For continuous measurement of powder, solid and liquid

*Pulse Radar Type Microwave Level Meter*

MWLM-PR26 series
**Highest global standard measuring performance**

Compact body with higher performance covering all kinds of fine powder, bulk solids and liquid applications. Excellent performance under high temperature, high pressure, corrosive, steam, airborne dust, turbulence conditions.

**Long experience bulk solids measuring know-how integrated**

Considerable experience over 60 years for bulk solids applications in steel, cement, mining, power, chemical, etc, as well as 40 years of experience with radar measurement, finally integrated in the compact body.

**Accurate and reliable measurement by excellent signal conditioning**

Provides accurate and reliable measurement under severe environmental conditions by means of excellent S/N (Signal Noise) ratio, furthermore, self-diagnosis function tells immediately on failure.

**Easy operation**

Simple and precise operation possible. Site maintenance with simple hand communicator GRAPHIC COM2, Remote operation with customer friendly PC software.

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**Principle of Measurement**

The microwave level meter measures the time from when the level meter emits pulse radar waves from the antenna to when the waves (echoes) reflected from the object to be measured return to the meter, which is then calculated into a distance.

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**Remote operation**

The PC with adjustment software allows easy operation for complex parameter settings.

**Local operation**

The GRAPHIC COM2, a detachable LCD adjuster, has a liquid crystal display with high visibility. You can see waveforms in real time while monitoring, and you can adjust settings if needed.

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**Software Features**

- Real time indication for measurement situation
- Make adjustment
- Check waveforms while monitoring and store the data
- Record trends
- Languages: Japanese, English, Chinese, and Korean

**Real time indication for measurement situation**

![Real time indication for measurement situation](image)
**Superior wide variety of applications**

State-of-the-art data processing technology with unique automatic disturbance echo elimination realizes superior wide variety of applications.

**Cement Silo**

Excessive dust floats in a pneumatic feeding line of a cement silo. When cement is fed into the silo by a pneumatic conveyor line, excessive dust is created and it floats in the cement silo. Floating dust does not affect the performance of the level meter, because microwaves can pass through the dust. Levels of cement can be measured without any problem even when moving cement from a tank truck to silos.

**Clinker Silo**

Measurement is possible in any area of a cement plant: mine, burning, ACC, clinker or milling. The microwave level meter can apply to any type of environment: high temperature, wetness, etc. Concerning kilns, the microwave level meter is very useful even under environments such as industrial waste treatment processes.

**Fly-ash Silo**

Measuring levels of fly ash (coal ash) is considered to be difficult, because air is blown into the silo from the bottom. Numbers of microwave level meters have been employed recently for many fly-ash silo applications in power plants. These microwave level meters show their measurement performance with high reliability.

**Chemical Tank**

The microwave level meters in the MWLM-PR26 series include a meter with a PTFE (polytetrafluoroethylene) Antenna. Because PTFE has a high chemical resistance, the meter can be used to measure levels of corrosive liquids.

**Incinerator**

The microwave level meter can continuously monitor the level of the burning layer in a refuse incinerator. At incineration plants, the level of garbage can also be measured. It can also be used for tanks of fuels or chemical liquids.

**Tank with Gaseous Materials**

Ultrasonic level meters are not suited for measuring levels of materials that generate gas, because the gas affects the speed of sound. The microwave level meters can measure the levels without being affected by the gas in the tank.

**Silos**

The radiation angle of this product is 8° which is narrower than earlier models. The product is suitable for use in long-cylinder-like silos to measure levels of materials such as grains, pellets, and cement.

**Water Level of River**

The microwave level meter can carry out continuous measurement without being affected by weather conditions such as rain, wind or snow. Since it does not have any emission sound, it can be used near residential areas.
**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>MWLHM-PR26C1G</th>
<th>MWLHM-PR26H1G</th>
<th>MWLHM-PR26H30/F/S</th>
<th>MWLHM-PR26H1G/F/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>For liquid</td>
<td>For liquid</td>
<td>For powder</td>
<td>For powder</td>
</tr>
<tr>
<td>Antenna</td>
<td>Corn</td>
<td>Small horn</td>
<td>Horn</td>
<td>Horn</td>
</tr>
<tr>
<td>Power Supply</td>
<td>20 to 35VDC (Two-wire transmission system)</td>
<td>Approx. 800mW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>Approx. 800mW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>G2 thread</td>
<td>G1 thread</td>
<td>G1 1/2 thread</td>
<td>G1 1/2 thread</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>F: JIS 9059A flange or an equivalent</td>
<td>F: JIS 9059A flange or an equivalent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S: JIS 9059A swivel flange or an equivalent</td>
<td>S: JIS 9059A swivel flange or an equivalent</td>
</tr>
<tr>
<td>Dead Zone</td>
<td>0.3m below the antenna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Measurable Distance*</td>
<td>10.0m</td>
<td>10.0m</td>
<td>35.0m</td>
<td>70.0m</td>
</tr>
<tr>
<td>Transmitting frequency</td>
<td>Approx. 260Hz</td>
<td></td>
<td></td>
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<tr>
<td>Transmitting cycle</td>
<td>Every 83msec.</td>
<td></td>
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<tr>
<td>Bean angle (~3dB)</td>
<td>Approx. 12deg. (approx. 24deg., including side beam)</td>
<td>Approx. 12deg. (approx. 24deg., including side beam)</td>
<td>Approx. 14deg. (approx. 28deg., including side beam)</td>
<td>Approx. 8deg. (approx. 16deg., including side beam)</td>
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<tr>
<td>Resolution</td>
<td>1mm</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Allowable Fluctuation Rate</td>
<td>±0.05%</td>
<td></td>
<td></td>
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<tr>
<td>Temperature</td>
<td>-40 to +60°C (with LCD: -20 to +60°C) Note: One hour is required to warm up the device if the temperature is lower than -20°C or 5°C lower or when the power is turned on.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>SUS304</td>
<td>SUS316L</td>
<td>SUS316L</td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP66 (Housing cover and lead outlet must be closed.)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lead outlet</td>
<td>1-G1/2 (applicable cable size: φ8 to 12mm)</td>
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<tr>
<td>Output signal</td>
<td>4 to 20mA/4-20mA (Load resistance when 24VDC power supply is used: 499Ω max.) HART communication</td>
<td></td>
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<tr>
<td>Integral Time</td>
<td>0 to 999s</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mass</td>
<td>Approx. 1.98kg</td>
<td>Approx. 1.98kg</td>
<td>Approx. 2.34kg / 4.41kg</td>
<td>Approx. 2.74kg / 5.38kg / 6.06kg</td>
</tr>
<tr>
<td>Accessories (option)</td>
<td>*LCD Adjustment unit (GRAPHIC COM 2)</td>
<td>*Data communication cable (HM-USB-ISO)</td>
<td>*PC Adjustment software (M-lDM)</td>
<td></td>
</tr>
</tbody>
</table>

* From measurement reference zero point

**Dimension mm**

**Connection**

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**Caution:**
- Read the instructions to ensure correct and suitable application of products.
- Contact our nearest sales office when using our products for any systems used in situations which may be life-threatening.

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**Distributor**

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