6000i	6000g	1g	1g	133 × 170mm
EK-12Ki	12kg	1g	1g	133 × 170mm

*NTEP Class III on 600i and 6000i and Class II on 1200i and 12Ki
NTEP CC#04-0-019A1

- Standard RS-232C interface
- Large LCD display with backlight
- Triple range (EW-i only)
- Compact design
- GLP compliant
- Overload protection
- Standard comparator function
- Optional rechargeable battery pack
- 9 Weighing units plus count and percentage mode
- Counting function with Automatic Counting Accuracy Improvement (ACAI)
- Full digital calibration with optional user definable mass setting

Standard functions

External Calibration • Counting Function • Percentage Function • Comparator Function • RS-232C Interface • LCD Backlight • Optimizing Unit Weights • GLP Compliant • Auto Power Off • Software

Optional

Rechargeable Battery • Buzzer • Underhook
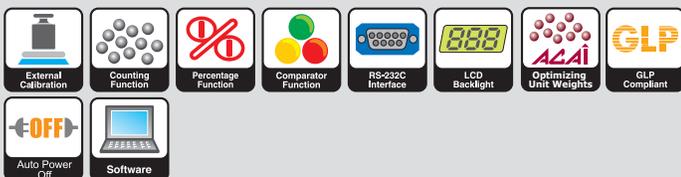
for capacity over 4kg

EK-AEP
Intrinsically Safe Compact Balances

EK-300AEP

EK-3000AEP

Conforms to:

IECEx: Ex ia IIB T3 Ga
ATEX: II 1G Ex ia IIB T3 Ga
FM/FMc (NEC505): AEx / Ex ia IIB T3
FM/FMc (NEC500): IS / I / 1 / C,D / T3C

Model	Capacity	Resolution	Pan Size
EK-300AEP	300g	0.01g	Ø 110 mm
EK-3000AEP	3000g	0.1g	133 × 170mm
EK-12KAEP	12000g	1g	133 × 170mm

Accessories	Model
Carrying case	EJ-12
Optical communication adapter	AD-1611
Optical cable 10m	AX:KS5456-010
Optical cable 30m	AX:KS5456-030
Optical cable 60m	AX:KS5456-060

Standard functions

Intrinsic Safety | External Calibration | LCD Backlight | Optimizing Unit Weights | Percentage Function | Comparator Function | Auto Power Off | Normal Battery

- Compact, lightweight and extremely affordable while providing excellent intrinsic protection protection
- Battery operation*1 (approx. 250 hours) for high portability, requiring no power supply from a safe area via a safety barrier
- Easy-to-read LCD display with backlight (16 mm character height)
- Auto power OFF function to save battery power
- Hygienic and chemically resistant stainless steel (SUS304) weighing pan
- Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr, N, in addition to SG (specific gravity)*2
- Counting mode with Automatic Counting Accuracy Improvement (ACAI) function
- Percent mode function for target weighing, checking the sample variation, etc.
- Comparator function for faster and more accurate filling, packing, sorting, etc.
- Adjustable response characteristics depending on the degree of drafts and vibrations at the location
- Security ring for wire-locking the balance to prevent theft
- Optical communication optional with AD-1611

*1 Only to be used with four DURACELL AA alkaline MN1500 LR6, ENERGIZER AA E91 alkaline LR6 AM3, or Panasonic AA alkaline LR6 (XJ) 1.5V batteries.
*2 Either tl (tael) or tol (tola) can be added upon request.

GX/GF
High Capacity Balances

GX-30K
IP65 Rated

Model	Capacity	Resolution	Pan Size
GX- 8K	8.1kg	0.01g	270 × 210mm
GX- 8KSR	8.1/2.1kg	0.1/0.01g	270 × 210mm
GX- 10K	10.1kg	0.01g	270 × 210mm
GX- 12K	12kg	0.1g	270 × 210mm
GX- 20K	21kg	0.1g	270 × 210mm
GX- 30K	31kg	0.1g	270 × 210mm
GX- 30KSR	31/6.1kg	1/0.1g	270 × 210mm
GF- 8K	8kg	0.01	270 × 210mm
GF- 8KSR	8.1/2.1kg	0.1/0.01g	270 × 210mm
GF- 10K	10kg	0.01g	270 × 210mm
GF- 12K	12kg	0.1g	270 × 210mm
GF- 20K	21kg	0.1g	270 × 210mm
GF- 30K	31kg	0.1	270 × 210mm
GF- 30KSR	31/6.1kg	1/0.1g	270 × 210mm

* Smart Range (see icon definition)

Options & Accessories	Model
Comparator relay output with buzzer/current loop	GX/GF-OP-04K
Analog/current loop output	GX/GF-OP-06K
Waterproof RS-232C cable (5m)	GX/GF-OP-07K
Transparent plastic covers (5 pc)	AX-073007197-S
Breeze break (standard on GF/GX-8K/8K2 & 10K models)	AX-GXK-31
Rechargeable, portable power supply unit	AD-1682
Animal weighing pan	AX-GXK-012

- Fast response time with Super Hybrid sensor (SHS) – only 1.5 seconds
- One touch automatic calibration with motor-driven internal calibration mass (GX-K)
- Automatic self calibration when the ambient temperature changes (GX-K)
- IP65 – water and dust proof
- Standard RS-232C Interface
- GLP, GMP and ISO compliant
- Underhook weighing (for thermal or magnetic samples, or for density measurement)
- ACAI (Automatic Counting Accuracy Improvement)
- Auto power ON function
- Display auto power OFF function
- Data memory function
- Smart Range function (GX/GF-8K2/32K)

*Note: In wet areas, please use interfaces only with OP-07.

GX-K/GF-K
Industrial Precision Balances

Robust:

- Die cast aluminium
- Four support points under the pan
- Mechanical keyboard
- SHS sensor technology

Easy to clean

IP 65 dust & water protected, for a large weighing capacity at a given resolution: 10kg × 0.01g, 31kg × 0.1g
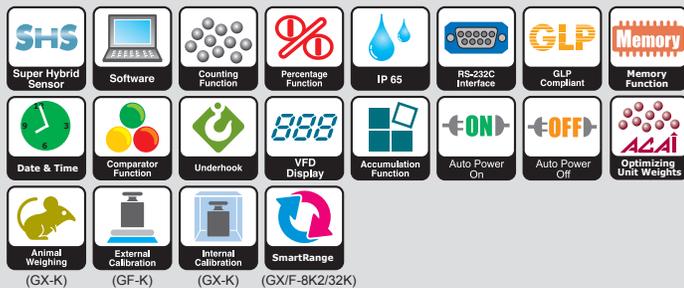
GX-30K

IP65 protected data cable

*Well protected, easy to clean*

Standard functions

SHS Super Hybrid Sensor	Software	Counting Function	Percentage Function	IP 65	RS-232C Interface	GLP Compliant	Memory Function
Date & Time	Comparator Function	Underhook	VFD Display	Accumulation Function	Auto Power On	Auto Power Off	Optimizing Unit Weights
Animal Weighing (GX-K)	External Calibration (GF-K)	Internal Calibration (GX-K)	SmartRange (GX/F-8K2/32K)				

Optional

Buzzer

GP Series
High Precision Bench

Up to: 61kg × 0.1g
         101kg × 1g

Fast
Robust
Durable
Versatile
IP65
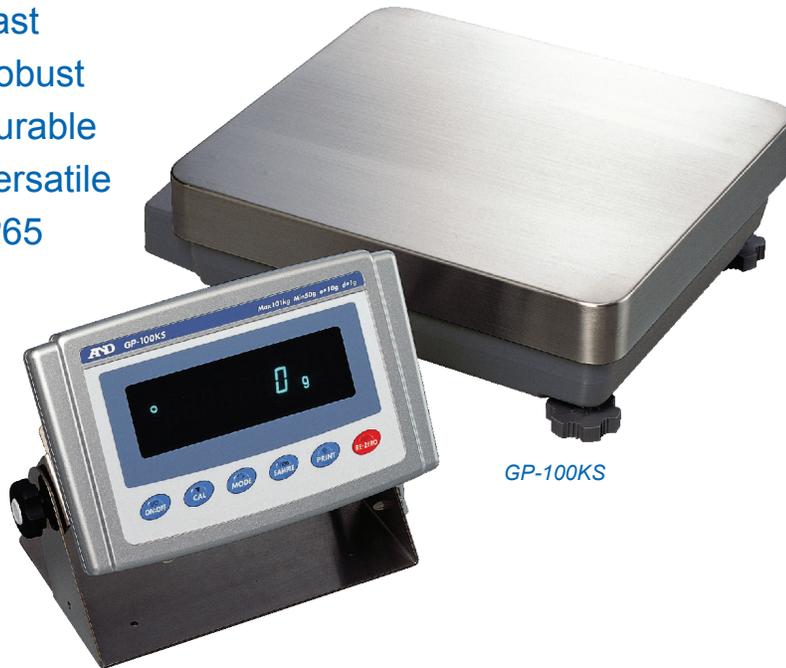
GP-100KS

*With detached display unit
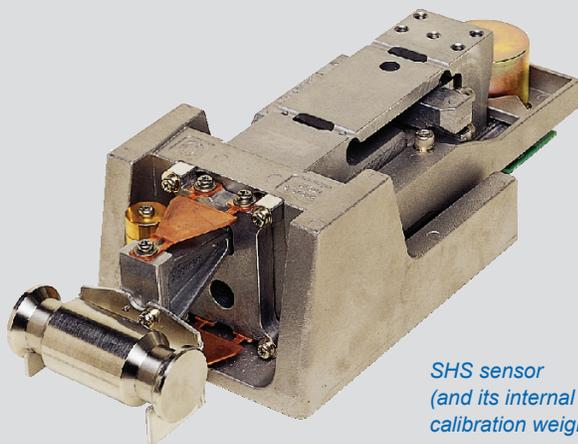(KS models only)*

WinCT

Communications software provides easy transmission of weighing data from A&D balances to a computer
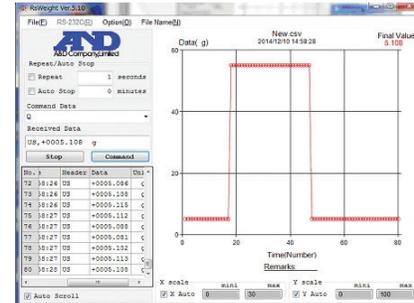
WinCT-RsWeight
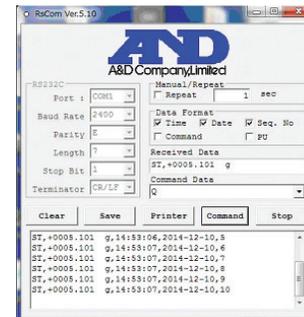
WinCT-RsCom

*SHS sensor
(and its internal
calibration weight)*

- Swing arm design or separate display and platform design
- IP65 protected
- Durable aluminium alloy & stainless steel construction
- Easy calibration with internal calibration mass
- SHS response speed of only 1.5 seconds
- GLP, GMP and ISO compliant
- RS-232C interface
- Comparator output and analog output (optional)
- Large Vacuum Fluorescent display
- Data memory function
- Counting function with ACAI (Automatic Counting Accuracy Improvement)
- Smart range function (GP-32K/102K/32KS)
- Comparator function
- Underhook weighing for thermal and magnetic samples as well as for density calculation
- Animal weighing function

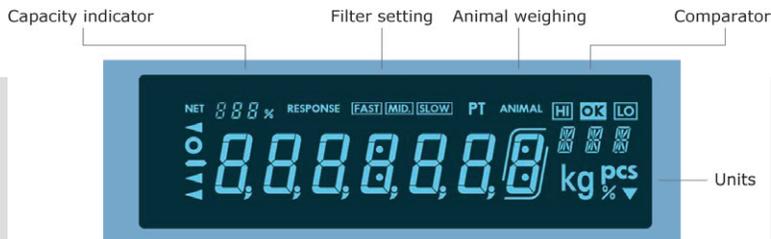| Options & Accessories	Model
Comparator relay output/RS-232C/current loop	GP-OP-04
Analog output	GP-OP-06
5m extension cable (KS model only)	GP-OP-07
Underhook (GP-12K/20K/22K/30K/30KS)	GP-OP-20
Underhook (GP-60K/100K/100KS/102K)	GP-OP-21
AD-8121 printer mounting kit	GP-OP-22
Transparent plastic covers (1 pc)	07:3004753
Rechargeable, portable power supply unit	AD-1682

GP Series
High Precision Bench

GP-30K

Swing arm display

Capacity indicator | Filter setting | Animal weighing | Comparator

NET `888` % RESPONSE FAST MID SLOW PT ANIMAL HI OK LO

`88888888` kg PCS % ▼

Units

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

* Smart Range (see icon definition), ** Detachable display (KS models)

Standard functions

| Memory Function | Internal Calibration | Counting Function | Percentage Function | IP 65 | RS-232C Interface | Animal Weighing | Super Hybrid Sensor |

| Comparator Function | VFD Display | Accumulation Function | GLP Compliant | Software | Optimizing Unit Weights | Date & Time | Auto Power Off |

| Auto Power On | SmartRange |

(GP-32K/32KS/102K)

Optional

| Buzzer | Underhook |

MC Mass Comparators
Precision Balance with Extended Resolution

MC-6100

MC-10K and auto-centering pan

Model	Capacity	Resolution	Pan Size
MC-1000	1100g	0.0001g	128 × 128mm
MC-6100	6100g	0.001g	165 × 165mm
MC-10K	10.1kg	0.001g	270 × 210mm
MC-30K	31kg	0.01g	270 × 210mm
MC-100KS	101kg	0.01g	386 × 346mm

- For management of masses in the OIML Class F1 or below
- Extra decimal place for monitoring fine weight changes with heavy tare weights
- Stabilizing filter to lessen errors due to drafts or vibrations
- Auto-centering pan to avoid corner-load errors and ensure higher accuracy (optional)
- Internal calibration mass for simplified calibration of the balance
- Equipped with a glass breeze break (MC-1000/6100) or simple breeze break as standard (MC-10K/30K)
- Fast stabilization of approx. 1.5 seconds
- GLP/GMP/GCP/ISO compliant output
- Large bright Vacuum Fluorescent Display
- Multiple weighing units of measurement

Standard functions

VFD Display | Internal Calibration | RS-232C Interface | GLP Compliant | Counting Function | Optimizing Unit Weights | Memory Function | Auto Power On

Comparator Function | Underhook | Software | Percentage Function | Animal Weighing | Super Hybrid Sensor | Auto Power Off | Accumulation Function (MC-10K/30K)

IP 65
(MC-10K/30K/100KS)

Optional

Quick USB | Underhook
(MC-100KS)

