Mass Comparators

MC

series

MC-1000
1100 g × 0.0001 g

MC-6100
6100 g × 0.001 g

MC-10K
10.1 kg × 0.001 g

MC-30K
31 kg × 0.01 g

MC-100KS
101 kg × 0.1 g

MC-6100

MC-10K

MC-100KS

New model added !

ISO 9000 CERTIFIED

A&D

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A&D Company, Limited

http://www.aandd.jp

Revealed—Here Are What A&D Use To Manage Their Masses!

It's not easy to find high performance, quality mass comparators that meet your budget, is it? Discover how A&D, an ISO17025 accredited calibration laboratory as well as being a weighing equipment manufacturer, can finally solve such problems for you—.

1. Enhanced stabilizing filter

High resolution balances like the MC series can respond to even the slightest environmental disturbances. For smooth and accurate mass comparison, the MC series is equipped with a special stabilizing function that copes with the effect of drafts or vibrations.

2. Simplified calibration of the balance

Using the internal mass, you can ensure the balance accuracy with one key press when changes to the environment (such as temperature or location) take place. The internal mass value can be corrected as necessary.

3. Various options to minimize possible measurement errors

Even under a perfectly controlled weighing environment, there still remain errors that can arise from operation. The following tools are effective in managing such errors:

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

Corrects eccentric loading automatically by bringing the mass to the center.
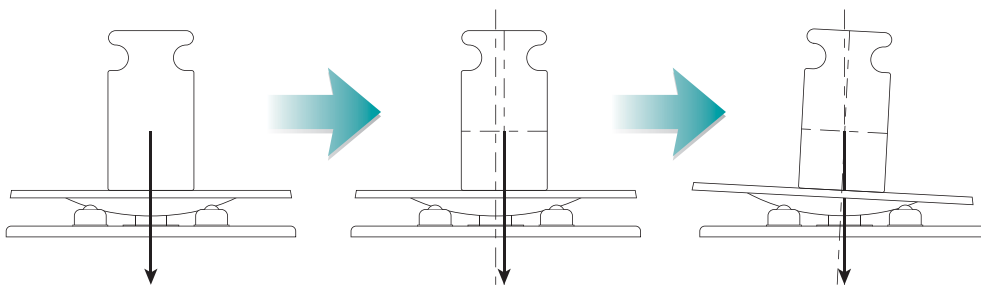
Please also visit our video library at *www.aandd.jp* to see how it operates!

MC Series
with auto-centering pans

Remote controller (AD-8922A)

Enables operations without directly touching and consequently shaking the balance.

Static eliminator (AD-1683)

Instantly neutralizes charged objects such as the operator's clothes to ensure stable weighing.

| Internal Calibration | Super Hybrid Sensor | VFD Display | RS-232C Interface | GLP Compliant | Clock & Calendar | Data Memory Function | Counting with ACAI | Percentage Function | Animal Weighing | Comparator Function | Auto Power ON | Auto Power OFF |

Recommended Measurement Ranges

Model	BM-20					BM-252				BM-500				MC-1000				MC-6100				MC-10K				MC-30K				MC-100KS		Nominal value
Class	E2	F1	F2	M1	M2	F1	F2	M1	M2	F1	F2	M1	M2	F1	F2	M1	M2	F1	F2	M1	M2	F1	F2	M1	M2	F1	F2	M1	M2	M1	M2	
1 mg																																1 mg
2 mg																																2 mg
5 mg																																5 mg
10 mg																																10 mg
20 mg																																20 mg
50 mg																																50 mg
100 mg																																100 mg
200 mg																																200 mg
500 mg																																500 mg
1 g																																1 g
2 g																																2 g
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50 g																																50 g
100 g																																100 g
200 g																																200 g
500 g																																500 g
1 kg																																1 kg
2 kg																																2 kg
5 kg																																5 kg
10 kg																																10 kg
20 kg																																20 kg
50 kg																																50 kg
100 kg																																100 kg

*Please refer to the BM series of micro analytical balances for the BM-20, BM-252 and BM-500.

Wait, there is more! If you are in the industrial sector, how about using the MC series as

Precision Balances With Extended Resolution

The MC series displays the weighing results with an extra decimal place not normally found in balances of the same capacity. Such extended resolution enables measurements of minute weight changes with heavy objects or containers. Example applications include:

Management of Liquids

- Resist inks on flat panels (glass)
- Coating materials on silicon wafers
- Moisture contents of catalysts
- Solder pastes and sealing materials on electronic parts
- Resins used for LED lenses
- Surface materials on optical lenses
- Grease in miniature bearings for hard disks

Management of Powders

- Medicines in pharmaceutical manufacturing – from full flow to minute flow
- Discharges (losses in weight) from feeders
- Wear volumes of metallic materials
- Cutting dust (contaminants) left on mechanical parts
- Particles caught by filters

Management of Gases

- Fill ration of hydrogen gas
- Gasified components

Production Line Weighing

- As precision check-weighing sensors with wider ranges

Underhook | Software

(Optional for MC-100KS)

