DIGITAL LENGTH MEASURING SYSTEM

DIGIMICRO
MF-1001 / MF-501 / MH-15M
Readings from 1µm to 0.01µm; Extreme Accuracy Guaranteed

**Specifications**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement range</td>
<td>0-100 mm</td>
<td>0-50 mm</td>
<td>0-50 mm</td>
<td>0-15 mm</td>
<td>0-25 mm</td>
</tr>
<tr>
<td>Minimum readable value</td>
<td>0.1 µm; can be switched to 0.5 µm or 1 µm</td>
<td>0.01 µm; can be switched to 0.05 µm, 0.1 µm, 1 µm, or 5 µm</td>
<td>0.1 µm; can be switched to 0.5 µm or 1 µm</td>
<td>0.0 1 µm; can be switched to 0.05 µm, 0.1 µm, 1 µm, or 5 µm</td>
<td></td>
</tr>
<tr>
<td>Accuracy (20°C)</td>
<td>3 µm</td>
<td>1 µm</td>
<td>1 µm</td>
<td>0.7 µm</td>
<td>1 µm</td>
</tr>
<tr>
<td>Response speed</td>
<td>500 mm/sec. or less</td>
<td>100 mm/sec. or less</td>
<td>100 mm/sec. or less</td>
<td>100 mm/sec. or less</td>
<td>100 mm/sec. or less</td>
</tr>
<tr>
<td>Measuring force</td>
<td>Downward 1.225 to 1.813 N (variable to about 0.441 N), lateral 0.637 to 1.225 N</td>
<td>Downward 1.127 to 1.617 N (variable to about 0.294 N), lateral 0.637 to 1.225 N</td>
<td>Upward 0.265 N, downward 0.637 N, lateral 0.441 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External output</td>
<td>RS-232C</td>
<td></td>
<td></td>
<td></td>
<td>* With lifting release</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 to +40°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (main unit)</td>
<td>Approx. 480 g</td>
<td></td>
<td></td>
<td></td>
<td>Approx. 310 g</td>
</tr>
</tbody>
</table>

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**System Diagram**

- **Main unit**
  - MF-1001
  - MF-501
  - MH-15M

- **Display**
  - MFC-101A counter
  - TC-101A counter

- **External output**
  - RS-232C
  - Computer, etc.

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**Accessories**

- **Counters**
  - MFC-101A
    - A compact, single-shaft counter for exclusive use with MF-501 and MF-1001. Offers display and resolution switching, directing switching, and display unit switching functions. The MFC-101A can be used attached to the head or placed next to equipment.
  - TC-101A
    - Smallest readable value is 0.01um. The TC-101A counter can be used with older digital micrometers and rotary encoders.

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**Platform Details**

- **MS-11C**
  - Ceramics 110 x 110 mm

- **MS-21**
  - Steel 150 x 150 mm

- **MS-31G**
  - Granite 120 x 180 mm

- **MS-4G**
  - Granite 400 x 300 mm

- **MS-5C**
  - Ceramics ø100 mm

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* It is also possible to place the object being measured on a large platform, and make measurements using the lower surface as a reference.
**MFC-101A**
A compact, single-shaft counter for exclusive use with MF-501 and MF-1001. Offers display and resolution switching, directing switching, and display unit switching functions. The MFC-101A can be used attached to the head or placed next to equipment.

**TC-101A**
Smallest readable value is 0.01µm. The TC-101A counter can be used with older digital micrometers and rotary encoders.

### Specifications

**Display**
7-segment LED (green); 8 digits (including - sign); zero blanking; floating minus sign

**Minimum readable value**
0.1 µm (can be switched to 0.5 µm or 1 µm)

**Other functions**
Reset
Error alarm (excess speed, etc.)
RS-232C output
Dedicated printer output

**Input power supply**
Dedicated AC adapter (12V 350 mA)

**Ambient temperature**
Operating temperature: 0 to +40 °C
Storage temperature: -20 to +60 °C

**Compatible micrometers**
MF-501, MF-1001

**Dimensions (WxDxH)**
80 x 25.5 x 60 mm (D is 32.2 mm with connectors)

**Weight**
Approx. 95g

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**Dust Bellows**
Protects head spindle of the digital micrometer head from dust and dirt, increasing the equipment lifetime.

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**Measurement attachments**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Pin</th>
<th>Plastic</th>
<th>Off-center</th>
<th>Flat attachment</th>
<th>Roller attachment</th>
</tr>
</thead>
</table>

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**Measurement stands**

<table>
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<tr>
<td><strong>Platform material</strong></td>
</tr>
<tr>
<td>MS-11C</td>
</tr>
<tr>
<td>MS-21</td>
</tr>
<tr>
<td>MS-31G</td>
</tr>
<tr>
<td>MS-4G</td>
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<tr>
<td>MS-5C</td>
</tr>
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*It is also possible to place the object being measured on a large platform, and make measurements using the lower surface as a reference.*
## Dimensions

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<thead>
<tr>
<th>Micrometer head</th>
<th>MF-1001</th>
<th>MF-501</th>
<th>MH-15M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>105</td>
<td>120</td>
<td>154</td>
</tr>
<tr>
<td>Cable length</td>
<td>105</td>
<td>120</td>
<td>154</td>
</tr>
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<th>Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø5</td>
<td>Ø5.5 x 0.46</td>
<td>Ø5</td>
<td>Ø5.5 x 0.46</td>
<td>Ø5</td>
<td>Ø5</td>
</tr>
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## Measurement stands

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## Specifications and equipment are subject to change without notice or obligation on the part of the manufacturer. February 2019.

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*Products: Hardware and its technical information (including software)

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WARNING

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.