MC Mass Comparators

MC-100KS

MC-30K with auto-centering pan

Options & Accessories		Model
For MC-1000/6100	Auto-centering pan (MC-1000)	AX-MC1000PAN
For MC-1000/6100	Auto-centering pan (MC-6100)	AX-MC6100PAN
For MC-1000/6100	Quick USB interface with cable	GX-02
For MC-1000/6100	Comparator output with a buzzer/RS-232C/current loop*	GX-04
For MC-1000/6100	Analog voltage auto-centering pan (MC-1000)	GX-06
For MC-1000/6100	Output/current loop*	GX-12
For MC-1000/6100	Animal weighing pan	GX-13
For MC-10K/30K	Auto-centering pan (MC-10K/30K)	AX-MC10K/30KPAN
For MC-10K/30K	Comparator output with a buzzer/RS-232C/current loop**	GX-04K
For MC-10K/30K	Analog voltage output/current loop**	GX-06K
For MC-10K/30K	Waterproof RS-232C cable (5m)	GX-07K
For MC-10K/30K	Animal weighing pan	GXK-012
For MC-10K/30K	Carrying case	GXK-015
For MC-100KS	Comparator output with buzzer/RS-232C/current loop	GP-OP-04
For MC-100KS	Analogue voltage output/current loop	GP-OP-06
For MC-100KS	5m display cable (factory fit)	GP-OP-07
For MC-100KS	Animal weighing pan	GP-OP-12
For MC-100KS	Underhook	GP-OP-21
For MC-100KS	AD-8121B printer support bracket	GP-OP-22
For all models	Weighing environment logger (temperature, humidity, pressure, vibration)	AD-1687

* GX-04 and GX-06 are factory installed options.
** GX-04K, GX-06K, and the standard RS-232C interface cannot be used at the same time. The MC-10K/30K are not IP65 compliant with these options

M Series
Moisture Analyzer

Save time & money with moisture results within minutes
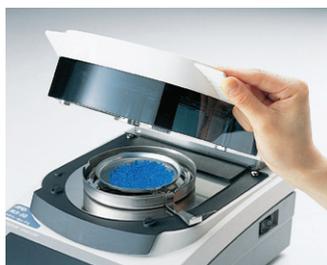
Simple operation

Easy sample handling

Quick reference card

SRA Filter

A&D Innovation, maximizing uniform heating of the sample

SHS Sensor
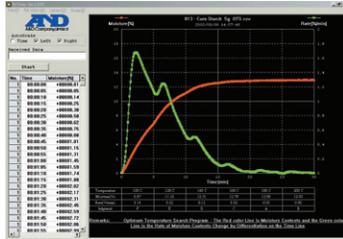
A&D Innovation, robust, reliable and fast weighing

ML-50

- Fast and uniform heating with halogen lamp and uniquely designed "SRA" filter that avoids hot spots
- High repeatability with SHS technology (Super Hybrid Sensor)
- Sodium Tartrate Dihydrate for accuracy verification
- Calibration function for the heating temperature with optional MX/MF-OP-43 (for MS & MX)
- Memory function (to be able to save/recall configurations as well as measurement results)
- Five measurement programs (standard, automatic, quick, timer and manual mode)
- Four heating modes (standard, quick, step and ramp mode) (not ML)
- Large and easy to read VFD display
- Standard RS-232C interface
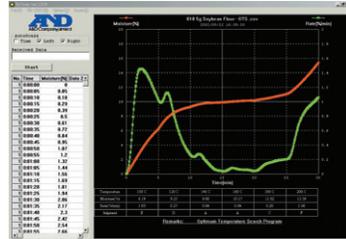- Measurement of liquid or solid content

Standard functions

External Calibration | Super Hybrid Sensor | VFD Display | RS-232C Interface | GLP Compliant | Date & Time | Memory Function | Software

WinCT-Moisture Software
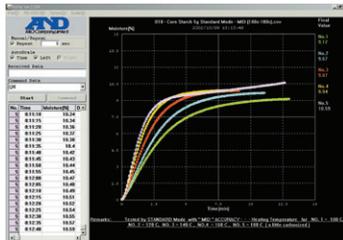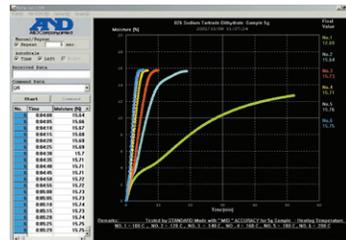## Moisture Analyzers

Soybean flour

Sodium tartrate dihydrate

The example shows multiple measurements by using the RS-Fig graphical software:

Sodium tartrate dihydrate

Soybean flour

WinCT measurement graphs

With our WinCT–Moisture software, data measured by the moisture analyzers can be easily displayed on your computer. You can animate analysis curves in real time *(module RsFig)*, control the equipment from your PC *(RsCom)* and transfer measurement results directly into MS Excel or MS Word *(RsKey)*. WinCT–Moisture allows testing of new sample types in order to determine the best measurement parameters such as heating temperature *(RsTemp)*. This function is very useful to reduce the measurement time and to improve accuracy.

Model	Capacity	Resolution	Moisture Content	%Accuracy(1g)
MS-70	71g	0.0001g	0.001/0.01/0.1%	0.05%
MX-50	51g	0.001g	0.01%/0.1%	0.1%
MF-50	51g	0.002g	0.05%/0.1%/1%	0.2%
ML-50	51g	0.005g	0.1%/1%	0.5%

Options & Accessories	Model
Sample Pans (Single-use disposable, 100 ea) (Ø 85 mm)	AX-30
Sample Pans (Reusable washable, 100 ea) (Ø 85 mm)	AX-31
Glass Fiber Sheets (100 ea) (Ø 70 mm)	AX-32-1
Glass Fiber Sheets (100 ea) (Ø 78 mm)	AX-32-2
Sodium Tartrate Dihydrate Test Samples (30g x 12 ea)	AX-33
Halogen Lamp (replacement)	AX-34
220V Halogen Lamp (replacement)	AX-MX-34-240V
Pan Handles (2 ea)	AX-35
Tweezers (2 ea)	AX-36
Spoons (2 ea)	AX-37
Protective Covers (5 ea)	AX-38
Dust Cover	AX-39
WinCT-Moisture (standard for MS-70 & MX-50, option for MF-50)	AX-42
Calibration Mass (20g)	AD-1700-20G
AX-43 Temperature Calibrator (MS-70 & MX-50 only)	MX/MF-OP-43
Power Cable (120V)	KO:115
Power Cable (220V)	KO:243
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

Note: For 220V power add "X" to the end of the part # (e.g. MS-70X) No additional cost.

- WinCT-Moisture displays moisture rate changes over time in a real-time animated graph (RsFig)
- Measures moisture rate in shortest time with excellent accuracy
- Shows sample data summary: configuration description and measurement results
- Calculates measurement data statistics
- Saves the recorded data as a CSV file

MPA Series
Electronic Pipettes

Greater Ease & Ergonomic - Higher Precision

The plunger of the pipette is controlled by lightly pressing a key with the ball of the forefinger (like pulling a trigger), while maintaining all fingers in a natural, effortless grip. No longer will hours or days of pipetting cause pain in your thumb

Stress-minimized, pain-free operation:

Reduced physical stress due to ergonomic operation. The use of an electronic pipette requires minimal power, and keeps the strain on your hand as low as possible. The degree of fatigue compared to a manual pipette is very low.

With padding set on the four corners of the head, the pipettes of the MPA series are protected from impacts and falls.

Model	Volume Range	Accuracy
MPA-10	0.5 to 10.0µL	0.1µL
MPA-20	2.0 to 20.0µL	0.1µL
MPA-200	10 to 200µL	1.0µL
MPA-1200	100 to 1200µL	1.0µL
MPA-10000	0.1 to 10.0mL	0.01mL

Accessories	Model
Tip box for the MPA-10/20/200*3	AX-BOX200A
Tip box for the MPA-1200*3	AX-BOX1200A
Tip box for the MPA-10/20/200 (without lid)*3	AX-BOX200B
Tip box for the MPA-1200 (without lid)*3	AX-BOX1200B
Tip cartridge for the MPA-10/20 (10 trays)*4	AX-CART-10/20
Tip cartridge for the MPA-200 (10 trays)*4	AX-CART-200
Tip cartridge for the MPA-1200 (10 trays)*4	AX-CART-1200
Tip box for the MPA-10000 (250 pcs)	AX-BULK-10ML-A
Tip box for the MPA-10000 (36 pcs)	AX-BOXT-10ML-A
Tip box for the MPA-10000 (36 pcs sterilized)	AX-BOXT-10ML-AS
Stainless steel stand (for up to three MPAs)	AX-ST-SUS
Acrylic stand (for up to two MPAs)	AX-ST-ACR
Charging hanger	AX-HA-CHG
Charging stand for single MPA	AX-ST-CH-A1
Charging stand for four MPAs	AX-ST-CH-M4
Lithium-ion rechargeable battery	AX-BAT-MPA

*3 tips not included, *4 one set includes 96 tips

- Automatic operation assuring accuracy for everyone at all times
- Calibration and display by either volume (µL/mL) or weight (mg)
- Multiple dispensing (MD) mode with automatic initial volume correction (pre-dispensing)
- Mixing (MIX) mode for homogenizing solutions
- Reverse operation for accurately dispensing viscous samples
- Aspirating/dispensing speeds adjustable to 5 levels
- Easy calibration (adjustment) by yourself – user CAL function
- Accurate pipetting possible with other manufacturers' tips

AD-4212A/B-PT, FX-300i-PT
Pipette Accuracy Testers

FX-300i-PT

AD-4212B-101

- Compliant to ISO8655 for "gravimetric methods"
- Three models covering a wide volumetric range from 1μg to 1mg
- The innovative SHS Sensor enables very fast measuring and quick stabilisation time, and therefore increases productivity when testing pipettes
- Data evaluation and control of the balance with "WinCT-Pipette" software
- Standard liquid thermometer for precise mass-to-volume conversion
- Standard calibration weight and tweezers to maintain the balance accuracy included

Model	Capacity	Min. weighing value
AD-4212B-PT	110g/31g/5.1g	0.1mg/0.01mg/1μg
AD-4212A-PT	110g	0.1mg
FX-300i-PT	320g	1mg

Standard functions

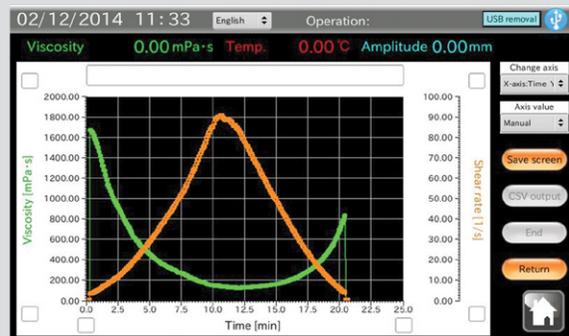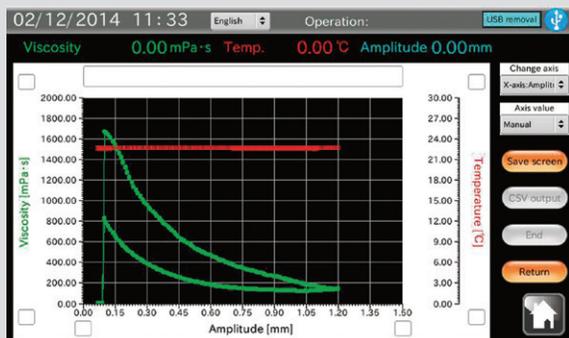SHS
Super Hybrid Sensor

RV-10000/A
RV Tuning Fork Vibro Rheometer

RV-A controller

RV-10000A

* The shear rate shown by the controller is a root-mean-square value and is calculated assuming that the sample is a Newtonian fluid.

- Wide measurement range from 0.3 mPa.s-25,000 mPa.s
- Simultaneous measurement of temperature and viscosity
- Repeatability as high as 1% of the measured value even with low viscosity sample fluids
- Quick measurement in only 20 seconds
- Low thermal capacity of the sensor plates
- Adjustable vibration amplitude to allow changing the shear rate
- Measurement of liquids in motion
- Easy calibration by the user
- The sensor plates are easy to clean
- LCD Display with 7-inch, color touch-panel (RV-A)
- Can automatically change the amplitude of the sensor plates, and take data as programmed by the user (RV-A)
- Displays graphs of measurement data in real time
- Changes in the viscosity are shown as a function of temperature, time, and/or shear rate*
- The RVA model comes with a special controller enabling:
  » Automatically changing the amplitude (shear rate) and capturing data in the manner set by the user
  » Real time graphing of viscosity variation with time, temperature and shear rate
  » Saving results (in CSV format) and graph screens (as JPEG images) in USB flash drives
- Sample fluid

RV Series
Rheometer

Sensor plates (close up)

Two thin sensor plates arranged like a tuning fork, and electromagnetically driven, vibrate at a frequency of 30Hz in the sample liquid.

Viscosity is then calculated based on the proportional relationship between the viscous resistance of the sample fluid and the amount of electric current required to drive and maintain the sensor plates at constant vibration amplitude.

The sensor plate amplitude of the RV-10000/A can be altered between the minimum of 0.07 mm and the maximum of 1.2 mm (peak to peak), while the frequency is kept at 30Hz, which will cause a variation in shear rate.

This allows the user to easily quantify the viscous behaviours of non-Newtonian fluids in response to different shear rates.

A temperature sensor (0 to 160 ° C) located between the sensor panels enables to capture the measuring temperature at the same place during the measurement.

In addition, the sample may be placed in the supplied water jacket with a commercially available temperature control tank, to control the temperature (between 0 and 100 °C) of the sample fluid in order to measure the viscosity at a constant temperature or to see how the viscosity varies with changing temperature.

WinCT - Viscosity (supplied) is software for automatic transfer of the measurement data (temperature and viscosity) to allow further processing. The measurement results can be graphically displayed in real time or can be stored as a "CSV file" for future analysis.

