Electronic Densimeter MDS series consist of 2 models, MDS-300 upgraded from previous model MDS-300S, and MDS-3000 with maximum capacity up to 3kg. New features: 1. Accuracy increased 8 times than previous model 2. High stability weighing sensor 3. Auto-weighing function 4. Powder Density, which improves working efficiency and accuracy. They inherit the easy operation "Sample on the container, then into the water". Highly developed Densimeter to industrial standard.

Types of Industry & Typical Users

- **Main Industry**: Automobile, Aircraft, Electric, Electron, Rubber, Plastic, Siner, Nonferrous Metal, Glass, Paper, Food, Wood, Laboratory, University, Medical, Oil, etc…

- **Main User (random order)**: Bridgestone, JSR, Sun Automation Industries, Yokohama Rubber, Mitsubishi Chemical, Toyota Glass, Dye Cutting, Toyko Silicone, Shires, Otsuka-Pill-Techn, Mouse, Bondi, Mitsubishi, Moon Star, Inakai, etc…

- **Plastic**: Sun Automation Chemical, Mitsubishi Chemical, Toyko, Arai Chemical, Tjis Tin, Waki Chemical, Liquid Chemical Industries, Sekisui, Idemitsu, Kureha, Unlita, Toppan, Starlite, Taisei, etc…

- **Automobile, Aircraft, Ships**: Toyota, Nissan, Honda, Mitsubishi, Mazda, Toyota Central R&D Labs, Daihatsu, Denso, Aisin Seiki, IHI, Mitsubishi Heavy Industries, Sumitomo Precision Industries, Yamaha, NIH Spring, etc…

- **University, Medical, Oil, etc…**: Nonferrous Metals, Glass, Paper, Foods, Woods, Laboratories, Automobile, Aircraft, Electric, Electron, Rubber, Plastic, Sinter, Industries, Sekisui, Idemitsu, Kureha, Unitika, Toppan, Starlite, Asahi Chemical, Fuji Film, Hitachi Chemical, Daicel Chemical, Bando, Mitsuboshi, Moon Star, Inaba,Inaki, etc…

- **Corning Toray Silicone, Shinetsu, Ohtsuka Poli-Tech, Mizuno, Yokohama Rubber, Mitsubishi Chemical, Toyoda Gosei, Dow Rubber**: Aisin Seiki, IHI, Mitsubishi Heavy Industries, Sumitomo Precision Industries, Yamaha, NIH Spring, etc…

Densimeter to industrial standard.

**Features**

- **Solid Density Mode**
  - Density Resolution
    - EW-300SG: 0.01
    - MDS-300S: 0.001
    - MDS-300: 0.001
    - SD-200L: 0.0001
    - MDS-3000: 0.0001
  - Volume Variation: X
  - Comparator Mode: X
  - Optimal Measuring Mode: X
  - Compensation of State Temperature: X
  - Other Medium Adaptable: X
  - Auto-weighing Function: X
  - New Sensor: X
  - Reference Value: X
  - Error Tolerance: X
  - Measuring Time: 10sec.

- **Liquid Density Mode**
  - Density Resolution: 0.001g/cm³
  - Measurable Density/μl
    - EW-300SG: 0.01
    - MDS-300S: 0.001
    - MDS-300: 0.001
    - SD-200L: 0.0001
    - MDS-3000: 0.0001
  - Measurable Maximum density: 1.8g/cm³
  - Measurable Minimum density: 0.2g/cm³
  - Measured Method: Contain to Pycnometric and Hydrometer Method
  - Power Source: AC100 – AC240V
  - Dimensions (mm): L62 x W280 x H190 (H175)

**Optional Parts**

- **Terminal Printer AD-8121B**
- **Compact Printer AD-2159**
- **Liquid Density Kit**
- **Armight Window**
- **Calibration (kg weight)**
- **AIS Document**

Produced by

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FAX. +81-6-6924-2044
U R L: http://www.alfamirage.com
E-mail: sales@alfamirage.com

Densimeter to industrial standard.

- **Powder Density can be measured by original substituted method**
- **Liquid viscosity less than 100 cP can be measured**

High precision with new designed Sensor and Auto-weighing function

**ELECTRONIC DENSIMETER**

**MDS-300**
Density Resolution 0.001g/cm³

**MDS-3000**
Density Resolution 0.01g/cm³

**Please Contact**

www.alfamirage.com
**MDS-3000**
**Features**
- Solid Mode
  - Bigger sample which could not fit in previous models, with weight up to 3kg can be measured.
  - Minimum resolution of 0.01g/dl and reference value of 0.0001g/dl can be displayed.
  - Improves working efficiency and repeatability with Auto-weighing function. (Semiautomatic measurement)
  - New function of powder density substituted measurement.
  - Floating objects and pellets can be measured easily.
- **Liquid Mode** Optional kit required
  - Density resolution 0.01g/dl and reference value 0.001g/dl
  - Liquid density temperature compensation by setting liquid coefficient value depending on temperature.
  - Selectable measuring time.

**Functions**
- **Solid Mode**
  - Maximum density and volume resolution 0.0001 g/cm³.
  - Maximum measuring range up to 300g.
  - More smooth and easy operation with redesigned Container and chemical resistant Styro Water Tank.
  - Only 10 seconds to measure.
  - Measuring the change rate of density and volume are possible.
  - Result judgments with Comparator Mode is available.
  - Measuring the change rate of density and volume are possible.
  - Result judgments with Comparator Mode is available.
  - New function of powder density substituted measurement.
  - Floating objects and pellets can be measured easily.
  - Density variation of absorbent sample can be measured.
  - Selectable measuring time from 5 kinds.
- **Liquid Mode** Optional kit required
  - Density resolution 0.01g/dl and reference value 0.001g/dl
  - Liquid density temperature compensation by setting liquid coefficient value depending on temperature.
  - Selectable measuring time.

