

AST-DJ21 Online Water Temperature Sensor



Features

Online water temperature sensors are widely used in industrial cooling, wastewater treatment, aquaculture, environmental monitoring, HVAC systems, and other fields. They monitor water temperature in real time to ensure efficient and safe system operation. For instance, power plants and chemical facilities require monitoring of cooling water temperatures to prevent equipment overheating; aquaculture farms need to regulate water temperatures to promote biological growth; environmental monitoring

assesses the ecological health of water bodies. Operating in diverse environments, these sensors feature waterproofing, corrosion resistance, and anti-interference capabilities.

Technical parameters:

1. Technical Parameters

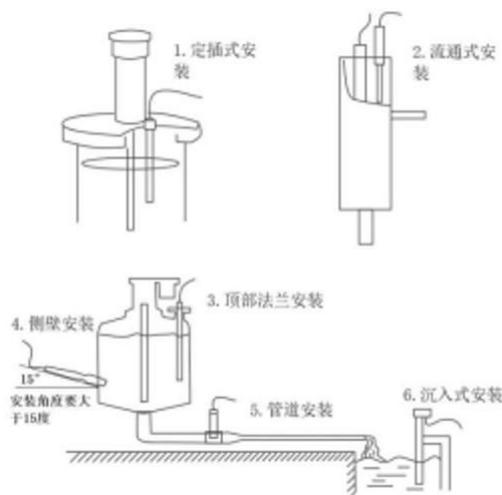
Signal Type	RS485 (MODBUS-RTU)
Measurement Range	-20 °C to 85 °C
Accuracy	±0.1 °C
Measurement Resolution	0.1 °C
Housing Material	ABS
Cable Length	Standard 5m cable
Supply Voltage	12-24VDC
Power Consumption	0.25W@12V
Calibration Method	Single-point calibration
Waterproof Rating	IP68
Mounting Method	Immersion mounting, NPT 3/4" thread

2. Dimension Drawing



III. Installation and Electrical Connections

1. Installation



Installation Distance Requirements: Maintain a minimum clearance of 5cm from side walls and 10cm from the floor.

Installation Environment: Must not operate under intense light; should be placed in a dark environment whenever possible. No other fluorescent substances that could be stimulated should be present.

2. Electrical Installation

The cable is a 4-core shielded cable with the following pin assignments:

Red - Power Line (12~24VDC)

Blue - Ground Wire (GND)

Green - 485B, Yellow - 485A

Carefully verify the wiring sequence before powering on to avoid unnecessary damage from incorrect connections.

Note: Cable colors may vary slightly by production batch; refer to the printed markings on the cables for accuracy.

IV. Maintenance and Care

1. When measurement errors occur after prolonged sensor use, calibration can be performed using the instrument. If calibration and measurement remain impossible after maintenance and care, the sensor is considered failed and must be replaced.