Model	Measurement Range	Units
RV-10000	0.3 — 25000 mPa·s	mPa·s, Pa·s, cP, P
RV-10000A	0.3 — 25000 mPa·s	mPa·s, Pa·s, cP, P
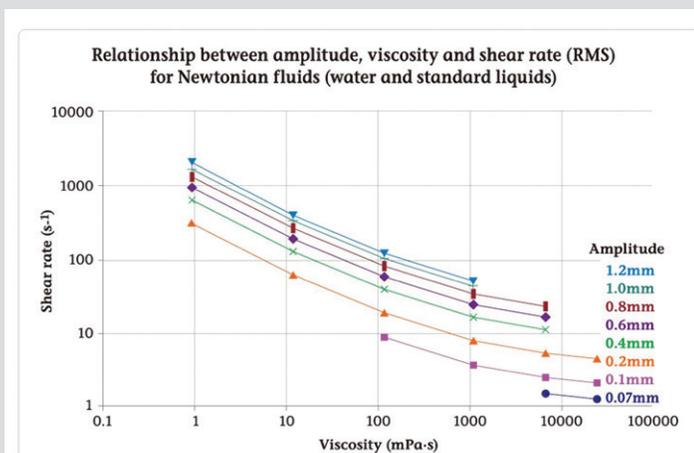
Options & Accessories for RV-10000 and RV-10000A	Model
Sample cup, 35-45ml, polycarbonate (pack of 10)	SV-33
Sample cup, 10ml, with cover, polycarbonate (pack of 10)	SV-34
Sample cup, 13ml, glass	SV-35
Positioning stopper	SV-36
Water jacket (1 water jacket, 4 x 10ml-cups with cover)	SV-37
Storage container, 60ml, glass (pack of 10)	SV-38
Storage container 120ml, polycarbonate (pack of 10)	SV-39
Analog voltage output (0-1V)	SV-42
5m display extension cable	SV-43
Software set (WinCT-Viscosity x 1pc, 25p-9p	SV-53
Cable x 1pc, Serial-USB Converter x 1pc)	RS-232C
Viscometer Carrying Case	CC:SV
AC Adapter 120V (standard with unit)	TB:636
AC Adapter 220V	TB:137
25 pin RS-232 to USB Converter	AX-USB-2920-25P
Cup set: • 5 x 45ml sample cup, polycarbonate • 5 x 10ml sample cup, polycarbonate, 5 x cover for 10ml sample cup • 2 x 13ml sample cup, glass, 1 x holder (stainless steel) for 13ml sample cup • 1 x Water jacket, polycarbonate	SV-54

SV Series
Viscometers

SV-10/100

Viscosity Revolution!

Sine-wave Vibro Viscometers. Technology: The SV measures viscosity by detecting the driving current necessary to resonate two sensor plates at a constant frequency of 30 Hz and amplitude of less than 1mm.

– Small sample
– Simplicity
– Repeatability
– Speed
– Wide measuring range
– Measurement of very low viscosities

Specifications	SV-10	SV-100	SV-1A
Measurement method	Sine-wave Vibro Viscometer using tuning fork vibration method (30Hz)		
Measurement range	0.3~10000 mPa.s	1000~100000 mPa.s	0.3~1000 mPa.s
Units	mPa.s, Pa.s, cP, P	Pa.s, P	mPa.s, Pa.s, cP, P
Accuracy	Repeatability of 1% of the displayed value (S.D., 20~30°C, no condensation)		
Sample size	10ml~	10ml~	2ml~
Temperature range	0~160°C / precision 0.1°C		
Display	Vacuum Fluorescent Display		
Power supply	AC adapter (approx.14VA)		

WinCT-Viscosity Software

The module RsVisco was developed for the transmission of real-time viscosity and temperature measurement results from the SV series to a PC. The results are displayed in a graph format with scaling conversion and logarithm display functions available. The user can save the measurement data as a "CSV" file and open it using RsVisco or MS-Excel.

The module RsKey transfers measurements directly into an application such as MS-Excel. RsCom sends commands and can be used for remote control of the viscometer.

- Wide measurement range: 0.3 – 10,000mPa.s for SV-10, and 1,000 – 100,000mPa.s for SV-100
- Measurement of very low viscosities *(down to 1/3 of water viscosity!)*
- Temperature measurement from 0 to 160° C
- Fast measurements: 1st result within 15 seconds, and refresh in real time
- Possible continuous measurements in order to characterize changes of state
- High precision with a repeatability of ±1% of displayed value
- Small size sample: cups of 35ml, 13ml, 10ml, and even tubes of 2ml *(with SV-1A)*
- Possibility to do measurements directly into your containers: beakers, product packages.
- Low mechanical impact: preservation of sample characteristics and its texture
- Negligible thermal impact
- Measurements possible on foaming samples, on foam itself, on flowing or agitated samples
- Simple operation: no configuration - just push the start button
- Easy cleaning
- WinCT-Viscosity software for data acquisition on PC, graphic display of curves, and data archiving *(viscosity curves against temperature or time)*
- Calibration (judgement and even adjustment) of viscosity possible by the user: 1 or 2 points
- Simplified and automated calibration *(including adjustment)* with pure water *(SV-10)*
- Temperature control of sample with water jacket option *(AX-SV-37)* or other methods

andweighing.com

SV Series
Viscometers

Standard accessories for SV-1A

SV-1A: miniaturized sensor

2ml sample measurements (SV-1A)

Model	Measurement Range	Unit
SV-10	0.3 — 10000 mPa·s	mPa·s, Pa·s, cP, P
SV-100	1 — 100 Pa·s	Pa·s, P
SV-1A	0.3 — 1000 mPa·s	mPa·s, Pa·s, cP, P
SV-10A	0.3 — 10000 mPa·s	
SV-100A	1 — 100 Pa·s	

| Options & Accessories for SV-10, 100, 1A	Model
Sample cup, 35-45ml, polycarbonate (pack of 10)	SV-33
Small sample cup, 10ml, with cover, polycarbonate (pack of 10)	SV-34
Sample cup, 13ml, Glass	SV-35
Positioning stopper	SV-36
Water jacket (1 water jacket, 4 × 10ml-cups with cover)	SV-37
Storage container, 60ml, glass (pack of 10)	SV-38
Storage container, 120ml, plastic (pack of 20)	SV-39
Analog voltage output (0-1V)	SV-42
Extension cable (5m) between the main unit and the display	SV-43
Tube holders for 2ml cups, polycarbonate	SV-56*
(5pc: 2 transparent, 3 black)	SV-56*
Rack stands for 2ml tubes (2 pcs)	SV-57*
Sample tube, 2ml with lid, polycarbonate (pack of 100)	SV-58*
Rack stand and 5 glass sample-cups (2ml)	SV-59*

*only for SV-1A

Standard accessories delivered with SV-10/SV-100:

4 x 35ml-sample cup *(polycarbonate)*, WinCT-Viscosity software, RS-232C interface and cable.

Standard accessories delivered with SV1-A:

10 x 2ml-sample tubes with lid *(polycarbonate)*, 5 x 35ml-sample cup *(polycarbonate)*, 10 x 2ml-sample tubes *(glass)*, 5 x holders for 2ml-sample tubes: 3 in black and 2 transparent, 1 rack for 2ml-sample tubes, 1 water jacket *(polycarbonate)*, for temperature control, WinCT-Viscosity software, RS-232C interface and cable, USB adapter

INDUSTRIAL
WEIGHING
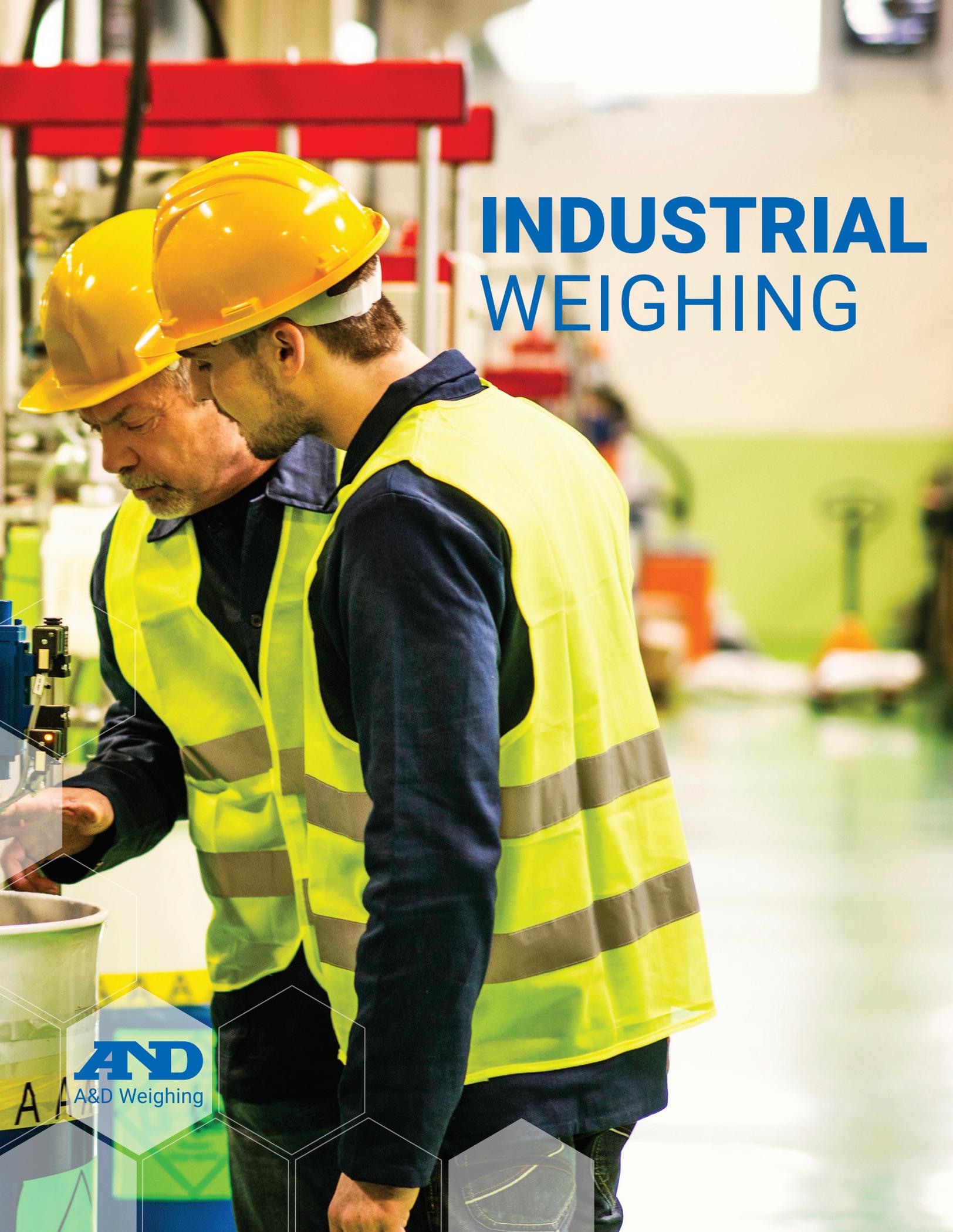
A&D Weighing

HJ-150
Compact Scales

- Compact and lightweight design for easy portability
- Large, backlit LCD screen is easy to read
- Battery operation with 2 x AAA batteries for convenient on-the-go weighing
- Auto Power Off Function extends battery life
- Easy One-Touch Calibration with included 100g weight
- Weigh in either grams or ounces

Model	Capacity	Resolution	Pan Size
HJ-150	150g	0.01g	2.36 x 2.52in

Standard functions

External Calibration	LCD Display	Normal Battery	Auto Power Off

PV Compact Scales

- Compact and lightweight design make for easy storage or transport
- Operation with with 2 x AAA batteries for 40+ hours of use
- Auto Power Off Function conserves the battery life
- Large, clear LCD display for accurate reading of results
- Multiple weighing units g, oz, dwt, ozt

Model	Capacity	Resolution	Pan Size
PV-100	100g	0.1g	3.25 x 3in
PV-200	200g	0.1g	3.25 x 3in
PV-500	500g	0.1g	3.25 x 3in

Standard functions

External Calibration	LCD Display	Normal Battery	Auto Power Off

HT Series
Compact Scales

HT with stainless steel pan

Ideal for classrooms! The stackable case takes up less space for storage

Standard functions

| External Calibration | LCD Display | Normal Battery | Auto Power Off |

- Large LCD display with clearly visible characters (13.5mm)
- External calibration
- Tare
- Battery operation with 4 AA size dry batteries (batteries are included)
- Long battery life: approx. 500 hours with alkaline cells
- Optional AC adapter
- Automatically turns off the display after 5 minutes of inactivity
- Delivered with a storage box
- Anti-theft lock
- Three color bars to sort scales easily - not HT-120 (e.g., color coded identification depending on classroom, lab, application...)

Model	Capacity	Resolution	Pan Size
HT-120	120g	0.01g	Ø 2.75in
HT-300	310g	0.1g	5.20 x 5.12in
HT-500	510g	0.1g	5.20 x 5.12in
HT-3000	3100g	1g	5.20 x 5.12in
HT-5000	5100g	1g	5.20 x 5.12in

Options & Accessories	Model
Stainless Steel Weighing Pan	HT-10
AC adapter (120Vac)	TB:662
AC Adapter (220V)	FV-06

HL-i Series Compact Scales

Easy storage on the side

- High weighing resolution (1/2,000)
- Large LCD Display
- Calibration function
- AC Adapter (option) or battery operation
- Long Battery Life: approx. 450 hours with alkaline cells
- Auto Power OFF
- Batteries included (4 x AA)
- Low battery indicator
- Multi weighing units
- Tare
- Overload protection

Model	Capacity	Resolution	Pan Size
HL-200i	200g	0.1g	Ø 5.1in
HL-2Ki	2000g	1g	Ø 5.1in

Options & Accessories	Model
Stainless Steel Weighing Pan (for HL-i)	AX:043008052
Plastic Carrying Case	AX-093008304
AC adapter for the HL-i	TB:662

Standard functions

| External Calibration | LCD Display | Normal Battery | Auto Power Off |

SJ Series
Compact Scales

- Stainless steel weighing pan
- Large LCD display
- Short stabilization time - less than 1 second
- Multiple weighing units – g, lb, oz and lb-oz
- Level bubble and adjustable feet for precise levelling
- Battery or AC adapter operation (AC adapter comes as option)
- 4 type D batteries (batteries not included)
- Long battery life: approx. 1,600 hours with alkaline cells at 20°C
- Simple and easy to change the batteries: battery tray at the back
- Flat design for avoiding food traps
- Hygiene - NSF approved

Model	Capacity	Resolution	Pan Size
SJ-1000HS	2.2lb / 1000g	0.001lb / 0.5g	9 x 7.5in
SJ-2000HS	4.4lb / 2000g	0.002lb / 1g	9 x 7.5in
SJ-5000HS	11lb / 5000g	0.005lb / 2g	9 x 7.5in
SJ-5001HS	11lb / 5000g	0.002lb / 1g	9 x 7.5in
SJ-12KHS	26lb / 12kg	0.01lb / 0.005kg	9 x 7.5in
SJ-20KHS	44lb / 20kg	0.02lb / 0.01kg	9 x 7.5in
SJ-30KHS	66lb / 30kg	0.05lb / 0.02kg	9 x 7.5in

Accessories	Model
AC adapter (120Vac)	TB:662
AC Adapter 220V (optional)	FV-06

Standard functions

External Calibration | LCD Display | Normal Battery | Auto Power Off | NSF Compliant

HT-CL Series Compact Scales

- Highly-visible, multi-colored LED lights for quick and unmistakable comparator judgments
- 9 memories for comparator settings
- Negative values for comparator limits allow for checking weights that are taken out of (instead of added to) a container[1]
- Operation with either four AA batteries or the provided AC adapter
- Large LCD display with 13.5-mm high characters
- Auto power OFF function to avoid wasting power
- Multiple weighing units: g, oz, ozt, lb-oz, dwt, ct, tael, tola and Newton[2]
- Security slot at the back to accommodate an anti-theft lock
- Key lock function to prevent operators from making changes to the scale settings
- Comes in a stackable carrying case to save space when stored
- Includes three color bars (red, green and orange) for sorting the scales depending on the purpose, owner, point of use, etc.

