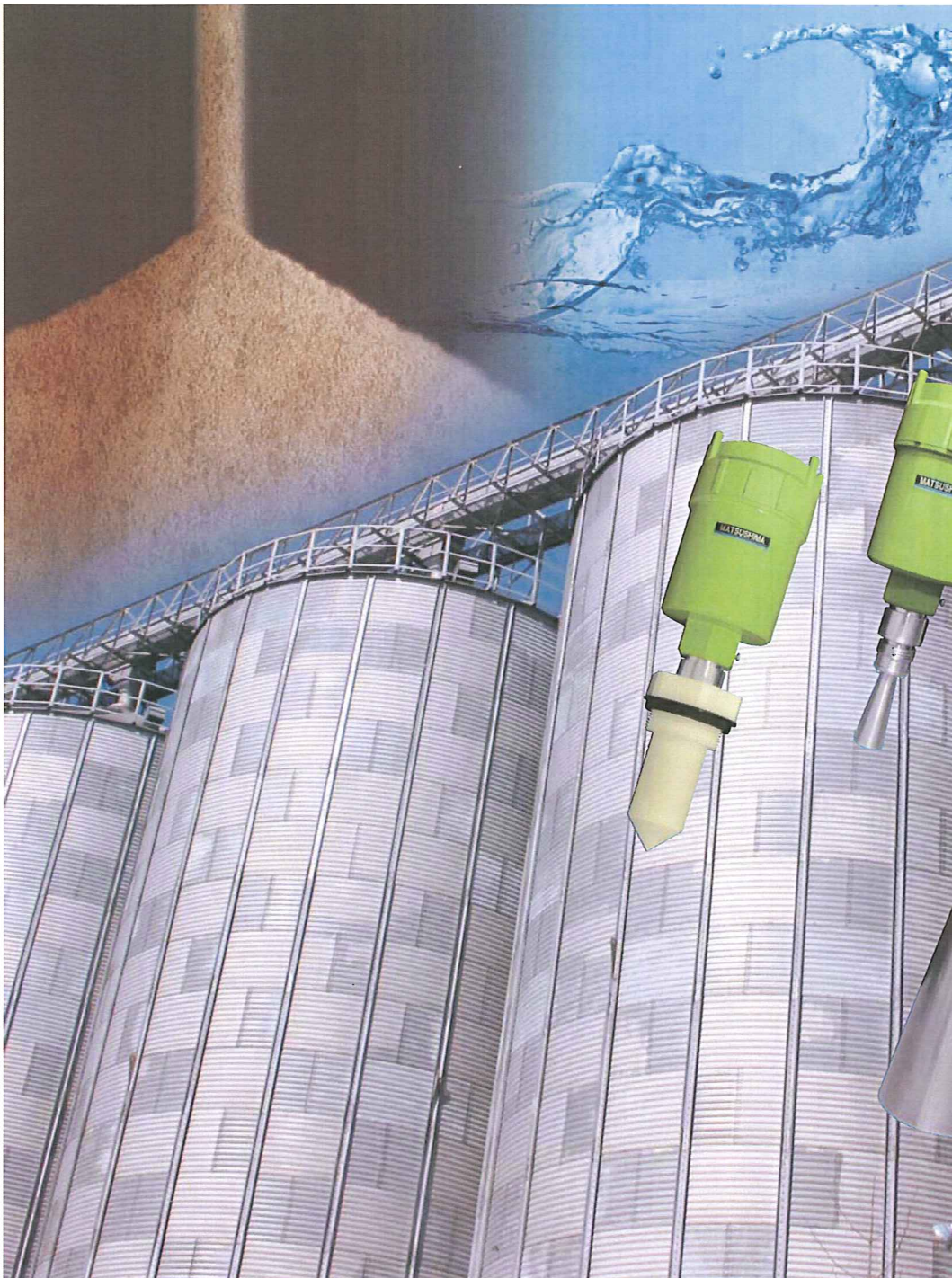


Dramatically  
improved  
performance

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 range

70m

Competitive price

Two-wire  
HART  
communication

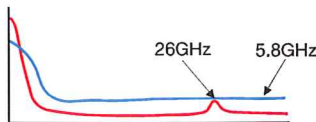
Compact  
&  
lightweight

## 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.



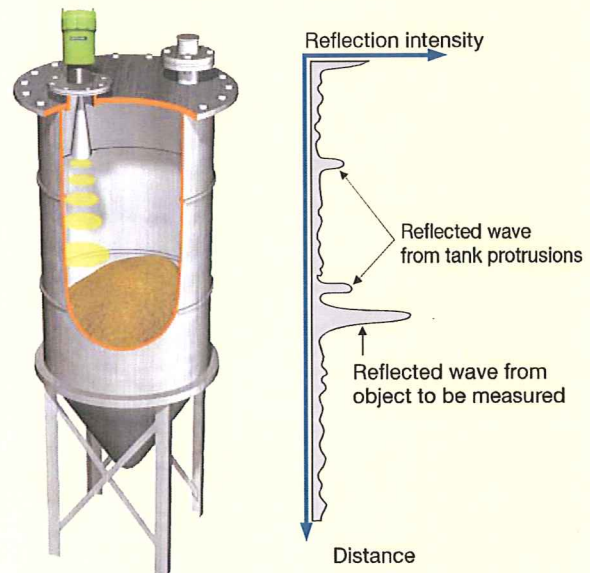
Comparison with our conventional product

