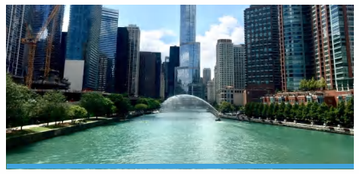
H1601
Radar Flow Meter

The H1601 Radar Flow Meter adopts advanced planar microwave radar technology and built-in multi-section hydrodynamic model algorithms to provide accurate and stable water level, flow velocity and flow data. It supports built-in 4G wireless data transmission for unattended operation and can also connect to computers/PLC/RTU via standard Modbus protocol to form an all-weather monitoring system.

Core Parameters

Ranging Range	30m
Speed Measurement Range	0.15m/s~30m/s or 0.03m/s~30m/s (related to water flow state)
Speed Measurement Precision	±1%F.S.
Water Flow Direction	Supports water flow direction measurement, manual configuration and automatic identification of water flow direction
Attitude Angle	Horizontal angle and roll angle precision ±1°; resolution ±0.1°, built-in vertical angle correction
Temperature and Humidity	Temperature range -40℃~125℃, precision ±0.3℃; humidity range 0%RH~100%RH, precision ±3%RH
Communication Type	RS-485/Standard Modbus-RTU Protocol
Baud Rate	9600~115200 bps, default 9600 bps
Power Supply Voltage	+6~+32V DC, 12V DC recommended

Application Scenarios



River Flow Monitoring

Irrigation Area Water Measurement Monitoring

Hydrological Emergency

Outfall and Pipeline Monitoring

Non-Contact Measurement

Less affected by temperature gradient, pressure, air density, wind or other meteorological and environmental conditions, as well as pollution corrosion, sediment, etc.

Bluetooth Module

Effective connection distance of not less than 10 meters (related to usage scenarios)

High Protection Level

IP68 protection level, waterproof and dustproof design, overvoltage protection, surge voltage protection and reverse connection protection, suitable for use in various field environments

H1601

Built-in Edge Computing Algorithms

Multiple cross-sectional hydrodynamic model algorithms, intelligent flow integration algorithms, angle self-correction and compensation algorithms, and irregular cross-section definition models ensure flow measurement accuracy

Radar Ranging Module

Radar Speed Measurement Module

Planar microstrip array antenna CW+FMCW

Debugging Without Computer

Can directly connect to the radar flow meter through mobile phone Bluetooth app or platform for end-to-end management, including parameter configuration, system upgrade, data polling, device status query, etc.

Diversified Data Collection

Suitable for various measurement scenarios, supporting the collection of voltage, water level, empty height, flow velocity, flow rate, positive cumulative flow, negative cumulative flow, signal strength, temperature, angle and other information