*1 The display needs to be set to zero before each measurement.
*2 The comparator function cannot be used with lb-oz or tael, and lb-oz is not available with the HT-300CL.

Model	Capacity	Resolution	Pan Size
HT-300CL	310g	0.1g	5.20 x 5.12in
HT-500CL	510g	0.1g	5.20 x 5.12in
HT-3000CL	3100g	1g	5.20 x 5.12in
HT-5000CL	5100g	1g	5.20 x 5.12in

Options & Accessories	Model
Stainless steel weighing pan	HT-OP-10

Standard functions

LCD Display | Internal Calibration | Comparator Function | Auto Power Off | Normal Battery
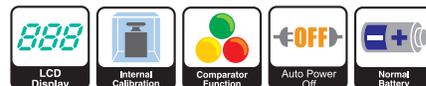
HL-WP Series
IP65 Compact Scales

HL-300WP

HL-3000LWP

- Dust and waterproof (IP65)
- Stainless steel case and weighing pan
- Compact design
- High resolution (1/3,000)
- Low battery indicator
- Portable (6 AA type batteries, batteries not included)
- Net weight and stability indicator
- Auto power OFF
- Optional AC adapter

Model	Capacity	Resolution	Pan Size
HL-300WP	10.58oz / 300g	0.01oz / 0.1g	5 x 5in
HL-1000WP	2.2lb / 1000g	0.001lb / 0.5g	5 x 5in
HL-3000WP	6.6lb / 3000g	0.002lb / x 1g	5 x 5in
HL-3000LWP	6.6lb / 3000g	0.002lb / x 1g	5.4 x 6.8in
HL-3000WPN*	6.6lb / 3000g	0.002lb / x 1g	5 x 5in
HL-3000LWPN*	6.6lb / 3000g	0.002lb / x 1g	5.4 x 6.8in

*Legal for Trade versions

Options & Accessories	Model
AC adapter (120V)	TB:662

Standard functions

IP 65 | Normal Battery | LCD Display | External Calibration | Auto Power Off | NSF Compliant | Legal for Trade

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SK-WP Series IP65 Compact Scales

- NTEP Certified and Measurement Canada Approved
- Dust and waterproof (IP65)
- Stainless steel body and weighing pan
- Large & clear LCD display (25mm)
- 1/2,000 Resolution (SK-5001WP: 1/5,000)
- Net weight / Stability indication
- Separate keys for Power and Re-Zero
- Portable (6 D type batteries, batteries not included)
- Long battery life: approx. 1,200 hours with alkaline cells at 20°C
- Low battery indication
- Auto Power Off
- Optional AC adapter

Model	Capacity	Resolution	Pan Size
SK-1000WP	2.2lb / 1000g	0.001lb / 0.5g	9.1 x 7.5in
SK-2000WP	4.4lb / 2000g	0.002lb / 1g	9.1 x 7.5in
SK-5000WP	11lb / 5000g	0.005lb / 2g	9.1 x 7.5in
SK-5001WP	5000g	1g	9.1 x 7.5in
SK-10KWP	22lb / 10kg	0.01lb / 5g	9.1 x 7.5in
SK-20KWP	44lb / 20kg	0.02lb / 10g	9.1 x 7.5in

Options & Accessories	Model
AC adapter (120Vac)	TB:662
AC Adapter (220V)	FV-06

Standard functions

IP 65 | Normal Battery | LCD Display | External Calibration | Auto Power Off | NSF Compliant | Legal for Trade

SJ-WP Series
IP67 Checkweighing Compact Scales

- IP67, dust and waterproof
- Externally mounted load cell to allow fast stabilization (max. 0.5 seconds)
- 5,000 hours of continuous operation with 6 D alkaline batteries (LED and backlight off) (batteries not included)
- Large LCD display (26 mm character height) with white backlight
- Bright and multi-colored 5-step LED comparator lamps
- Take-away check weighing using the auto-tare function
- Stainless steel (SUS304) weighing pan
- Waterproof and anti-corrosive load cell with integrated overload protection mechanism
- Four selectable weighing resolutions from 1/3,000 up to 1/30,000
- Auto tare function
- Counting function
- Auto power OFF function
- Multiple weighing units: g, kg, lb, oz, ozt, lb-oz, tael, tola, Newton
- Battery life indicator

Standard functions

Model	Capacity	Resolution	Pan Size
SJ-3000WP	6.6lb / 3kg	0.0002lb / 0.1g	9.1 x 7.5in
SJ-6000WP	13lb / 6kg	0.0005lb / 0.2g	9.1 x 7.5in
SJ-15KWP	33lb / 15kg	0.001lb / 0.5g	9.1 x 7.5in
SJ-30KWP	66lb / 30kg	0.002lb / 1g	9.1 x 7.5in

IP 67 · External Calibration · LCD Backlight · Counting Function · Comparator Function · Auto Power Off · Normal Battery · NSF Compliant · Legal for Trade
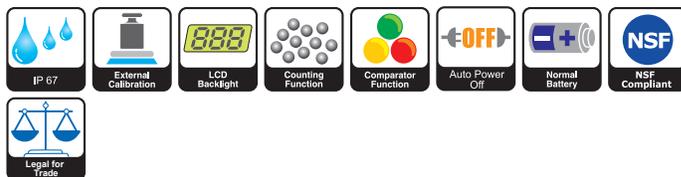
EK-L Series Precision Bench Scales

- EK-15KL: Offers a large capacity and high resolution
- EK-30KL: Especially useful when the gross weight exceeds 15kg, yet 0.1 g readability is necessary to measure the net weight
- Large (300×210mm) weighing pan for measurements of bulky objects or quantities
- Hygienic and scratch-resistant stainless steel (SUS430) weighing pan
- Easy-to-read LCD display, white backlight (22 mm characters)
- RS-232C interface as standard
- GLP/GMP/GCP/ISO compliant output
- Multiple weighing units: g, kg, oz, lb, ozt
- Automatic Counting Accuracy Improvement (ACAI) function
- Operation with either AC adapter or optional rechargeable battery
- Percent function, comparator function, display hold function

Standard functions

External Calibration · LCD Backlight · RS-232C Interface · GLP Compliant · Optimizing Unit Weights · Percentage Function · Comparator Function · Auto Power Off · SmartRange · Software

Model	Capacity	Resolution	Pan Size
EK-15KL	15kg	0.1g	300 × 210mm
EK-30KL	3kg / 30kg	0.1g/1g	300 × 210mm

Accessories	Model
Rechargeable battery pack	HC-OP-02i

HV/W-KC(P) Series
Multi-Functional Platform Scales

Display unit with HVW-02CB, HVW-03C, HVW-04C

HV-15KC/P

HW-60KC/P

HV-200KC/P

- Wide selection of capacities and resolutions. Choose from high capacity, high resolution HW-C(P) or multi-interval HV-C(P) models
- High-speed measurement—stabilization within 1 second (HV-C(P) series)
- IP65 dust & waterproof base unit with a stainless steel (SUS430) pan
- Built-in printer for creating paper-based records on the spot (CP models) includes Date & Time
- Operation with either AC adapter or dry cell batteries (AC Adaptor only for CP models)
- Up to 1200 hours from 4 D size batteries (C models)
- Highly-visible, LCD display (25 mm character height) with white backlight
- Bright and multi-colored 5-step LED comparator lights
- Auto-tare, Negative weighing and Initial tare functions. Ideal for 'take-away' check weighing
- Alphanumeric keypad for quick entry of ID number, Pre-set tare, comparator limits etc.
- Key lock function to prevent operators from making changes to the scale settings
- Optional roller conveyers for weighing in production lines
- Universal Flexi Coms (UFC) function to edit serial data output/printout format. Enables control of barcode label printers etc.

IP65 base unit with a SUS430 pan

- Three Interface slots for optional communication interfaces including RS-232C, USB, comparator output, buzzer, control input
- Display hold: Counting: Accumulation: Key Lock: Auto-On/Off: Display working cover
- Adjustable display Angle: Optional 5m display extension cable and wall-mount bracket

HV/W-KC(P) Series
Multi-Functional Platform Scales

Examples for display

HW-200KCP

Model	Capacity	Resolution	Pan Size
HV-15KC	6/15/30 lb / 3/6/15 kg	0.002/0.005/0.01 lb / 0.001/0.002/0.005 kg	9.8 x 9.8in
HV-60KC	30/60/150 lb / 15/30/60 kg	0.01/0.02/0.05 lb / 0.005/0.01/0.02 kg	13 x 16.7in
HV-200KC	150/300/500 lb / 60/150/220 kg	0.05/0.1/0.2 lb / 0.02/0.05/0.1 kg	15.4 x 20.9in
HV-15KCP	6/15/30 lb / 3/6/15 kg	0.002/0.005/0.01 lb / 0.001/0.002/0.005 kg	9.8 x 9.8in
HV-60KCP	30/60/150 lb / 15/30/60 kg	0.01/0.02/0.05 lb / 0.005/0.01/0.02 kg	13 x 16.7in
HV-200KCP	150/300/500 lb / 60/150/220 kg	0.05/0.1/0.2 lb / 0.02/0.05/0.1 kg	15.4 x 20.9in
HW-10KC	20lb / 10kg	0.002lb / 0.001kg	9.8 x 9.8in
HW-60KC	150lb / 60kg	0.01lb / 0.005kg	13 x 16.7in
HW-100KC	200lb / 100kg	0.02lb / 0.01kg	15.4 x 20.9in
HW-200KC	500lb / 220kg	0.05lb / 0.02kg	15.4 x 20.9in
HW-10KCP	20lb / 10kg	0.002lb / 0.001kg	9.8 x 9.8in
HW-60KCP	150lb / 60kg	0.01lb / 0.005 kg	13 x 16.7in
HW-100KCP	200lb / 100kg	0.02lb / 0.01kg	15.4 x 20.9in
HW-200KCP	500lb / 220kg	0.05lb / 0.02kg	15.4 x 20.9in

Options & Accessories Model	Model
USB INTERFACE for HVW-C/CP	HVW-02CB
RS-232C INTERFACE for HVW-C/CP	HVW-03C
COMPARATOR RELAY OUT/BUZZER for HVW-C/CP	HVW-04C
Extension Cable (5m)	HVW-08C
Wall-mount bracket	HVW-11C
ROLLER CONVEYOR A36098	HVW-13
ROLLER CONVEYOR A36099	HVW-14
Swivel/Lock Caster for 30 lb & below capacities (each)	HVW-16SSC
Swivel/Lock Caster for above 30 lb capacities (each)	HVW-17LSC
AC adapter (120Vac)- spare/replacement for HV/W-C ONLY, (P printer models require TB:278, below) unit ships with an AC adapter	TB:662
AC adaptor 100-240V for HV/W-CP series	TB:278
AC Adapter (220V) with type C euro-prongs	FV-06
2.5" Diameter Non-Skid Foot	FT:10
USB to DIN RS-232 Converter	AX-USB-2920-DIN
HV-CP HW-CP printer paper (5 rolls)	AX-PP147-S

Optional

RS-232C Interface | Quick USB

Standard functions

External Calibration | Counting Function | Comparator Function | LCD Backlight | Auto Power Off | IP 65 | Auto Power On | Legal for Trade

Accumulation Function | Normal Battery

(C Models)

FG-K Series
Platform Scales

FG-60KBM

FG-150KAL

Model	Capacity	Resolution	Pan Size
FG-30KBM	60lb / 30kg	0.005lb / 0.002kg	11.8 x 15in
FG-60KBM	150lb / 60kg	0.01lb / 0.005kg	11.8 x 15in
FG-150KBM	300lb / 150kg	0.02lb / 0.01kg	11.8 x 15in
FG-30KAM	60lb / 30kg	0.005lb / 0.002kg	11.8 x 15in
FG-60KAM	150lb / 60kg	0.01lb / 0.005kg	11.8 x 15in
FG-150KAM	300lb / 150kg	0.02lb / 0.01kg	11.8 x 15in
FG-60KAL	150lb / 60kg	0.01lb / 0.005kg	15.4 x 20.9in
FG-150KAL	300lb / 150kg	0.02lb / 0.01kg	15.4 x 20.9in
FG-200KAL	400lb / 200kg	0.02lb / 0.01kg	15.4 x 20.9in

Options & Accessories	Model
RS-232C Interface	FG-23
Comparator/Setpoint Relay Outputs	FG-24
Display Wall Mount Bracket	FG-25
Carrying Handle	FG-26
AC adapter (120Vac)	TB:662
AC Adapter (220V)	FV-06
FGK DISPLAY PROTECTIVE COVER	07:3007527A
Swivel/Lock Caster for 30 lb & below capacities	HVW-16SSC
Swivel/Lock Caster for 30 lb capacity	HVW-17LSC
USB to DIN RS-232 Converter	AX-USB-2920-DIN

Standard functions

External Calibration · Counting Function · Comparator Function · LCD Backlight · Legal for Trade · Normal Battery

(C Models)

Optional

RS-232C Interface

- Comparator function
- Counting function
- Auto power OFF function
- Status indicators (stable, zero, and net)
- High-speed weighing with 1-second stabilization
- Washable and hygienic stainless steel weighing pan in two sizes
- Optional RS-232C and comparator output (FG-OP-23/FG-OP-24)
- Display unit either on a column (FG-KAM/KAL) or attached directly to the platform (FG-KBM)
- Three selectable weighing resolutions (non approved versions only)
- Approx.150 hours with 4 x C type dry-cell batteries, batteries not included

Premium resistance to hostile environments!