## Easy operation

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

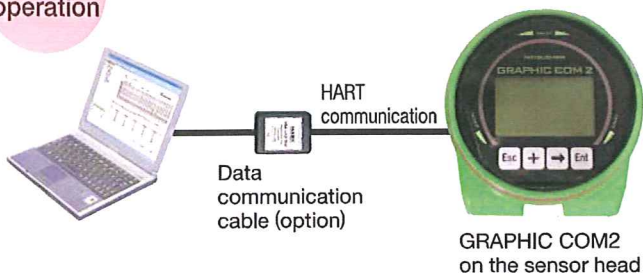
## Principle of Measurement

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.



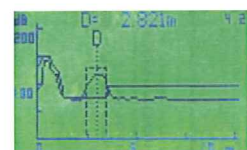
### Remote operation

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

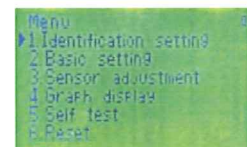


### Local operation

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.



Real time indication for measurement situation



Setting input screen



### 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

LCD Adjustment unit "GRAPHIC COM2" (option)

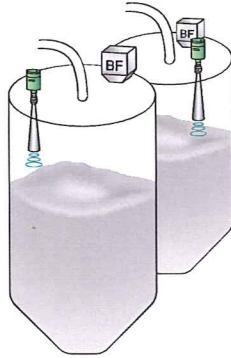
Languages:  
Japanese and English

## Superior wide variety of applications

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

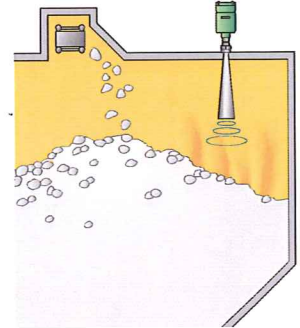
### Cement Silo

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.



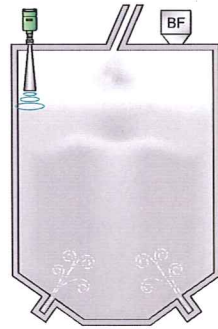
### Clinker Silo

Measurement is possible in any area of a cement plant; mine, burning, AQC, 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.



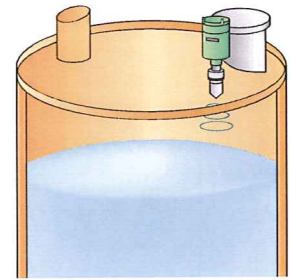
### Fly-ash Silo

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.



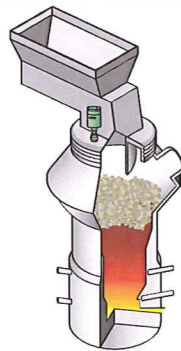
### Chemical Tank

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.



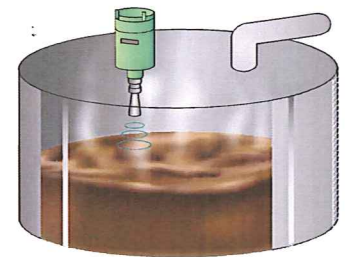
### Incinerator

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.



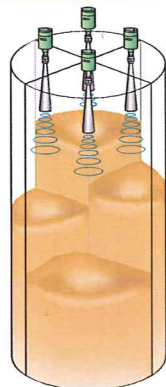
### Tank with Gaseous Materials

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.



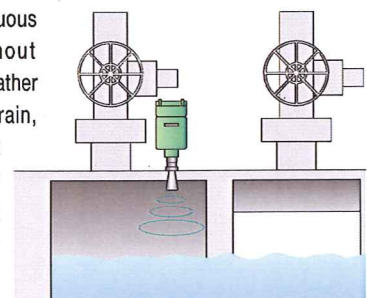
### Silos

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.



