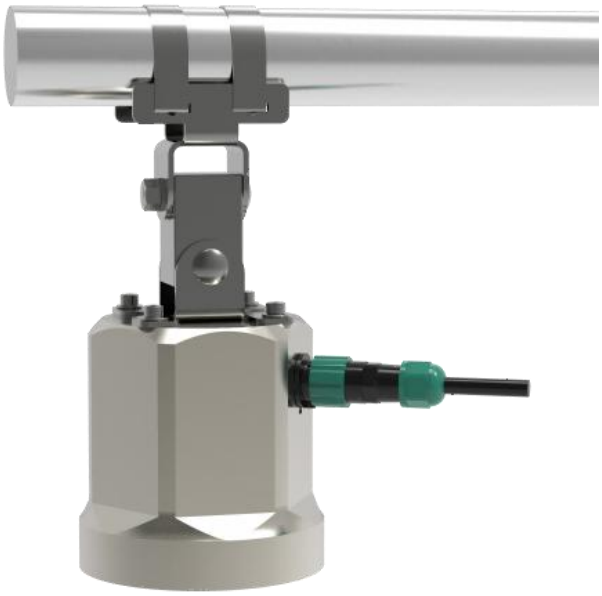
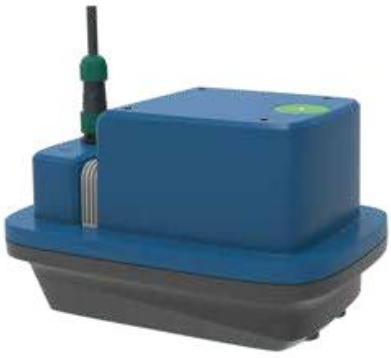
DATASHEET

Level

80GHz FMCW Radar Level Meter
Model PD300



Aluminum alloy material housing



ASA plastic material housing

Description

PD300 Radar Water Level Meter is a non-contact flat radar water level meter for surface water level measurement. It uses frequency modulated continuous wave (FMCW) radar technology to measure the liquid level.

This energy-saving, non-contact measurement technology makes it unaffected by ambient temperature, water vapor pressure on the water surface, air dust, pollutants in the water and sediment during measurement. The optimized algorithm can make the measurement results more accurate and stable. Mobile phone APP is connected via Bluetooth wirelessly, which is convenient for on-site debugging and maintenance. It has the characteristics of small size, easy installation and low maintenance.

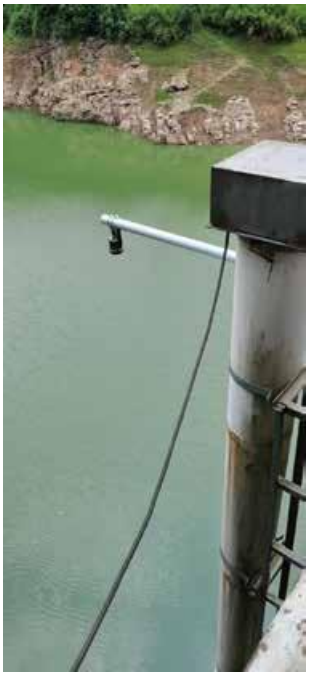
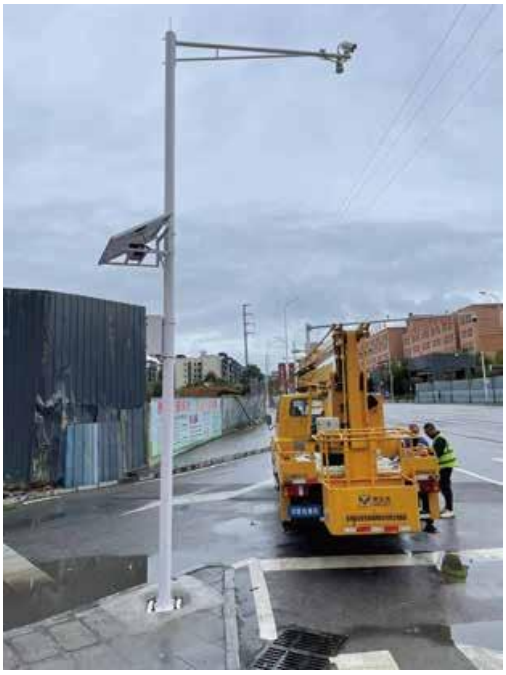
Application

- Hydrological survey of rivers, lakes, reservoirs, etc.
- Water level monitoring of rivers, irrigation canals, flood control, etc.
- Water level monitoring of urban flood control, waterlogging, etc.
- Monitoring of rainstorm floods in mountainous areas, etc.

Features

- Fully waterproof design IP68, suitable for outdoor use;
- Very simple installation, very little civil engineering;
- The power supply circuit adopts anti-reverse connection and lightning protection design;
- Monitoring can also be carried out under high flow conditions during flood season;
- Multiple trigger modes: periodic, trigger, manual, automatic;
- Light weight and compact structure, wind resistant and anti-shake ability;
- Non-contact, safe and low-loss, low maintenance, not affected by mud and sand;
- Low system power consumption, generally solar power supply can meet measurement needs;
- Built-in angle attitude sensor, which can sense the installation tilt and facilitate installation and debugging;
- Both digital interface and analog interface, easy to connect to various systems;
- Flat antenna design avoids the hidden dangers of insect nesting and web building and fog affecting radar signals;
- Built-in low-power Bluetooth, can be directly debugged and set parameters on-site through mobile phone APP without computer connection.

Site Pictures


Specifications

Model	PD300
Measuring Range	15m/40m/70m/110m
Accuracy	±3mm; ±0.05%FS
Resolution	1mm
Angle Sensor Accuracy	±0.1°
Blind Area	20cm(typical)
Radar Antenna	Planar microstrip array antenna
Measuring Lasting Time	0~180s(Adjustable)
Measuring Interval	1~18000s(Adjustable)
Radar Frequency	80GHz
Beam Angle	8°
Bluetooth Version	4.2 and above
Bluetooth Module	Internal built-in, for local parameter setting, data viewing, etc Transmission Power +8dBm Receive sensitivity -95dBm at 0.1%BER
Digital Communication	RS485 Modbus RTU(typical), RS232 and SDI-12 (optional)
Analog Output(optional)	4-20mA
Power Supply	7-32VDC; 5.5-32VDC(optional)
Consumption(DC12V)	Standby ＜1mA; Working ≤ 35mA
Working Temperature	-35 ~ 70℃
Storage Temperature	-40 ~ 70℃
Protection Level	IP68
Anti-Lightning Level	6KV
Housing Material	Aluminum alloy, ASA plastic(optional) ASA plastic: Suitable for outdoor applications requiring long-term weather resistance, lightweight, and UV resistance.
Dimension	Aluminium alloy: Φ89*97 mm ASA plastic: 215×144×126mm