The large LED screen is highly visible and intuitive. Capacitive keys prevent damage from sharp objects, thus contribute to maintain the integrity of the equipment

The desktop/wall-mount stand can be selected instead of the pole stand

Model	Capacity	Resolution	Pan Size
SW-6KS	13lb / 6kg	0.001lb / 0.001kg	9.8 x 9.8in
SW-15KS	33lb / 15kg	0.002lb / 0.002kg	9.8 x 9.8in
SW-15KM	33lb / 15kg	0.002 lb / 0.002kg	11.8 x 15.0in
SW-30KM	66lb / 30kg	0.005 lb / 0.005kg	11.8 x 15.0in
SW-60KM	130lb / 60kg	0.01lb/ 0.010kg	11.8 x 15.0in
SW-150KM	330lb / 150kg	0.02lb / 0.02kg	11.8 x 15.0in
SW-60KL	130lb / 60kg	0.01lb / 0.01kg	15.4 x 20.9in
SW-150KL	330lb / 150kg	0.02lb / 0.02kg	15.4 x 20.9in

Options & Accessories	Model
RS-232C plus compatator relay output	SW-03
RS-422/485	SW-04
SW Indicator	SW-D
Wall mount bracket	SW-11
Rechargeable Battery Pack	HC-06i

Standard functions

LED Display · External Calibration · Counting Function · Comparator Function · IP-69K · Legal for Trade · NSF Compliant

Optional

RS-232C Interface · Rechargeable Battery

- IP69K - the highest level of dust and water-proofing:
- High pressure: ~ 10,000 kPa / 100 bars / 1,450 PSI
- High temperature: ~85°C
- Auto tare (comparator)
- Auto tare (initial weight)
- Auto tare (reload)
- Negative in addition to positive comparator (loss-in-weight and weight-in-weight batching)
- Grading
- Ultimate protection against the effects of condensation
- Streamlined construction for easy cleaning of food-processing residues
- Stainless steel: sensor, pan, framework, column
- Durable and adjustable indicator bracket
- Capacitive keys for light touch operation and robustness
- Bright, multicolored LED display
- 5-step comparator for check weighing and filling applications
- 5-level comparator output with color lights: red, orange, green
- Desktop/wall-mount stand available instead of the pole stand
- Optional rechargeable battery
- Optional interfaces: RS-232C + comparator, RS-422 / RS-485
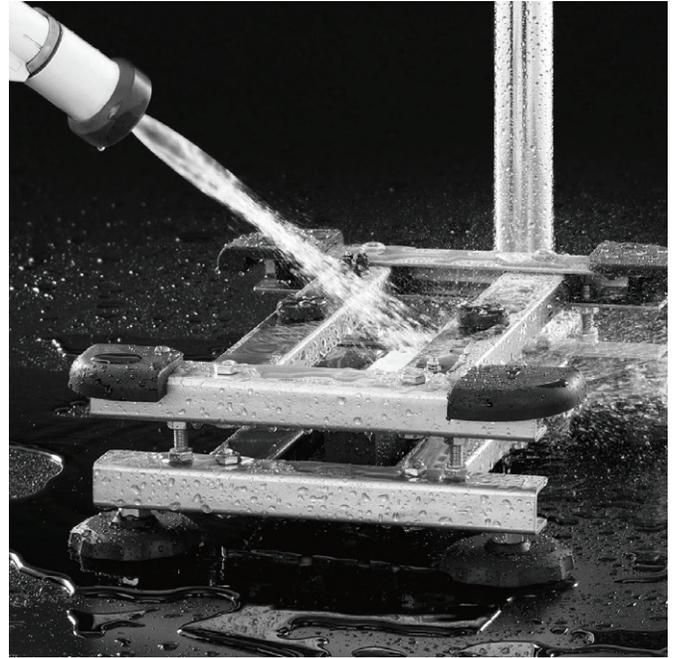
SC/SE
Washdown Platform Scales - IP68

Water jet cleaning

Stainless steel frame (SC)

Stainless steel frame and column (SC)

Painted steel frame and column (SE)

- IP68 dust and water-proof: submersible at 1m under water for 24 hours!
- Wash down construction for easy cleaning
- High speed stabilization in 1 second
- Battery operated
- 4,500 hours of continuous operation with 6 D batteries
- Supersized LCD of 39 mm character height
- Stainless steel weighing pan and frame (SC)
- Painted steel frame and column (SE)
- Waterproof and corrosion-resistant load cell (aluminium anodized and coated with epoxy resin with protective silicon over wiring)
- Comparator function
- Counting function
- Automatic power OFF
- Multiple interfaces (options):
- RS-232C
- Quick USB
- Comparator output
- Easily switchable, multiple weighing units (kg, lb, oz, and pcs)

SC/SE
Washdown Platform Scales - IP68

SC-60KAL

SE-60KAL

Model	Capacity	Resolution	Pan Size
SC-30KAM	66lb / 30kg	0.01lb / 0.005kg	11.8 x 15in
SC-60KAM	130lb / 60kg	0.02lb / 60kg	11.8 x 15in
SC-150KAM	330lb / 150kg	0.05lb / 0.02kg	11.8 x 15in
SC-60KAL	130lb / 60kg	0.02lb / 0.01kg	15.4 x 20.9in
SC-150KAL	330lb / 150kg	0.05lb / 0.02kg	15.4 x 20.9in
SE-30KAM	66lb / 30kg	0.01lb / 0.005kg	11.8 x 15in
SE-60KAM	130lb / 60kg	0.02lb / 60kg	11.8 x 15in
SE-150KAM	330lb / 150kg	0.05lb / 0.02kg	11.8 x 15in
SE-60KAL	130lb / 60kg	0.02lb / 0.01kg	15.4 x 20.9in
SE-150KAL	330 b / 150kg	0.05lb / 0.02kg	15.4 x 20.9in

Options & Accessories	Model
Quick USB Interface	SCE-02
RS-232C Interface with comparator relay output	SCE-03

Standard functions

Auto Power Off	IP 68	External Calibration	Counting Function	Comparator Function	Normal Battery	LCD Display	Software

Legal for Trade

Optional

RS-232C Interface	Quick USB

HV/HW-WP
Washdown Platform Scales -IP65

IP65- Washdown

Three platform sizes

Model	Capacity	Resolution	Pan Size
HV-15KWP	6/15/30lb / 3/6/15kg	0.002/0.005/0.01lb / 0.001/0.002/0.005kg	9.8 x 9.8in
HV-60KWP	30/60/150lb / 15/30/60kg	0.01/0.02/0.05lb / 0.005/0.01/0.02kg	13 x 16.7in
HV-200KWP	150/300/500lb / 60/150/220kg	0.05/0.1/0.2lb / 0.02/0.05/0.1kg	15.4 x 20.9in
HW-10KWP	20lb / 10kg	0.002lb / 0.001kg	9.8 x 9.8in
HW-60KWP	150lb / 60kg	0.01lb / 0.005kg	13 x 16.7in
HW-100KWP	200lb / 100kg	0.02lb / 0.01kg	15.4 x 20.9in
HW-200KWP	500lb / 220kg	0.05lb / 0.02kg	15.4 x 20.9in

Options & Accessories	Model
Display Extension Cable (17')	HVWP-02
RS-232C & Comparator/Setpoints (relays & audio)	HVWP-03
RS-422/485 & Comparator/Setpoints (relays)	HVWP-04
Swivel/Lock Caster for 30 lb & below capacities (each)	HVW-16SSC
Swivel/Lock Caster for above 30 lb capacities (each)	HVW-17LSC
2.5" Diameter Non-Skid Foot (each)	FT:10
USB to DIN RS-232 Converter	AX-USB-2920-DIN
Mounting Bracket	AX-043005266

- Washdown - IP65/NEMA4 rated
- Bright VFD display
- AC Mains power
- lb, oz and counting modes
- Accumulator and comparator modes
- Standard RS232 interface

Standard functions

IP 65 | External Calibration | Counting Function | Comparator Function | RS-232C Interface | VFD Display | Auto Power On | Accumulation Function

Percentage Function | Legal for Trade

HW-CEP Series
Intrinsically Safe Platform Scales

Removing the Barriers in Hazardous Environments

HW-10KCEP

HW-200KCEP

Model	Capacity	Resolution	Pan Size
HW-10KCEP	20lb / 10kg	0.002lb / 0.001kg	9.8 x 9.5in
HW-60KCEP	150lb / 60kg	0.01lb / 0.005kg	13.0 x 16.7in
HW-100KCEP	200lb / 100kg	0.02lb / 0.01kg	15.4 x 20.9in
HW-200KCEP	500lb / 220kg	0.05lb / 0.02kg	15.4 x 20.9in

- IECEx/ATEX Certified Scales
- Easy settings using the alphanumeric keypad
- Auto-tare and negative comparison function
- Counting mode and accumulation function
- Highly-visible, backlit LCD display
- Easy and flexible installation with 1000+ hours of battery life

Standard functions

IP 65 | External Calibration | Counting Function | Comparator Function | Intrinsic Safety | GLP Compliant | LCD Backlight | Accumulation Function

Normal Battery

FS-i Series
Checkweighing Scales - IP65

Auto tare (comparator)

Auto tare (initial weight)

Auto tare (reload)

Negative and positive Checkweighing

FS-30Ki

Model	Capacity	Resolution	Pan Size
FS-6Ki	15lb / 6kg	0.001lb / 0.0005kg	9.8 x 9.8in
FS-15Ki	35lb / 15kg	0.002lb / 0.001kg	9.8 x 9.8in
FS-30Ki	70lb / 30kg	0.005lb / 0.002kg	15 x 11.8in

Options & Accessories	Model
Rechargeable Battery Pack	HC-06i
21.5" Extension Column (Only for FS-30Ki)	FS-C
Wall Mount Bracket	FS-01i
RS-232C & Relay Output	FS-03i
RS-485 & Relay Output	FS-04i

- Ultra fast weighing response – only 0.5 seconds!
- Intuitive operation
- IP65 Dust and Waterproof
- Comparator function with LO, OK or HI
- Large comparator lights
- Analog bar display - 3 modes
- Memory for 99 products
- Hygiene - NSF certified
- Large backlit LCD display
- Rechargeable battery pack (optional)
- Filtering function
- Buzzer

Standard functions
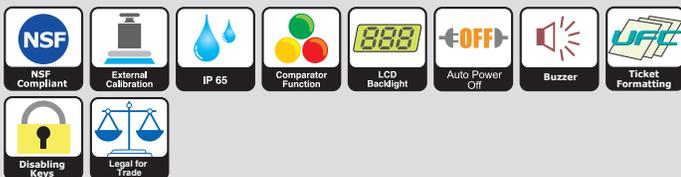
Optional

HC-i Series
Counting Scales

Economical Compact Counting Scale for Basic Industrial Applications
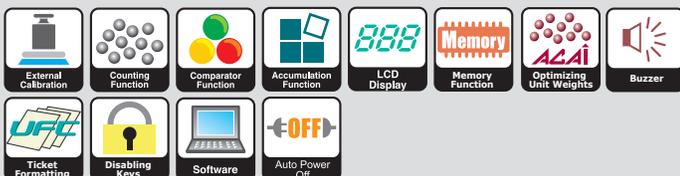

Internal, rechargeable battery pack (optional)

Detachable display

HC-6Ki

Model	Capacity	Resolution	Pan Size
HC-3Ki	6lb / 3kg	0.001lb / 0.0005kg	11.8 x 8.3in
HC-6Ki	15lb / 6kg	0.002lb / 0.001kg	11.8 x 8.3in
HC-15Ki	30lb / 15kg	0.005lb / 0.002kg	11.8 x 8.3in
HC-30Ki	60lb / 30kg	0.01lb / 0.005kg	11.8 x 8.3in

Options & Accessories	Model
RS-232C for HC-i	HC-03i
RS-232C relay output for HC-i	HC-04i
Rechargeable Battery Pack	HC-06i
Extension Cable (2m)	HC-08i
AC adapter (120Vac)	TB:662
AC Adapter (220 V)	TB:164
USB to DIN RS-232 Converter	AX-USB-2920-DIN

- High resolution of 1/600,000 or 1/750,000
- Ability to count even small objects down to 0.005g
- 3 methods to initialize unit weights: sample, memory, and keyboard input
- Large memory for 99 products incl. tare, unit weight and comparator limits
- Navigation system with LEDs indicating active keys for easy and faster operation
- Automatic Counting Accuracy Improvement (ACAI)
- Comparator with HI (exceeding), OK, and LO (insufficient) results
- Accumulation function totals piece count into memory
- Beeping function with frequency variation as you approach your preset target
- UFC: easy formatting of your RS-232C outputs and labels for printers (Universal Flexible Comms)

Standard functions

External Calibration	Counting Function	Comparator Function	Accumulation Function	LCD Display	Memory Function	Optimizing Unit Weights	Buzzer
Ticket Formatting	Disabling Keys	Software	Auto Power Off				

Optional

RS-232C Interface	Rechargeable Battery

HD Series
Counting Scales

HD-30KA

HD-60KB

Model	Capacity	Resolution	Pan Size
HD-12KA	30lb / 12kg	0.005lb / 0.0005kg	11.8 x 15in
HD-30KA	60lb / 30kg	0.01lb / 5g	11.8 x 15in
HD-60KA	120lb / 60kg	0.02lb / 10g	11.8 x 15in
HD-12KB	30lb / 12kg	0.005lb / 2g	11.8 x 15in
HD-30KB	60lb / 30kg	0.01 lb / 5 g	11.8 x 15in
HD-60KB	120lb / 60kg	0.02 lb / 10 g	11.8 x 15in

Options & Accessories	Model
Serial Interface (RS-232C/Current Loop)	HD-03
Comparator Output	HD-04
20mA Current Loop	HD-05
Carrying Handle	HD-06
Rechargeable Battery Pack	AD-1681
AC adapter (120Vac)- spare / replacement. Unit ships with an AC adapter.	TB:662
AC Adapter (220V)	TB:164
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

Note: can also use six (6) "C" batteries (not included)

- High internal resolution up to 1/120,000 counts for accurate parts counting
- Detachable display and large, stainless steel platform are ideal for weighing oversized containers
- Increased counting accuracy with Automatic Count Accuracy Improvement (ACAI), which automatically corrects errors caused by variation in unit weights
- Detachable display and large, stainless steel platform are ideal for weighing oversized containers
- Intuitive operation with either standard keys (HD-A) or 10-digit keypad (HD-B)

Standard functions

External Calibration | Counting Function | Comparator Function | Accumulation Function | LCD Display | Normal Battery | Optimizing Unit Weights | Buzzer

