

SMR06 Temperature Transmitter

RS485 Communication. All-in-One Compact Housing. Explosive Proof.

The Temperature Transmitter is connected directly via RS485 communication interface, providing simple, reliable, cost-saving process data with remote monitoring, calibration, configuration and diagnostic capabilities. Housing in a robust IP68 proof enclosure, 1500 N tensile strength Kevlar reinforced cable, up to 1.2 km digital data transmission, the transmitter is ideally used in water/wastewater industry.

Advantages

- Robust IP68 Water Submersible Protection, Directly Installed in the Field, No Cabinet Required
- Plug & Play, On-line Realtime Measurement
- Ultra Low Power Consumption, Ideal for Outdoor Applications
- 1500 N Tensile Strength Kevlar Reinforced Cable
- Built-in Temperature, Humidity Monitoring and Temperature Sensor Failure Self Diagnosis Function
- Advanced Intelligent Algorithm and Signal Processing Technology to Eliminate Noise
- High Stability and Drift-Free
- Surge Protection for Power and RS485 Communication
- RS485 Digital Communication, Minimize Cabling and Engineering Cost
- Standard Modbus RTU Protocol, Direct Connected with PLC, HMI
- Onboard Memory to Easily Calibrate and Configure Sensor at Lab and Distribute to Various Fields
- AQCFG Software Tool for Data Monitoring, Calibration, Configuration and Diagnosis
- IECEx/ATEX Ex ia IIB T4/T5 Ga Explosive Proof Certification

Applications

Drinking water, surface water, groundwater, industry, water treatment, wastewater

Measurement Method

Pt1000 resistance temperature detectors are used to measure temperature by correlating the resistance of the RTD element with temperature. The RTD element has a predictable change in resistance as the temperature change which is used to determine temperature.

Installation

Submersible, flow through, pipe insertion



Specifications

General	
Output Signal	RS485 (Modbus RTU protocol), 19,200 bps, 8 data bits, no parity, 1 stop bit; 4~20 mA (optional)
Data Resolution	16 bits (0.001% FS)
Surge Protection	1,500 VDC
Power	5~12 VDC, 12 mA
Protection	Polarity, Overload, Short circuit
Safety	CE, FCC
Temperature	
Measurement Range	-20~60 °C
Type	Pt100
Accuracy	±0.1 °C; ±0.01°C (optional)
Resolution	0.01 °C
Repeatability	± 0.05 °C
Operating Pressure	Max. 10 Kg/cm ²
Operating Temperature	-20~60°C
Response Time	5 secs
Calibration Interval	Typical 12 months
Protection	IP68
Electrical Connection	M12X1.5 plug fixed cable, M12 connector, 5 pin
Housing Material	SS316L; Titanium
Electrode Material	Glass
Cable	Kevlar reinforced, UV resistant PUR cable, 1500N tensile strength
Dimensions	ø 20X90 mm
Weight	analyzer: approx. 200 g (SS316L) ; 160 g (Titanium) ; cable: 80 g/m

Ordering

Codes

SMR06 - 1 - 1 - - - 3 - - 0 - - - - - -

Cable Length (m)

5 _____ 005
 10 _____ 010
 Custom _____ 001~999

Cable Type

PUR _____

Housing

SS316L _____ 0
 Titanium _____ 1

Wiper

None _____

Wire Connection

Bare Wire _____ 0
 M12 Connector _____ 1

Explosive Proof

None _____ 0
 Certificated _____ 1

Analog Output

None _____ 0
 4~20 mA _____ 1




Installation

- FLX Assemblies and holders for immersion installation
- FTC06-1 Assemblies for flow through installation
- PIF06-1 Assemblies for fixed pipe insertion installation
- JET Automatic cleaning system

Communication

- BOX01 IP68 4 Port RS485 Hub 
- BOX02 IP68 8 Port RS485 Hub 

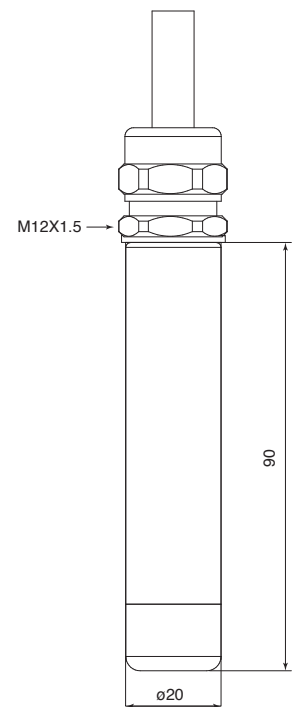
Cable

- CAB03-B RS485 Communication Cable (1.5 m or custom length) 
- CAB06 Configuration Cable (1.5 m) 
- CAB12 2 Port RS485 Cable (20 cm) 

Software

- AQCFG Configuration and Calibration Software

Dimensions



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