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

New model added!
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](http://www.aandd.jp) to see how it operates!

**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.
**Recommended Measurement Ranges**

<table>
<thead>
<tr>
<th>Model</th>
<th>BM-20</th>
<th>BM-252</th>
<th>BM-500</th>
<th>MC-1000</th>
<th>MC-6100</th>
<th>MC-10K</th>
<th>MC-30K</th>
<th>MC-100KS</th>
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</table>

*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 ratio of hydrogen gas
- Gasified components

**Production Line Weighing**
- As precision check-weighing sensors with wider ranges
## Specifications

### Models

<table>
<thead>
<tr>
<th>Models</th>
<th>MC-1000</th>
<th>MC-6100</th>
<th>MC-10K</th>
<th>MC-30K</th>
<th>MC-100KS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighing capacity</td>
<td>1100 g</td>
<td>6100 g</td>
<td>10.1 kg</td>
<td>31 kg</td>
<td>101 kg</td>
</tr>
<tr>
<td>Minimum weighing value</td>
<td>0.001 g</td>
<td>0.001 g</td>
<td>0.01 g</td>
<td>0.1 g</td>
<td></td>
</tr>
<tr>
<td>Repeatability (standard deviation)</td>
<td>0.005 g (for 1 kg)</td>
<td>0.005 g (for 5 kg)</td>
<td>0.015 g (for 10 kg)</td>
<td>0.015 g (for 20 kg)</td>
<td>0.2 g (for 100 kg)</td>
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<tr>
<td></td>
<td>0.004 g (for 500 g)</td>
<td>0.004 g (for 5 kg)</td>
<td>0.004 g (for 5 kg)</td>
<td>0.1 g (for 60 kg)</td>
<td></td>
</tr>
<tr>
<td>Linearity</td>
<td>±0.003 g</td>
<td>±0.03 g</td>
<td>±0.2 g</td>
<td>±2 g</td>
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</tr>
<tr>
<td>Sensitivity drift (10 to 30°C / 50 to 86°F)</td>
<td>±2 ppm / °C</td>
<td>±3 ppm / °C</td>
<td>±6 ppm / °C</td>
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</tr>
<tr>
<td>Accuracy immediately after internal calibration</td>
<td>±0.010 g</td>
<td>±0.15 g</td>
<td>±1.5 g</td>
<td>±10.0 g</td>
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<tr>
<td>Operating environment</td>
<td>5°C to 40°C (41°F to 104°F), 85%RH or less (no condensation)</td>
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<tr>
<td>Display refresh rate</td>
<td>5 times/second or 10 times/second</td>
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<tr>
<td>Display mode</td>
<td>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</td>
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</table>

### New!

|----------------------|------------|------------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|-------------|-------------|----------------|---------|-----------|
| Calibration masses, OIML class E2 | Calibration masses, OIML class F1 | Rechargeable battery unit | Static eliminator | Electrostatic fieldmeter | Weighing environment logger | Weighing data logger | Tweezers for calibration mass | Weighing environment analyzer | Compact printer | Serial/Ethernet converter | Quick USB adapter | Remote display | Remote controller | Auto-centering pan (MC-1000) | Auto-centering pan (MC-6100) | Auto-centering pan (MC-10K/30K) | Foot switch | Serial/USB converter |}

### Options

**For MC-1000/6100**

- **GX-02** *4* Quick USB interface with cable
- **GX-04C** *6* Comparator output with a buzzer/RS-232C/Current loop output
- **GX-06C** *6* Analog output/Current loop output
- **GX-12** Animal weighing pan
- **GX-13** Density determination kit (for MC-1000 only)

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

**For MC-10K/30K**

- **GX-04** *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

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

**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

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

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![Auto-centering pan](https://via.placeholder.com/150)

**Accessories**

- AD-1602-E2
- AD-1602-F1
- AD-1682
- AD-1683
- AD-1684
- AD-1687
- AD-1688
- AD-1689
- AD-1691
- AD-8121B
- AD-8526
- AD-8527
- AD-8920A
- AD-8922A
- AX-MC1000PAN
- AX-MC6100PAN
- AX-MC10K/30KPN
- AX-SW128
- AX-USB-25F

* AD-1602-E2 calibration masses, OIML class E2
* AD-1602-F1 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/30KPN auto-centering pan (MC-10K/30K)
* AX-SW128 foot switch
* AX-USB-25F serial/USB converter

* 9 Selectable from 50 g to 20 kg.

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![Auto-centering pan](https://via.placeholder.com/150)

**AD and D Inst Limited**

3-23-14 Higashi-Reibu, Toshima-ku, Tokyo 170-0013 JAPAN

**A&D Instruments Ltd.**

Unit 24/25 Blacklands Way Abingdon Business Park, Abingdon, Oxon OX14 1DY UNITED KINGDOM

**A&D Instruments India Private Limited**

509 Udyog Vihar Phase V
Gurgaon-122 016, Haryana, INDIA

**A&D Korea Limited**

Manhattan Blvd, 8F, 36-2 Yoido-dong, Youngdeungpo-gu, Seoul, KOREA

**A&D Instruments USSR**

Vereyskaya str.17, Moscow, 121357 RUSSIA

**A&D Instruments Europe**

Hamburger Straße 56 D-22535 Ahrensburg GERMANY

**And A&D Global Sales Office**

Telephone: (7) (495) 937-33-44 Fax: (7) (495) 937-55-66

**A&D Instruments India Pr**

509 Udyog Vihar Phase V
Gurgaon-122 016, Haryana, INDIA

**A&D Instruments (UK) Ltd**

Telephone: (44) 7500-2350 Fax: (44) 7500-2351

**A&D Instruments (Shanghai) Co., Ltd.**

1001 Jiaodian Road, Songjiang Technology Park, Shanghai 201610, China

**A&D Instruments India Pvt. Ltd.**

2nd Floor, 227/228, Gachibowli IT Park, Hyderabad, 500081, Andhra Pradesh, India

**A&D Instruments (USA) Inc.**

Telephone: (714) 728-0888 Fax: (714) 728-0889

**A&D Instruments (Australia) Pty. Ltd.**

Telephone: (61) 8888-7865 Fax: (61) 8888-7866