**Specification**
<table>
<thead>
<tr>
<th>Model</th>
<th>EW-300SG</th>
<th>MDS-300S</th>
<th>MDS-300</th>
<th>SD-200L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>0.01g/dl</td>
<td>0.001g/dl</td>
<td>0.0001g/dl</td>
<td>0.01g/dl</td>
</tr>
<tr>
<td>Capacity</td>
<td>300g</td>
<td>3000g</td>
<td>0.001-300g</td>
<td>300g</td>
</tr>
<tr>
<td>Feature</td>
<td>Solid</td>
<td>Solid, Powder</td>
<td>Solid, Liquid</td>
<td>Solid</td>
</tr>
<tr>
<td>Weight</td>
<td>2.5kg</td>
<td>5.0kg</td>
<td>7.0kg</td>
<td>7.0kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>218x190x170mm</td>
<td>260x190x170mm</td>
<td>260x190x200mm</td>
<td>319x213x311mm</td>
</tr>
<tr>
<td>Accessories</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter, Interface RS232C</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter, Interface RS232C, Antigl Windshield</td>
<td>Tweezers, Thermometer, Steel Angle, AC Adapter</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter</td>
</tr>
</tbody>
</table>

**MD-300**
**Features**
- Popular model with resolution 0.001g/dl which upgraded from previous model MD-200S. Compact body and accurate density measurement for solid and liquid sample.

**Industrial Standard**

**Easy density measurement of not only solid, and liquid sample density, but also new function of powder density measurement added with resolution of 0.001g/dl and reference value of 0.0001g/dl. New designed Sensor and Auto-weighing function improve accuracy and working efficiency.**

**Functions**
- **Solid Mode**
  - Minimum density and volume resolution 0.01g/cm³.
  - Maximum density and volume resolution 0.001g/cm³.
  - Easy connection to PC with standard equipped Interface RS232C.
  - Optional Setting Mode is available for distinction of uncertain density.
  - Result judgments with Comparator Mode is available.
  - Easy density measurement of not only solid, and liquid sample density, but also new function of powder density measurement added with resolution of 0.001g/dl and reference value of 0.0001g/dl. New designed Sensor and Auto-weighing function improve accuracy and working efficiency.
- **Liquid Mode** Optional kit required
  - Density resolution 0.01g/dl and reference value 0.001g/dl
  - Liquid density temperature compensation by setting liquid coefficient value depending on temperature.
  - Selectable measuring time.

**Specification**
<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Capacity</th>
<th>Feature</th>
<th>Weight</th>
<th>Dimensions</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>0.01g/dl</td>
<td>0.0001g/dl</td>
<td>Solid, Liquid, Powder</td>
<td>2.5kg</td>
<td>260x190x170mm</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter, Interface RS232C</td>
</tr>
</tbody>
</table>

**SD-200L**
**Features**
- Top precision model with density resolution at 4 decimal places for both Solid and Liquid. Easy operation, as same as the other models.

**Functions**
- **Solid Mode**
  - Minimum density and volume resolution 0.001g/dl.
  - Selectable measuring time from 4 kinds.
  - Error tolerance can be shown.
  - Measuring the change rate of density and volume are possible.
  - Floating objects and pellets can be measured easily.
- **Liquid Mode** Optional kit required
  - One push operation to change Solid and Liquid Mode.
  - Minimum density resolution 0.0001g/dl.
  - Only 20 seconds is needed to test.
  - Only 500c of liquid sample is needed.
  - Changing liquid sample by replacing the beaker only.

**Specification**
<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Capacity</th>
<th>Feature</th>
<th>Weight</th>
<th>Dimensions</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>0.0001g/dl</td>
<td>0.0001g/dl</td>
<td>Solid, Liquid</td>
<td>7.0kg</td>
<td>319x213x311mm</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter</td>
</tr>
</tbody>
</table>

**MDS-300**
**Features**
- Only 10 seconds to measure density and volume, just putting the sample into the water. Ideal machine for the interval testing of production line.

**Functions**
- **Solid Mode**
  - Minimum density and volume resolution 0.01g/dl.
  - Maximum measuring range up to 300g.
  - More smooth and easy operation with redesigned Container and chemical resistant Styro Water Tank.
  - Only 10 seconds to measure.
  - Measuring the change rate of density and volume are possible.
  - Result judgments with Comparator Mode is available.
  - Optional Setting Mode is available for distinction of uncertain density.
  - Easy connection to PC with standard equipped Interface RS232C.

**Specification**
<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Capacity</th>
<th>Feature</th>
<th>Weight</th>
<th>Dimensions</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>EW-300SG</td>
<td>0.01g/dl</td>
<td>300g</td>
<td>Solid</td>
<td>2.5kg</td>
<td>218x190x170mm</td>
<td>Tweezers, Thermometer, 200g Calibration Weight Steel Angle, AC Adapter, Interface RS232C</td>
</tr>
<tr>
<td>MDS-300S</td>
<td>0.001g/dl</td>
<td>3000g</td>
<td>Solid, Liquid</td>
<td>5.0kg</td>
<td>260x190x170mm</td>
<td>Tweezers, Thermometer, Steel Angle, AC Adapter, Interface RS232C, Antigl Windshield</td>
</tr>
</tbody>
</table>