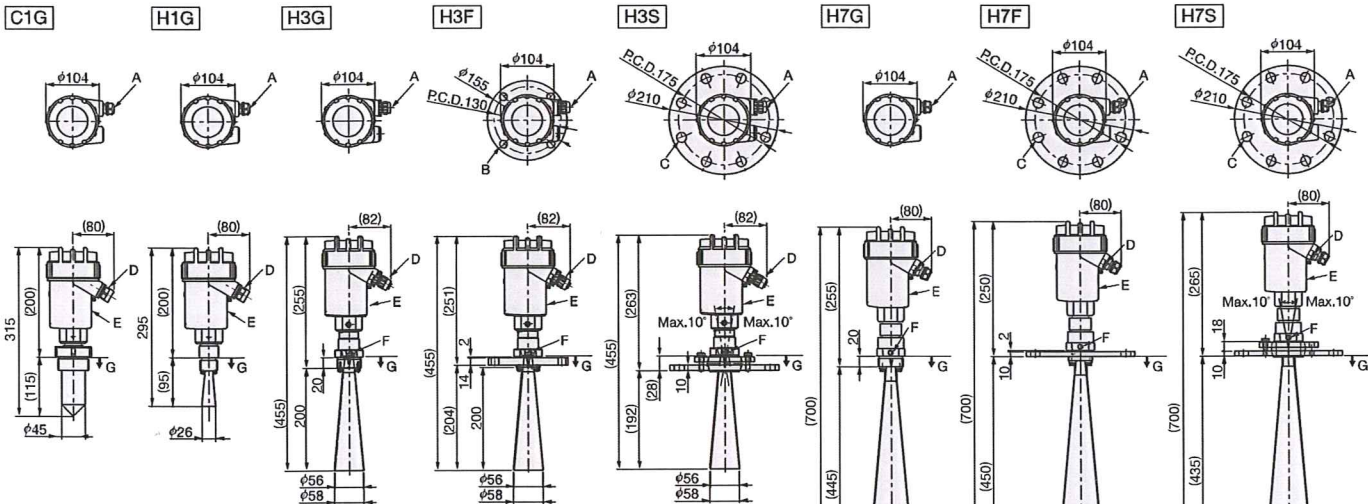
## ●Specifications

Model	MWLM-PR26C1G	MWLM-PR26H1G	MWLM-PR26H3G/F/S	MWLM-PR26H7G/F/S
Applications	For liquid	For liquid	For powder	For powder
Antenna	Corn	Small horn	Horn	Horn
Power Supply	20 to 32VDC (Two-wire transmission system)			
Power consumption	Approx. 800mW			
Mounting	G2 thread	G1 thread	G: G1 1/2 thread F: JIS5K65A flange or an equivalent S: JIS10K100A swivel flange or an equivalent	G: G1 1/2 thread F: JIS10K100A flange or an equivalent S: JIS10K100A swivel flange or an equivalent
Dead Zone	0.3m below the antenna			
Max Measurable Distance*	10.0m	10.0m	35.0m	70.0m
Transmitting frequency	Approx. 26GHz			
Transmitting cycle	Every 83msec.			
Beam angle (-3dB)	Approx. 12deg. (approx. 24deg. including side beam)	Approx. 12deg. (approx. 24deg. including side beam)	Approx. 14deg. (approx. 28deg. including side beam)	Approx. 8deg. (approx. 16deg. including side beam)
Resolution	1mm			
Allowable Fluctuation Rate	10cm/s			
Accuracy	Repeatability: Within 2m: ±30mm; 2m or more: 20mm or ±0.04% of measured distance (whichever is greater)			
	Temp. error: 0.06%/10K			
Ambient temperature	Housing: -40 to +60°C (with LCD: -20 to +60°C) Note: One hour is required to warm up the device if the temperature is -20°C or lower when the power is turned on.			
	Antenna: -40 to +150°C			
Allowable pressure	500kPa	1MPa	G:1MPa F:250kPa S:10kPa	G:1MPa F:250kPa S:10kPa
Material	ADC			
	Housing: PTFE	SUS304	SUS316L	SUS316L
Protection	IP66 (Housing cover and lead outlet must be closed.)			
	IP67			
Lead outlet	1-G1/2 (applicable cable size: φ8 to 12mm)			
Output signal	4 to 20mADC×1 (Load resistance when 24VDC power supply is used: 499Ω max.) HART communication			
Integral Time	0 to 999s			
Mass	Approx. 1.9kg	Approx. 1.6kg	Approx. 2.3kg / 4.4kg / 5.6kg	Approx. 2.7kg / 5.3kg / 6.0kg
Accessories (option)	• LCD Adjustment unit (GRAPHIC COM 2) • Data communication cable (HM-USB-ISO) • PC Adjustment software (M-DTM)			

\*: from measurement reference zero point

## ●Dimension mm

Model : MWLM-PR26□□□



A	Lead outlet: G1/2
B	4-φ15 Mounting hole
C	8-φ19 Mounting hole
D	Earth terminal*1
E	Housing*2
F	Purge nozzle: G1/8
G	Measurement reference zero point

\*1: Be sure to ground the earth terminal. (D-class grounding)  
\*2: Housing rotatable in 310°.

## ●Connection



Power supply / current output  
20 to 32VDC / 4 to 20mADC



**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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