



# WATER TREATMENT

ONE-STOP SOLUTION

ONE-STOP SERVICE

# LEVEL MEASUREMENT

# MQ8010 80GHz High Accuracy Radar Level Sensor



## Characteristics

- ☆ Highly accuracy of  $\pm 10\text{mm}$
- ☆ Non-contact measurement technology, eliminating the need for cleaning and maintenance
- ☆ Resistant to impacts from condensation, rain, steam, and corrosion
- ☆ Supports integration with host computer software and side-mounted meters
- ☆ Wide measuring range and wide voltage
- ☆ Intuitive PC interface for easy operation
- ☆ High sensitivity, lightweight, and easy to integrate
- ☆ User-friendly installation with a bubble level for alignment

## Applications

- ★ Water Treat
- ★ Sewage treatment
- ★ Power generation
- ★ Process control
- ★ Well level measurement and control
- ★ Oil and fuel tanks
- ★ Chemical industry
- ★ Petrochemical process storage tanks
- ★ Pharmaceutical industry
- ★ Food and beverage manufacturing
- ★ Refining process vessels

## I . Profiles

MQ8010 is a cutting-edge, millimeter-wave radar level sensor, designed to deliver exceptional accuracy and reliability. Featuring a proprietary radar ranging algorithm, this sensor provides high precision ( $\pm 10\text{mm}$ ) and a broad detection range, making it ideal for measuring liquid levels, distances, and challenging environments such as chemicals, oil & gas, water, wastewater, beverage, and more.

The non-contact measurement technology ensures that the sensor operates without physical interaction with the measured substance. Its unique compact design and user-friendly PC interface enable easy integration and superior performance in industrial environments.

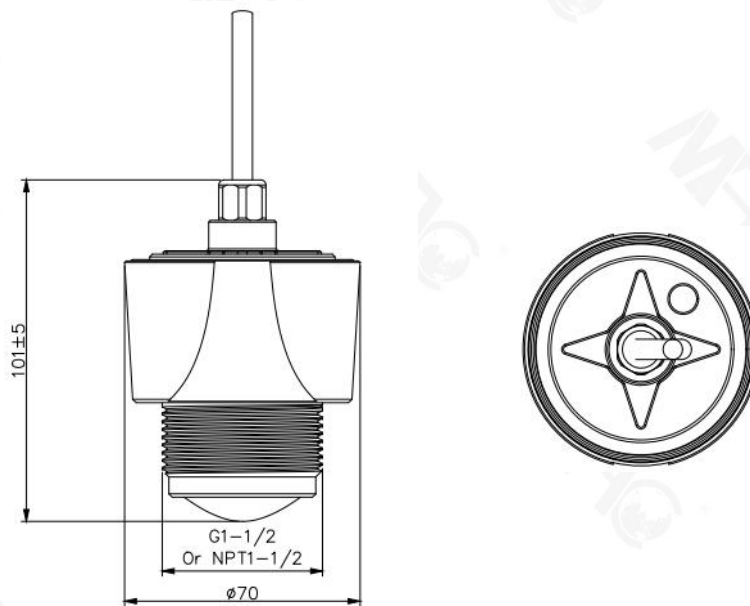
With its high sensitivity, ease of installation (thanks to the built-in bubble level), and no on-site calibration requirements, the MQ8010 is the ideal solution for reliable, long-term level measurement and monitoring across a variety of industrial processes.

## II . Specifications

Measuring range	0.2-10m	
Accuracy	Digital	±10mm(typical), ±2mm/±5mm(customized)
	Analog (4-20mA)	0.5%F.S(typical), 0.25%F.S(customized)
Beam Angle	8°	
Center frequency	80GHz	
Scanning frequency	76-81GHz	
Communication rate	Default 9600bit/s	
Power Supply	12-30Vdc(24V by default)	
Communication port	RS485 by default	
Working temperature	-40~85℃	
Power consumption	Min. 0.73W(12V*0.06A); Max 0.84W (30V*0.028A)	
Protection class	IP65	
Material	PC + Fiberglass	

### III. Dimension and Drawing

Unit, mm



### IV. Electronic Connections

**Electronic Wire Connections**

Pin No.	Definition	Remarks
1	U+	Red
2	U-	Black
3	RS-A	Green
4	RS-B	Blue
5	4-20mA	Yellow

V. Order Information

<b>Selection</b>	<b>MQ8010</b> <b>(Model)</b>	<b>1</b>	<b>004</b>	<b>H</b>	<b>4</b>	<b>S10</b>	<b>1</b>	<b>1</b>
<b>P/N</b>								
Signal Output	1=RS485 RTU+4~20mA	Modbus						
Range	000=0.2~1m 003=0.2~4m 006=0.2~10m	001=0.2~2m	002=0.2~3m	004=0.2~6m	005=0.2~8m	X=Customized		
Pressure Unit	H=m H <sub>2</sub> O (Min: 0.2 m H <sub>2</sub> O; Max:10 m H <sub>2</sub> O) M=m Fuel (Min: 0.2 m fuel; Max:10 m fuel)							
Accuracy	4=±10mm(Typical)    3=±5mm(By customized) 2=±2mm(By customized)							
Power Supply	S10=12-30Vdc							
Cable Length	1=Cable 1m    2=Cable 2m    3=Cable 3m    XXX=Cable xxx m							
IP rating	1=IP65(Typical)    2=By customized							