Ticket Formatting | Disabling Keys | Software | Auto Power Off

Optional

RS-232C Interface | Rechargeable Battery

FC-i/FC-Si
High-Performance Counting Scales

More flexible and versatile with additional options

Simple operation and easy to read Vacuum Fluorescent Display

Optional interface to remote scale for bulk counting

FC-Si with optional traffic light and optional comparator relay interface

Model	Min. Unit Piece Weight (internal resolution)	Capacity	Resolution	Pan Size
FC-500Si	0.0001g	1lb /500g	500g / 0.02g	5 x 5in
FC-5000Si	0.001g	10lb /5kg	5kg / 0.2g	6.5 x 6.5in
FC-500i	0.0005g	1lb / 500g	0.0001lb / 0.05g	8 x 6in
FC-1000i	0.001g	2lb / 1kg	0.0002lb / 0.1g	8 x 6in
FC-2000i	0.002g	5lb / 2kg	0.0005lb / 0.2g	11.8 x 11in
FC-5000i	0.005g	10lb / 5kg	0.001lb / 0.5g	11.8 x 11in
FC-10Ki	0.01g	20lb / 10kg	0.002lb / 1g	11.8 x 11in
FC-20Ki	0.02g	50lb / 20kg	0.005lb / 2g	11.8 x 11in
FC-50Ki	0.05g	100lb / 50kg	0.01lb / 5g	11.8 x 11in

Options & Accessories	Model
Rechargeable Battery Pack	FC-02i
Second & Third RS-232C	FC-03i
RS-232C/Comparator Relays	FC-04i
Remote Scale Connection	FC-05i
Demo/Carrying / Storage Case	CC:110
AC Adapter (120V)	TB:636
HR-i, FP, HA, HX, GP, FR, SV10/100, SV-A, GH, FC, FC-I, FC-SI	TB:137
2" Diameter Non-Skid Foot (each)	FT:8

Optional

Rechargeable Battery

- High internal resolution: 1/10,000,000 (FC-Si), and 1/1,000,000 (FC-i)
- Up to 3 RS-232C ports (option)
- 4 methods to initialize the unit weight: sample, memory, keyboard input, bar code
- FC-Si models come with SHS sensor, same as one of our laboratory balances
- Large memory for up to 500 IDs (ID, name, unit weight, tare, comparator limit)
- Navigation system with LEDs indicating active keys for easy and faster operation
- Automatic counting accuracy improvement (ACAI)
- Comparator with HI (exceeding), OK, and LO (insufficient) results
- Accumulation function totals piece count into memory
- Remote platform option offers bulk counting
- UFC: easy formatting of your RS-232C outputs and labels for printers (Universal Flexible Comms)
- Optional rechargeable battery pack (NiMH)

Standard functions

External Calibration · Counting Function · Comparator Function · Accumulation Function · VFD Display · Memory Function · Optimizing Unit Weights · Buzzer

Ticket Formatting · Disabling Keys · RS-232C Interface · Super Hybrid Sensor

WEIGHING
COMPONENTS

SB
Platforms - IP65

- Four models ranging from 30lb to 500lb capacity
- Easy-to-clean, removable stainless steel weighing platform
- Two (2) year warranty
- Water and dust resistant load cell sensor

Model	Capacity	Pan Size
SB-15K10	30lb / 15kg	9.8 x 9.8in
SB-60K11	150lb / 60kg	13 x 16.7in
SB-100K12	200lb / 100kg	15.4 x 20.8in
SB-200K12	450lb / 220kg	15.4 x 20.8in

Standard functions

IP 65

AD-4329A Digital Weighing Indicator

- Vacuum Fluorescent Display
- Standard RS-232C interface
- 4-point digital linearization
- Triple range on weighing capacity are available
- Automatic or manual storage of accumulated data
- Comparator output to optional relays
- Set-point comparison for batching applications
- Select weighing range
  (up to triple range)
- 1/20,000 displayed count resolution (maximum)
- Powers up to 8 units of load cells
- Controllable via external input
- Mount on panel, column or desk top
- Use the keypad to enter the predetermined tare weight

Model	Description
AD-4329A	Digital Weighing Indicator

Options and Accessories	Model
BCD Output	AD-4329A-01
Relay Outputs	AD-4329A-02
AC adapter (120Vac)- spare / replacement. Unit ships with an AC adapter.	TB:662
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

Standard functions

VFD Display

AD-4401A
Digital Weighing Indicator

- Powerful vibration-cancelling filter (High Performance Digital Filter)
- 100 times/sec. High speed sampling
- Up to 1 million counts of A/D resolution
- High display resolution up to 1/16,000
- Sub display provides feedback on all set points & simplifies calibration
- Digital Span Calibration enhances technical support and difficult installations

Model	Description
AD-4401A	Digital Weighing Indicator

Options & Accessories	Model
Parallel BCD Output (Open Collector)	AD-4401A-01
RS-422/485 Serial Interface	AD-4401A-03
RS-232C Serial Interface	AD-4401A-04
Setpoint Unit	AD-4401-05
Analog Output (4~20mA)	AD-4401A-07
Adapter Bracket to replace AD-4323	AD-4401-10
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

Standard functions

IP 65   Accumulation Function   VFD Display

AD-4402 Batch Weighing Indicator

- Batch weighing with 11 control inputs
- Large and easy to read Vacuum Fluorescent Display (VFD)
- Fast and precise with 100 A/D conversions per second
- Twin displays show weight and operational details
- 10 digit keypad and function buttons for easy operation
- Pre-programmed with multiple sequences and functions
- Stores 100 data points for raw materials and recipes

Model	Description
AD-4402	Digital Weighing Indicator

Options & Accessories	Model
BCD Output	AD-4402-01
Relay Output	AD-4402-02
RS-422/485	AD-4402-03
RS-232C	AD-4402-04
Parallel I/O	AD-4402-05
Analog Output	AD-4402-07
Adapter Bracket to replace AD-4325A/V	AD-4402-10
CC Link Interface	AD-4402-20
Device Net Interface	AD-4402-21
USB to 25 pin RS-232 Converter	AX-USB-2920-25P

Standard functions

IP 65   Accumulation Function   VFD Display

AD-4406A Digital Weighing Indicator

- Universal Flexi Coms
- UFC allows you to customize the protocol of the printing format as well as outputting the data with RS-232C
- Multi interval 2 weighing ranges selectable
- Accumulation Function-stored into memory automatically or manually
- Comparator Function Upper/Lower, HiHi/Hi/OK/Lo/Lolo & comparison

Model	Description
AD-4406A	Indicator, General Purpose

Options & Accessories	Model
Wall Mount Bracket	AD-4406-01A
RS-422/485/Relays	AD-4406-03
RS-232C with relays	AD-4406-05
Analog Output (4-20mA)	AD-4406-07
AC adapter (120Vac)- spare / replacement. Unit ships with an AC adapter.	TB:662
AC Adapter (220V)	TB:164
USB to 9 pin RS-232 Converter	AX-USB-2920-9P

Standard functions

Ticket Formatting · Accumulation Function · LCD Display · Normal Battery · Comparator Function · Legal for Trade

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AD-4407 Digital Weighing Indicator

- Large and easy to read Vacuum Fluorescent Display (VFD)
- Robust stainless steel construction
- High display resolution of 1/20,000
- IP65 rated allows for easy cleaning and reduces contamination
- 10 digit keypad and function buttons for easy operation
- Quickly determine if a weight count is below, within or above target with the built-in comparator function and audible buzzer alert
- Pre-programmed with multiple functions including: Accumulation, Comparator, Counting and Batching
- Easily format printouts with built-in Universal Flex Coms (UFC)

Model	Description
AD-4407	Indicator, Washdown, Stainless Steel Housing, 0-9 keys

Options and Accessories	Model
RS-422/485/Relays	AD-4407-03
RS-232C with relays	AD-4407-05
Analog Output (4-20mA)	AD-4407-07

Standard functions

Ticket Formatting · Accumulation Function · VFD Display · RS-232C Interface · Counting Function · IP 65 · Comparator Function · Legal for Trade

AD-4410
High Speed Weighing Indicator

- Powerful vibration-cancelling function (High Performance Digital Filter)
- High speed sampling (100 times/second), high accuracy
- Circuits equipped with powerful noise reduction
- Accurate linear correction function using high-order equations
- Average holding function
- Comes equipped with Modbus-RTU

Model	Description
AD-4410	Indicator, General Purpose

Options and Accessories	Model
RS-485 DIN connector	AD-4410-03
RS-232 DIN connector	AD-4410-04
Desk stand	AD-4410-11

Standard functions

LCD Display | RS-232C Interface | IP 65 | Comparator Function

SW-D IP69K Weighing Indicator

- IP69K - the highest level of dust and water-proofing:
- High pressure: ~ 10,000 kPa / 100 bars
- High temperature: ~85°C
- Ultimate protection against the effects of condensation
- Capacitive keys for light touch operation and durability
- Bright, multicolored LED display
- 5-step comparator for check weighing and filling applications
- 5-level comparator output with color lights: red/orange/green
- Auto tare
- Negative weighing
- Grading
- Pre configured fixed capacities / resolutions
- Optional desktop/wall-mount bracket
- Optional rechargeable battery
- Optional interfaces: RS-232C + comparator, and RS-422 / RS-485

Model	Description
SW-D	SW-D Indicator

Options & Accessories	Model
Internal, rechargeable battery	HC-OP-02i
RS-232C & comparator relay output*	SW-OP-03
RS-422/485*	SW-OP-04
Short pole (SW-6KS/SW-15KS)	SW-OP-09
Long pole	SW-OP-10
Desktop/wall-mount stand	SW-OP-11

Standard functions

IP-69K | LED Display | Rechargeable Battery | Comparator Function | RS-232C Interface | NSF Compliant

FS-D IP65
Indicator with 3-level Comparator

Model	Description
FS-D	FS-D Indicator

Options & Accessories	Model
Rechargeable Battery Pack	HC-06i
RS-232C & Relay Output*	FS-03i
RS-485 & Relay Output*	FS-04I

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

Standard functions

Memory Function	IP 65	Ticket Formatting	Comparator Function	Disabling Keys	Buzzer	NSF Compliant	LCD Backlight

Optional

RS-232C Interface	Rechargeable Battery

- Intuitive operation
- IP65 dust and waterproof
- Comparator function with LO, OK, or HI
- Large comparator lights
- Buzzer
- Analog sweep display - 3 modes
- Memory for 99 products
- Hygiene - NSF certified
- Large LCD display with backlight
- Rechargeable battery pack (optional)
- Filtering function
- Auto tare
- Negative weighing
- Desktop/wall-mount bracket included as standard

AD-4212A, AD-4212B
High Speed Production Weighing Sensor

Ensures maximum efficiency of your production line

For applications such as:
- High-speed weighing
- High-speed check weighing
- Filling
- Isolated weighing

Fast, Precise, Compact, Durable
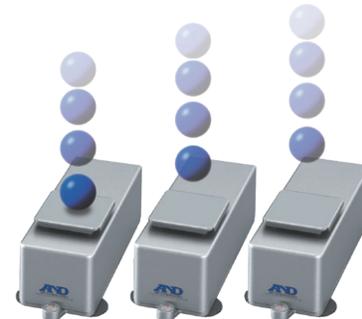
AD-4212A-1000
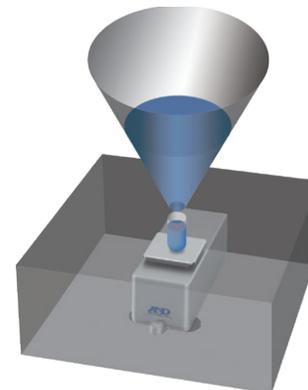
Model	Capacity	Resolution	Pan Size
AD-4212A-100	110g	0.1mg	50 × 50mm
AD-4212A-200	210g	1mg	50 × 50mm
AD-4212A-600	610g	1mg	50 × 50mm
AD-4212A-1000	1100g	1mg	70 × 70mm
AD-4212B-23	21g	0.001mg	Ø 34mm
AD-4212B-101*	110g/31g	0.1mg/0.01mg	Ø 34mm
AD-4212B-102	110g	0.01mg	Ø 34mm
AD-4212B-201	210g	0.1mg	50 × 50mm
AD-4212B-301	310g	0.1mg	50 × 50mm

* Smart Range (see icon definition)

Options & Accessories	Model
BCD output/external contact input	AD4212A-OP-01
Comparator output (only AD-4212A)	AD4212A-OP-04
Extension cable 3m	AD4212A-OP-07
Ethernet interface (with application software WinCT-plus in CD-ROM)	AD4212A-OP-08
Stainless steel breeze break (standard for AD-4212A-100 and all B models)	AD4212A-OP-19
Metal levelling foot	AD4212A-OP-20
Static eliminator	AD-1683

Optional

LAN-Ethernet Interface

- High resolution and quick stabilization times
- Possibility to use a weighing pan of your own design for holding special objects
- Standard RS-232C interface
- The AD-4212A offers 3-level comparator with contact output and buzzer
- The AD-4212B offers 5-level comparator with contact output and buzzer
- External digital inputs to trigger actions such as RE-ZERO or PRINT
- Data memory, GLP and GMP compliant
- WinCT: software tool for data acquisition from PC
- Multiple weighing units: g, mg, OZ, Lb, LOZ, Ozt, ct, mom, dwt, GN, TL, t, MS, PCS (counting) and Pct (%)
- 2m connection cable in between sensor and indicator
- Protection against vertical or transverse shocks - patented (AD-4212B)

Standard functions

Super Hybrid Sensor | External Calibration | Counting Function | Percentage Function | RS-232C Interface | Reverse Backlit LCD | Buzzer | GLP Compliant

Date & Time | Memory Function | Software | Comparator Function | Optimizing Unit Weights | Auto Power On | SmartRange
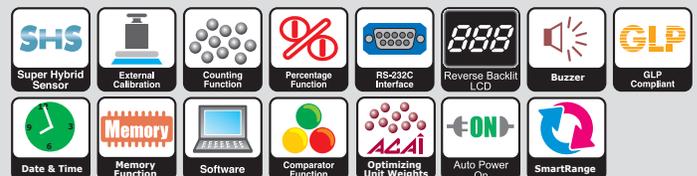
(AD-4212B-101)

AD-4212C
High Speed Production Weighing Sensor

AD-4212C-300

Autonomous operation with optional AD-8922A controller.