Accumulation Function | IP65

MC-10K/30K/100KS

Optional

Quick USB

MC-1000/6100

Specifications

Models	MC-1000	MC-6100	MC-10K	MC-30K	MC-100KS
Weighing capacity	1100 g	6100 g	10.1 kg	31 kg	101 kg
Minimum weighing value	0.0001 g	0.001 g		0.01 g	0.1 g
Repeatability (standard deviation) [*1]	0.0005 g (for 1 kg) 0.0004 g (for 500 g)	0.004 g (for 5 kg) 0.0015 g (for 2 kg)	0.005 g (for 10 kg) 0.004 g (for 5 kg)	0.015 g (for 20 kg)	0.2 g (for 100 kg) 0.1 g (for 60 kg)
Linearity	±0.003 g	±0.03 g		±0.2 g	±2 g
Sensitivity drift (10 to 30°C / 50 to 86°F)	±2 ppm / °C			±3 ppm / °C	±6 ppm / °C
Accuracy immediately after internal calibration [*2]	±0.010 g	±0.15 g		±1.5 g	±10.0 g
Operating environment	5°C to 40°C (41°F to 104°F), 85%RH or less (no condensation)				
Display refresh rate	5 times/second or 10 times/second				
Display mode [*3]	Gram, kilogram (for MC-100KS only), ounce, pound, pound-ounce, troy ounce, metric carat, momme, pennyweight, grain, counting mode, percent mode, density mode, and a user-programmable unit				
Standard interface	RS-232C				
Weighing pan size	128 x 128 mm	165 x 165 mm	270 x 210 mm		386 x 346 mm
External dimensions	210 (W) x 317 (D) x 86 (H) mm		300 (W) x 355 (D) x 111 (H) mm		Display unit: 260 (W) x 164 (D) x 202 (H) mm Platform: 346 (W) x 443 (D) x 130 (H) mm Cable length: 3 m
Net weight	Approx. 4.6 kg	Approx. 5.1 kg	Approx. 9.3 kg		Approx. 18 kg
Power consumption	Approx. 11 VA (supplied to the AC adapter)				Approx. 15 VA (supplied to the AC adapter)

※ 1 Repeatability when the auto-centering pan or an automatic weight loader is used under good environmental conditions.

※ 2 Accuracy immediately after internal calibration performed under good environmental conditions. The values are for the weighing capacities.

※ 3 Either tael (Singapore/HK jewelry/Taiwan) or tola can be added upon request.

Options

For MC-1000/6100

GX-02 [*4] Quick USB interface with cable

GX-04 [*4][*5] Comparator output with a buzzer/RS-232C/Current loop output

GX-06 [*4][*5] Analog output/Current loop output

GX-12 Animal weighing pan

GX-13 Density determination kit (for MC-1000 only)

※ 4 Only one of GX-02, GX-04, GX-06 or the standard RS-232C interface can be used.

※ 5 Factory-installed options

For MC-10K/30K

GX-04K [*6] Comparator output with a buzzer/RS-232C/Current loop output

GX-06K [*6] Analog output/Current loop output

GX-07K Waterproof RS-232C cable (25P-9P, 5 m)

GXK-012 Animal weighing pan

GXK-015 Carrying case

※ 6 Only one of GX-04K, GX-06K or the standard RS-232C can be used.
The MC-10K/30K are not IP65 compliant with these options.

For MC-100KS

GP-04 [*7] Comparator output with a buzzer/RS-232C/Current loop output

GP-06 [*7] Analog output/Current loop output

GP-07 [*8] 5-meter extension cable

GP-12 Animal weighing pan

GP-21 Underhook

GP-22 AD-8121B printer support

※ 7 Only one of GP-04, GP-06 or the standard RS-232C can be used.

※ 8 Factory-installed option

Accessories

AD-1602-E2 [*9] Calibration masses, OIML class E2

AD-1602-F1 [*9] Calibration masses, OIML class F1

AD-1682 Rechargeable battery unit

AD-1683 Static eliminator

AD-1684 Electrostatic fieldmeter

AD-1687 Weighing environment logger

AD-1688 Weighing data logger

AD-1689 Tweezers for calibration mass

AD-1691 Weighing environment analyzer

AD-8121B Compact printer

AD-8526 Serial/Ethernet converter

AD-8527 Quick USB adapter

AD-8920A Remote display

AD-8922A Remote controller

AX-MC1000PAN Auto-centering pan (MC-1000)

AX-MC6100PAN Auto-centering pan (MC-6100)

AX-MC10K/30KPAN Auto-centering pan (MC-10K/30K)

AX-SW128 Foot switch

AX-USB-25P Serial/USB converter
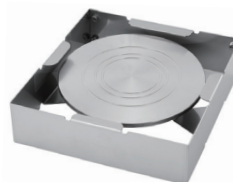
※ 9 Selectable from 50 g to 20 kg.

Auto-centering pan

AD-1602

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*MC Series-ADCC-01-PR1-13502