

# PLANAR ARRAY ANTENNA HYDROLOGICAL LEVEL GAUGE

#### **CHARACTERISTICS**

Non-contact hydrological measurement products, fully enclosed IP67 protection design with leveling indicator and lightning avoidance device, RS-485 communication, supports Modbus and RTU protocol. The use of planar array antenna design with ELD adaptability, eliminate ELD ecological interference, maintenance-free Industrial design concept, the appearance of the products to in natural environment

Options: Relay / 4 -20mA / RTU / IOT / Wi-Fi / BT

## **FEATURES**

• Water level measurement of rivers, lakes, channels, reservoirs, sinks, etc.

 Suitable for hydrological monitoring, hydrological forecasting, water conservancy calculation, hydrological analysis, water resources development, etc.

 Suitable for engineering and hydrological applications, urban hydrological applications, agricultural hydrological applications, forest hydrology applications, etc.



## **SPECIFICATIONS**

Radar Emission Frequency	Pulse radar, frequency 26.0GHz ± 250MHz, Typical power density of RF <10μW
Measuring Range	0.25 ~ 35.00m
Measurement Accuracy	±2.5mm
Measuring Response Time	Effective level data output time for power boot <5s, Measurement data
	update cycle <1.5s
Antenna Beam Angle	10°
Dimensions	Φ125mm x 45 mm (H)
Electrical Connection	M12/4 wire watertight aviation plug, mm²/AWG≤0.785/18 (6 wire watertight aviation plug is optional)
Antenna Type	Ф80mm Planar array antenna, 21dB (with POM antenna cover)
Signal output	RS-485
	Option: 1 relay level alarm output (250V AC/5A) or 4-20mA output
	Option: Ambient temperature output, elevation data output
	Option: Wi-Fi / App / GPRS / IOT
Communication protocol	RS485 MODBUS ( PLC/ RTU )
Ambient Temperature	-55 to 85 °C
Relative Humidity	≤95%RH
Environmental Pressure	860 ~ 1060 mbar (12,47 ~ 15,37psi)
Power Supply	6.0~38V DC, 4 wires, < 80mW
Diagnostic Method	Remote PC end software and mobile application software
Shell Material	Anodized Aluminum + POM or PTFE (Antenna cover)
Mounting Method	M6 Universal Joint Bracket Mounting
Ratings	IP67
Standard Lead-time	4 to 5 weeks ( for standard type )

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## **SPECIFICATIONS**

Radar Emission Frequency	FMCW, frequency 24.0GHz – 26.0 GHz, Typical power of RF <30μW
Measuring Range	0.3 ~ 35.00m (Based on antenna face)
Measurement Accuracy	±2.5mm
Measuring Response Time	Effective level data output time for power boot <5s, Measurement data
	update cycle <1.5s
Antenna Beam Angle	18°
Dimensions	Ф125mm x 45 mm (H)
Electrical Connection	M12/ 4 wires of watertight aerial plug, AWG≤0.785/18 (6-wire type is
	optional)
Antenna Type	Ф80mm Planar array antenna, 21dB (with POM antenna cover)
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# **Head office and Manufacturing - 1**

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