(AD-8922A can also interface with a PC or a PLC)

Direct connection of sensor to PC or PLC by RS-232C

Fast: down to 0.5s
Precise: down to 1mg
Compact: 59mm width
Durable: with IP65

Model	Capacity	Resolution	Pan Size
AD-4212C-301*	51g/320g	0.1mg/1mg	50 × 50mm
AD-4212C-300	320g	1mg	50 × 50mm
AD-4212C-600	610g	1mg	50 × 50mm
AD-4212C-3100*	510g/3200g	1mg/10mg	50 × 50mm
AD-4212C-3000	3200g	10mg	50 × 50mm
AD-4212C-6000	6100g	10mg	50 × 50mm

* Smart Range (see icon definition)

Options & Accessories	Model
Remote controller and display unit	AD-8922A
Remote controller with BCD interface	AD-8923-BCD
Remote controller with CC interface	AD-8923-CC
Static eliminator	AD-1683

Standard functions

(AD-4212C-301/3100)

- High resolution and quick stabilization times
- Possibility to use a weighing pan of your own design for holding special objects
- Protected against vertical and transverse overloading (patent pending)
- Outputs digital weighing data directly to a panel computer, PLC, or PC via standard RS-232C interface
- Analog, comparator, and BCD outputs are also available when using the optional AD-8922A controller
- High-speed data transmission of up to 50 times/second
- IP65 dust and water-proof construction for powder or liquid weighing
- Easy calibration and response speed adjustment using WinCT-AD4212 software
- Calibration weight included
- Connection cable included (about 5m)
- Securable to a base by replacing levelling feet with screws
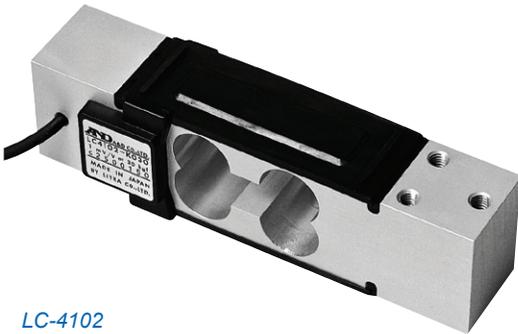
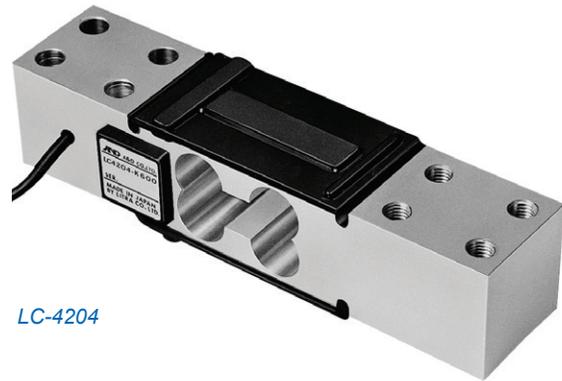# Load Cells
Single Point Load Cells

LC-4101
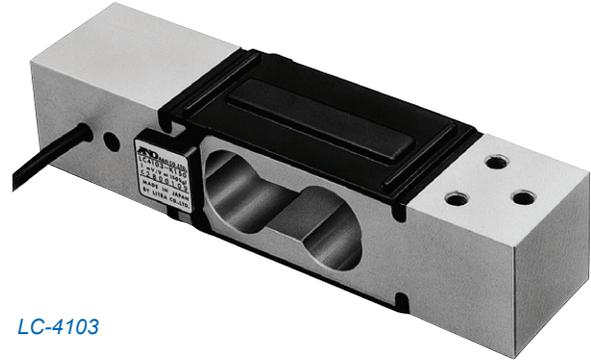
LC-4103

LC-4102

LC-4204

Model	Capacity
LC-4101-G600	1.2lb / 600g
LC-4101-K1.5	3lb / 1.5kg
LC-4101-K003	6lb / 3kg
LC-4101-K006	12lb / 6kg
LC-4101-K015	30lb / 15kg
LC-4102-K010	20lb / 10kg
LC-4102-K015	30lb / 15kg
LC-4102-K030	60lb / 30kg
LC-4102-K060	120lb / 60kg
LC-4102-K150	330lb / 150kg
LC-4103-K060	120lb / 60kg
LC-4103-K100	200lb / 100kg
LC-4103-K150	300lb / 150kg
LC-4204-K300	600lb / 300kg
LC-4204-K600	1200lb / 600kg

Options & Accessories	Model
Load Cell Connector (Male)	JM:NJC-207-RM
Load Cell Connector (Female)	JM:NJC-207-PF
Load Cell Connector for HV/HW	JT:171822-5
Summing Box (60-90 day lead time)	AD-4382

ACCESSORIES

AD-1688
Weighing Data Logger

Save, Carry, and Retrieve! Handheld device that lets you collect weighing data without connecting the balance or scale to a PC!

- Dual interface: An RS-232C interface to import weighing data from an A&D balance or scale and a USB interface to export the data to a PC (no driver software is required)
- Large memory: approx. 5000 weighing data sets (in the A&D standard format) can be stored
- Internal clock: date, time, & seq. N° added to weighing data
- Interval mode: periodic data acquisition
- Complex data records: records containing multiple data (tare, unit weight, weight, count, comparison result, product name...).
- No battery required: receives power supply directly from a balance, scale or PC

Model	Description
AD-1688	Weighing Data Logger

AD-1687 Weighing Environment Logger

Time-stamped recording of environmental and weighing data. Environmental data are produced by AD-1687 embedded sensors. Weighing data is acquired from a balance.

- Add environmental data to your weighing records:
  - » Temperature (°C/°F),
  - » Humidity (%),
  - » Barometric pressure (hPa),
  - » Vibration (mG)
- Large memory capacity of 10,000 data sets
- Graphic and numeric display of information
- Connects to balance by RS-232C and to PC by USB
- Time stamping of data

Model	Description
AD-1687	Weighing Environment Logger

AD-1641
Air Flow and Environment Logger

- High precision, fast response air flow sensor to capture low-velocity air flows of 0 to 1.00 m/s
- Measure and record four additional environmental data – temperature, humidity, barometric pressure and vibration
- Alarm for abnormal values (comparator function)

Model	Description
AD-1641	Air Flow and Environment Logger

AD-1691
Weighing Environment Analzyer

- Calculates minimum weight according to USP
- Calibration uncertainty calculation based on 7 uncertainty components
- Assess your measurement environment using AND-MEET with BM Series balances

Model	Description
AD-1691	Weighing Environment Analzyer

AD-1683
Static Eliminator

- The AD 1683 generates positive and negative ions to eliminate static electricity, which is often the cause of inaccurate weighing
- Ideal for treating your glassware, Petri dishes, powders, samples, etc.
- No fan, no breeze is produced, ideal for powders.
- Easily and safely connected; requires no high-voltage wiring
- Compact and lightweight:
  - » Size without its U shaped stand
    - 112mm (L) × 92mm (W) × 40mm (H)

Model	Description
AD-1683	Static Eliminator

AD-1684
Electrostatic Field Meter

- Electrostatic field meter designed for detecting static electricity, which is often the cause of inaccurate weighing
- Size: 123mm (L) × 73mm (W) × 25mm (H)

Model	Description
AD1684	Electrostatic Field Meter

AD-8526
Ethernet Converter

- Converts RS-232 serial signal to Ethernet
- Allows Ethernet interface to A&D devices
- Works with all A&D balances equipped with RS-232
- Input/output is 9 pin M serial connector, requires 9 pin F to 9 p or 25 pin depending on device being connected, so choose the kit with appropriate cable below.

Model	Description
AD-8526-9	Ethernet Convertor with D sub 9 cable
AD-8526-25	Ethernet Convertor with D sub 25 cable
AD-8526-7	Ethernet Convertor with 7 pin DIN cable

AD-8529 Series
Bluetooth Converter

- Replaces serial cable for direct paired connection
- AD-8529PC-W for balance / scale direct to PC connection. Comes with USB transceiver for use with PC or laptop
- AD-8529PR-W for balance / scale direct connect to A&D printers, including AD-8127
- Each comes with 2 transceivers, which automatically pair
- Cannot be used with built-in Bluetooth of laptops or mobile devices – requires use of the provided transceiver

AD-8529PC-W   *AD-8529PR-W*

Model	Description
AD-8529PC-W	Bluetooth Converter for PC
AD-8529PR-W	Bluetooth Converter for Printer

AX-USB-2920
USB to RS232 Convertor

- Transfer data and control A&D balances with this USB-to-RS232 serial convertor and cable set
- Use with A&D WinCT to transfer, capture and graph weighing data
- Choose kit below with convertor and cable.

Model	Description
AX-USB-2920-9P	RS-232-to-USB convertor with 9 pin RS-232 cable (6ft)
AX-USB-2920-25P	RS-232-to-USB convertor with 25 pin RS-232 cable (6ft)
AX-USB-2920-DIN	RS-232-to-USB convertor with 7 pin DIN RS-232 cable (6ft)

AD-8922A
Remote Controller

- The AD-8922A is a remote controller that can be connected to certain A&D weighing instruments in order to display and control the weighing instrument remotely
- Same keys as on most A&D balances
- Perfect for use with glove boxes or outside of environmental chambers

Model	Description
AD-8922A	Remote Controller

AD-8920A
Remote Display

- With this unit, weighing values can be viewed in a remote area
- Can be used with all A&D products using the RS-232C interface
- Bright Vacuum Fluorescent Display

Model	Description
AD-8920A	Remote Display

AD-1682 **Rechargeable Battery Unit**

- Ideal for mobile operation in the field
- Compatible products: GH, GR, HR, GX, GF, GP, EK-i, EW-i, FC-i, HC-i, FX-i, FZ-i, FX-i-WP, FZ-i-WP

Specifications	
Weight	Approx. 1.1kg
Battery life	4-50 hours, depending on operating conditions and connected devices
Dimensions	57(H) × 96(W) × 124(D) mm
Battery type	Nickel-metal-hydride (Ni-MH) battery

Model	Description
AD-1682	Rechargeable Portable Power Ssupply

AD-1192
Compact Printer

- Impact printing for a temperature-insensitive record
- Uses plain paper rolls
- Palm-sized

Model	Description
AD-1192	Compact Printer

Accessories	
Roll Paper (5 Rolls)	WP:PP137
Replacement Ribbon	AD-1192-1
Replacement Power Cord	AD-1192-2
RS-232C Interface Cable to Balances, Scales & Indicators with 25 pin connection	KO:1131
RS-232C Interface Cable to BM/HR-A/Z, EJ/EK-i/EWi/FC-i/ FCSi/GH/FX-i(WP)/FZi(WP)/JM	KO:WW9-25
RS-232C Interface Cable to FG-K /HCi /HV /HV-G /HW-G / HV-WP /HW-WP	KO:WW25-7

AD-8127
Multifunction Printer

- Impact dot-matrix printing on plain paper rolls (resists thermal fading)
- Statistical function
- Date & time
- Wireless printing from A&D balances and scales when used with AD-8529PR-W
- Cables provided as standard

Model	Description
AD-8127	Multi-Function Printer with LCD Display

| Accessories	
AX-ERC-22B	Ink ribbon (set of 5 ribbons)
AX-KO2116-090	RS-232 cable (9p -25p, 0.9m)
AX-KO2741-100	RS-232 cable (9p -9p, 1m)
AX-KO5291-100	Current loop cable (9p - DIN, 1m)
WP:PP137	Roll paper (5 rolls)
AX-PP173-S	Dust-free printer paper

Calibration Weights

Calibration Weights & Sets Non-Certification (10 DAY LEAD TIME)	
Model	**Description**
AD-1700-1MG	1mg - Class I
AD-1700-5MG	5mg - Class I
AD-1700-10MG	10mg - Class I
AD-1700-20MG	20mg - Class I
AD-1700-50MG	50mg - Class I
AD-1700-100MG	100mg - Class I
AD-1700-200MG	200mg - Class I
AD-1700-300MG	300mg - Class I
AD-1700-500MG	500mg - Class I
AD-1700-1G	1g - Class I
AD-1700-2G	2g - Class I
AD-1700-5G	5g - Class I
AD-1700-10G	10g - Class I
AD-1700-20G	20g - Class 1
AD-1700-50G	50g - Class 1
AD-1700-100G	100g - Class 1
AD-1700-200G	200g - Class 1
AD-1700-300G	300g - Class 1
AD-1700-400G	400g - Class 1
AD-1700-500G	500g - Class 1
AD-1700-1KG	1kg - Class 1
AD-1700-2KG	2kg - Class 1
AD-1700-3KG	3kg - Class 1
AD-1700-4KG	4kg - Class 1
AD-1700-5KG	5kg - Class 1
AD-1700-10KG	10kg - Class 1
AD-1700-20KG	20kg - Class 1
AD-1800-1M	100g - 1mg set - Class 1
AD-1800-10M	100g - 10mg set - Class 1
AD-1800-1G	100g - 1g set - Class 1
AD-1800-10K	1kg - 1mg set - Class 1
AD-1800-10G	1kg - 1g set - Class 1
AD-1800-5M	5kg - 1mg set - Class 1
AD-1800-5G	5kg - 1g set - Class 1

Calibration Weights with NIST Traceable Certification (30-90 DAY LEAD TIME)	
Model	**Description**
AD-1700-1MG-C	1mg - Class I
AD-1700-5MG-C	5mg - Class I
AD-1700-10MG-C	10mg - Class I
AD-1700-20MG-C	20mg - Class I
AD-1700-50MG-C	50mg - Class I
AD-1700-100MG-C	100mg - Class I
AD-1700-200MG-C	200mg - Class I
AD-1700-300MG-C	300mg - Class I
AD-1700-500MG-C	500mg - Class I
AD-1700-1G-C	1g - Class I
AD-1700-2G-C	2g - Class I
AD-1700-5G-C	5g - Class I
AD-1700-10G-C	10g - Class I
AD-1700-20G-C	20g - Class 1
AD-1700-50G-C	50g - Class 1
AD-1700-100G-C	100g - Class 1
AD-1700-200G-C	200g - Class 1
AD-1700-300G-C	300g - Class 1
AD-1700-400G-C	400g - Class 1
AD-1700-500G-C	500g - Class 1
AD-1700-1KG-C	1kg - Class 1
AD-1700-2KG-C	2kg - Class 1
AD-1700-3KG-C	3kg - Class 1
AD-1700-4KG-C	4kg - Class 1
AD-1700-5KG-C	5kg - Class 1
AD-1700-10KG-C	10kg - Class 1
AD-1700-20KG-C	20kg - Class 1
AD-1800-1M-C	100g - 1mg set - Class 1
AD-1800-10M-C	100g - 10mg set - Class 1
AD-1800-1G-C	100g - 1g set - Class 1
AD-1800-10K-C	1kg - 1mg set - Class 1
AD-1800-10G-C	1kg - 1g set - Class 1
AD-1800-5M-C	5kg - 1mg set - Class 1
AD-1800-5G-C	5kg - 1g set - Class 1

