



WATER TREATMENT

ONE-STOP SOLUTION

ONE-STOP SERVICE

LEVEL MEASUREMENT

MQ8010 80GHz High Accuracy Radar Level Sensor



Characteristics

- ☆ High 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.

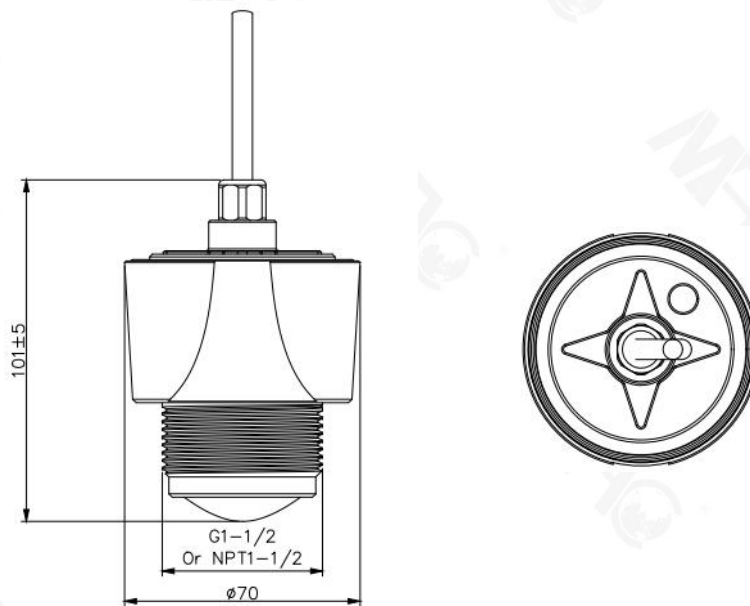
With its high sensitivity, ease of installation (thanks to the built-in bubble level), and no on-site calibration requirements, the MQ8010 is the ideal solution for reliable, long-term level measurement and monitoring across a variety of industrial processes.

II . Specifications

Measuring range	0.2-10m	
Accuracy	Digital	±10mm
	Analog (4-20mA)	0.5%F.S(typical), 0.25%F.S(customized)
Beam Angle	8°	
Center frequency	80 GHz	
Scanning frequency	76-81 GHz	
Communication rate	Default 9600bit/s	
Power Supply	12-30 V DC(24V by default)	
Communication port	RS485 by default	
Working temperature	-40°C to 85°C	
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	RS485-A	Green
4	RS485-B	Blue
5	4-20mA	Yellow

V. Order Information

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