SERVICES
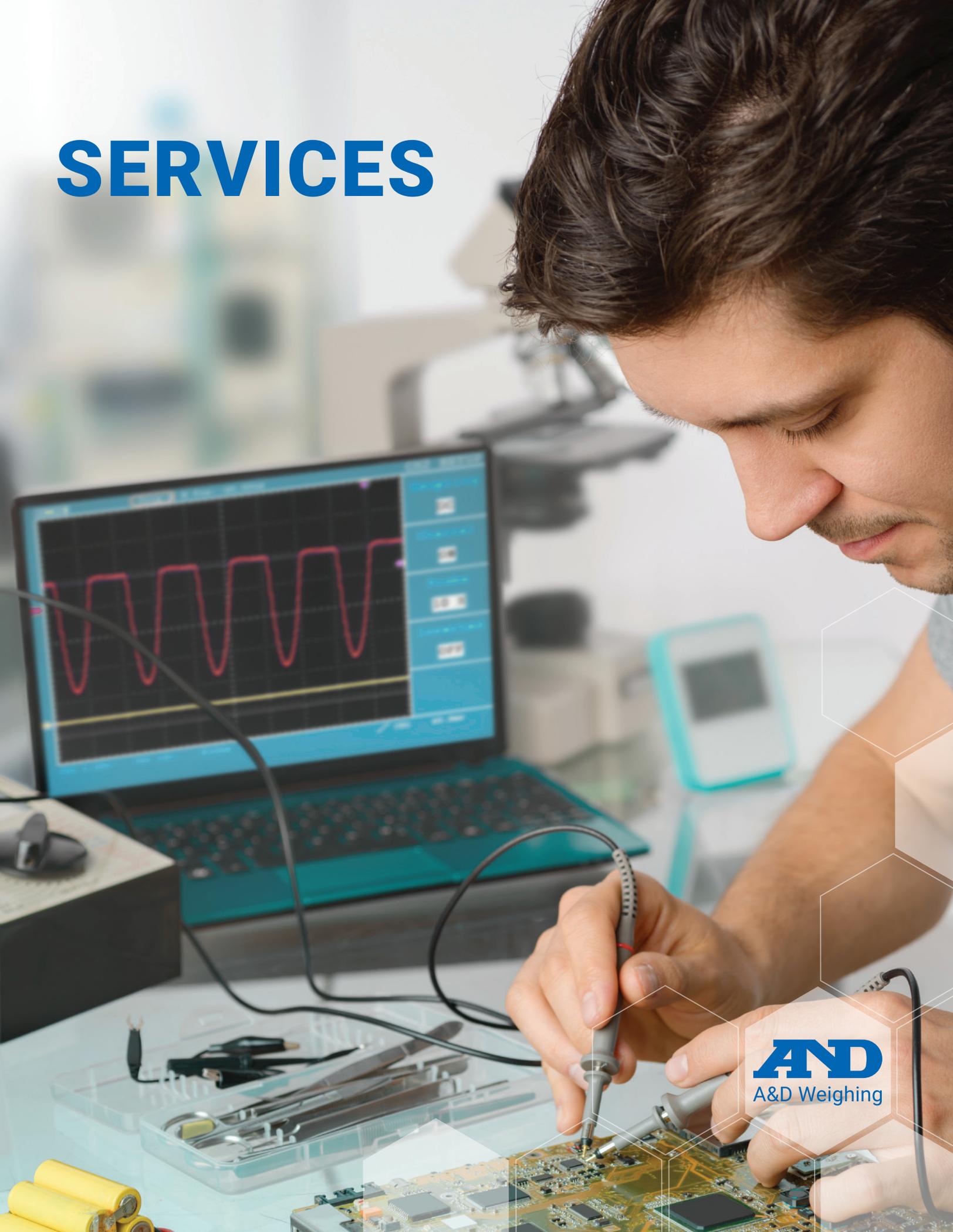
Service

Get the Most out of Your Investment

A&D Weighing offers accurate and reliable measurement equipment and we want to ensure your satisfaction over the lifetime of our equipment.

Our depot repair centers provide repair services for all A&D Weighing Equipment including warranty repairs and flat-rates.

Benefits of A&D Repair Center:
• Services are performed by factory-trained technicians
• Fast turnaround times, expediated repairs available on most models with an additional fee
• Original Spare parts
• Reasonable Flat-Rates
• Equipment is cleaned and aligned to manufacturer's specifications
• 180 days warranty on all repairs and services performed
• Services are performed in an ISO-1700 accredited facility
• Upgrade\trade-in your old equipment

Extended Warranties

A&D Engineering, Inc. ("A&D") warrants each product to be free from defects in materials and workmanship, and to conform to its published product specifications under normal use and service for the period listed above commencing from the date of purchase.

The foregoing warranty is extended only to the first purchaser and applies only to product failures due to defective materials and/or workmanship. Without limiting the generality of the foregoing, the foregoing warranty will not apply if, upon inspection, it is found that the product was: misused or abused; used for a purpose for which it was not designed; mishandled; placed in an improper environment; repaired by unauthorized personnel; or improperly installed or adjusted.

The sole and exclusive remedy in the event of any breach of the foregoing warranty shall be for the original purchaser to return the product to A&D, freight and insurance prepaid, for repair, replacement or credit, at A&D's option. Any product repaired or replaced under the foregoing warranty shall be shipped back to customer freight prepaid.

Except as provided above, A&D makes no warranty concerning the products, expressed or implied, including but not limited to the implied warranties or merchantability and fitness for a particular purpose. All such warranties are expressly disclaimed. In no event will A&D's liability under the foregoing warranty exceed the purchase price paid for the product giving rise to the liability.

IN NO EVENT SHALL A&D BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING WITHOUT LIMITATION DIRECT, OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM OR RELATED TO THE USE OR INABILITY TO USE A PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY OR ANY OTHER LEGAL THEORY, EVEN IF A&D HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH INCONVENIENCE, DAMAGE OR LOSS.

Terms and Conditions:
• All prices are FOB; San Jose, California or Duluth, Georgia.
• Returns will not be accepted unless a Return Goods Authorization Number (RMA) has been issued from a Customer Satisfaction Representative 800-726-3364.
• A 20% restocking charge will be applied to all returned goods.
• Suggested list prices, terms and specifications are subject to change without notice.

Depot Repair Rates

A&D is continuously developing service programs that offer fast and cost-effective method of repair for you and your customers. Most repairs received by A&D are now done under our Flat Rate Repair Policy. If you can't find your product on our flat rate repair list, please request an estimate. Flat Rate Repair is offered at the prices shown.

We offer:
- Reasonable Repair Rates
- Estimates for your customers
- 180 Days Warranty

It's as easy as 1, 2, 3:
1. Call your Service Technician for an RMA number.
2. Issue a purchase order and send us the product.
3. Specify return method.

Terms & Conditions:
- Prices are subject to change without notice.
- Replacements for missing parts, components and accessories are not included in the prices.
- In the event we are able to repair an instrument in 30 minutes or less with minor parts, a reduced flat rate of $225.00 will be charged. However, before you send an instrument in for repair you must get approval from your customer for the regular Flat Rate. Reduced Flat Rate applies to A&D Weighing products only.
- This Flat Rate repair policy applies only to instruments we feel are in repairable condition.
- Warranty for repairs is 6 months.

Model	Price
FLR-AD-4212A\B	$975.00
FLR-AD-4212C	$900.00
FLR-AD-4328	$275.00
FLR-AD-4329	$375.00
FLR-BM	$1,450.00
FLR-EK-I	$260.00
FLR-EK-L	$375.00
FLR-FC-I	$575.00
FLR-FG-K	$350.00
FLR-FG-K HEAD	$275.00
FLR-FS-I	$550.00
FLR-FSI-HEAD	$450.00
FLR-FX-I	$475.00
FLR-FX-IWP	$575.00
FLR-GF	$625.00
FLR-GF-A	$625.00
FLR-GF-K	$750.00
FLR-GH	$875.00
FLR-GP	$950.00
FLR-GR	$775.00
FLR-GX	$675.00
FLR-GX-A	$675.00
FLR-GX-K	$775.00
FLR-HC-I	$285.00

Model	Price
FLR-HD	$425.00
FLR-HL-WP	$175.00
FLR-HR	$750.00
FLR-HR-A	$625.00
FLR-HR-AZ	$675.00
FLR-HV\W-KC	$500.00
FLR-HV\W-KCP	$550.00
FLR-HV-KGL HEAD	$250.00
FLR-HV-KGV HEAD	$275.00
FLR-HV-WP	$525.00
FLR-HVWP-HEAD	$325.00
FLR-HW-WP	$550.00
FLR-MC	$990.00
FLR-ML/MF	$675.00
FLR-MS/MX	$775.00
FLR-OUTPUT OPTION	$175.00
FLR-RFR	$225.00
FLR-SC	$550.00
FLR-SE	$500.00
FLR-SKWP	$225.00
FLR-SV-VISCOMETER	$975.00
FLR-SW	$750.00
FLR-TM-2430	$475.00
FLR-TM-2655	$635.00

Key feature index

Accumulation (M+) Function
Sums the weighing results and displays the total value

Animal Weighing (Hold) Function
Helps measure and record the weight of a moving object such as an animal by averaging fluctuation

Auto Power OFF Function
Turns off the display automatically after a period of inactivity to save power

Auto Power ON Function
Activates the weighing mode display automatically when plugged in

Buzzer
Audible sound indicator

Clock and Calendar Function
Adds time and date information to output data

Comparator Function
Compares weight values within set limits and makes pass/fail judgments

Counting Function
Displays the number of pieces based on their individual unit weight

Counting Function with Automatic
Displays the number of pieces based on their individual unit weight while automatically optimizing the accuracy of the unit weight

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

Disabling Keys
Disable keys from being activated or switched

Electronically Controlled Load
A self-diagnostic before performing an internal repeatability test without an external weight, all in less than a minute and a half.

Calibration with External Weight
Requires an external weight for calibration

Calibration with Internal Weight
Enables you to ensure balance accuracy with just one key press

Flow Rate Display
Calculates, displays, outputs and compares mass or volume flow rate values

GLP/GMP/GCP/ISO Compliant Output
Outputs the manufacturer, model, serial number, ID number, space for signature, calibration records, etc., for documentation requirements

Impact Shock Detection
A visual & auditory alert that educated, prevents, and document damage to sensor due sharp impact

Intrinsic Safety
Protection from potentially explosive atmospheres

IP65 Dust and Waterproof
Permits no infiltration of dust and withstands water jetting from any direction

IP67 Dust and Waterproof
Permits no infiltration of dust while immersed in water up to 1 m of submersion non continuous.

IP68 Dust and Waterproof
Permits no infiltration of water while immersed to a depth of 1 meter for 24 hours

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)

LAN-Ethernet Interface
(with WinCT-Plus software) Enables acquiring data from and sending commands to multiple weighing instruments

Liquid Crystal Display with Backlight
Ensures visibility in a dimly-lit area

Liquid Crystal Display
Provides a sharp-cut, energy-saving display

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

Legal for Trade
Certified Legal For Trade Scales For Selling Goods By Weight specific

Normal Battery Operation
Works with off-the-shelf battery cells

NSF Compliant
Meets food protection and sanitation requirements as established by NSF International

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

Rechargeable Battery Operation
Works with a built-in rechargeable battery unit

Reverse-backlit Liquid Crystal Display
Provides a bright, high contrast that is extremely easy to read and less stressful on the eyes

RS-232C Serial Interface
Outputs data to and receives commands from a PC, printer, data logger, etc.

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

Software
Data management software available

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

Super Hybrid Sensor / Compact Super Hybrid Sensor
Simultaneously achieves precision, speed and stability, as well as ease of maintenance

Universal Flexi Coms Function
Enables editing of serial data output format or printout format

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

USB Interface
Enable the balance to communicate with peripheral device (bi-directional) via USB

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

User Access Control
Secure feature that allow users to have assigned user privilege managed and authorized by administrator

USB Host Interface
Stores the weighing value in the USB memory

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

![A&D Inspection logo]

INSPECTION MADE SIMPLE

This complete line of product inspection equipment is designed to save you time and reduce production error while managing the risk of costly chargebacks, fees, lawsuits and expensive recalls.

Checkweighing

If product giveaway and fill is your concern, this is your solution. Our line of checkweighers are modular, easy to incorporate into your existing line, have the ability to process up to 400 pieces per minute! Pair with a rejector to automate the rejection process.

In facilities with metal machinery and risk of metal contamination, our metal detectors can detect ferrous, non-ferrous and stainless steel pieces as small as 0.2 millimeters, that's smaller than a grain of sand! With a stainless steel body, they are wash down rated for easy cleaning and maintenance.

Metal Detector

PROTEX SERIES

X-Ray

Implement this smart inspection system. The ProteX X-ray series can be programmed to work specifically for your products to identify contaminants like bone, plastic, metal and glass. Advanced features like masking, missing component detection and misshaped product detection also come standard

For more information visit **andinspection.com**

Discover Precision

Data Acquisition

Measurement by anyone anywhere

Record, analyze and print right on-site with the A&D family of Data Acquisition Systems.

Features:
- 4, 8, 16 and 32 channel models
- 12.1" touch-screen display
- Built-in printer
- 11 plug-in modules for a wide array of transducers and signals

Applications:
- FFT analysis (on-board)
- Data logging
- Temperature tests
- Voltage, current measurements
- Strain gauge tests
- Vibration characterization
- PCB strain analysis
- Vehicle tests
- Electrical relay tests

DAQ solutions from bench to factory floor to field

Non-Destructive Test

Ultrasonic thickness testers

Its light weight (180g) offers hours of fatigue-free operation.

Features:
- Automatically displays the correct thickness. No special qualifications or training are required.
- Easy to read. Displays both measured thickness and sonic velocity of the sample.
- Select inch or mm units-of-measurement.

Applications:
- Thickness Measurement
- Corrosion Test
- Inspection

Samples:

Steel Titanium, Aluminium, Copper, Brass, Glass, Ceramic, Plastic, etc

Precisely test materials with the AD-3253B

Material and Product Test

Strength you can see!

The MCT series of table-top universal testing machines are great alternatives to force and push pull gauges.

Features:
- Compact space-saving design
- Color touch panel
- High precision load cell included
- Data capture software included

Applications:
- Tensile / compression tests
- Bending strength
- Required button-push force
- Plastic bottle buckling test
- Tablet (pill) crush / crack force
- Animal feed / pellet strength
- Food container peel / puncture
- Saline bag puncture force
- Syringe resistance

Gain insights into your materials and products with table-top and floor models

For more information contact us at: **datarecorder@andonline.com** or visit **andmeasurement.com**

A&D Weighing

andweighing.com