AQUAS
Simple. Reliable. Intelligent.

SMR09
Optical Dissolved Oxygen Analyzer

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

The Dissolved Oxygen Analyzer 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
- Replace Membrane Cap
- All-in-One Compact Housing, Built-in Transmitter and Sensors
- 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 Tensible Strength Kevlar Reinforced Cable
- Temperature Compensation
- Surge Protection for Power and RS485 Communication
- RS485 Digital Communication, Minimize Cabling and Engineering Cost
- Standard Modbus RTU Protocol, Direct Connected with PLC, HMI
- Membrane is over 12 Months Long Period of Life
- Auto Cleaning Wiper, Less Maintenance
- Onboard Memory Allowing Users Easily Calibrate and Configure Sensor at Lab and Distribute to Various Fields and Sites
- AQCFG Software Tool for Data Monitoring, Calibration, Configuration and Diagnosis
- IECEx/ATEX Ex ia IIB T5 Ga Explosive Proof Certification

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

Measurement Method
Based on fluorescent optical technology approved by ASTM international method D888-05, cap is stimulated by a blue light source, red light is emitted, the oxygen concentration is calculated from the time difference measurement of fluorescent signals.

Installation
Submersible, flow through, pipe insertion

Specifications

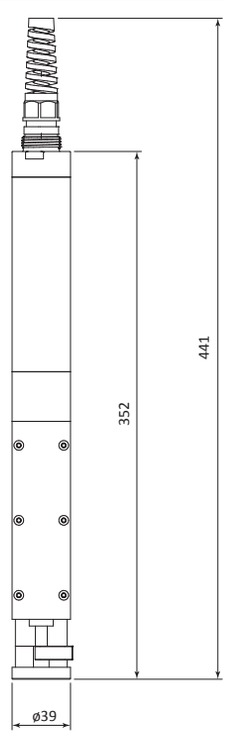
General	
Output Signal	RS485 (Modbus RTU protocol), 19,200 bps, 8 data bits, no parity, 1 stop bit; 4~20 mA (optional)
Data Resolution	16 bits (0.001% FS)
Surge Protection	1,500 VDC
Power	5~12 VDC, 200 mA
Protection	Polarity, Overload, Short circuit
Safety	CE, FCC
Dissolved Oxygen	
Measurement Method	Fluorescent optical technology
Measurement Range	0~20 mg/L (0~200%)
Accuracy	±0.2 mg/L (0~8 mg/L) ; ±0.3 mg/L (8~20 mg/L)
Resolution	0.01 mg/L
Repeatability	±0.1 mg/L
Light Source	LED 495 nm
Operating Pressure	Max. 5 Kgf/cm^2
Operating Temperature	0~50 °C
Process Flow Rate	Max. 3 m/s
Response Time	15 secs
Protection	IP68
Connection	M16 plug fixed cable, M12 connector, 5 pin
Housing Material	Titanium (body) ; POM (wiper)
Electrode Material	PTPE, Titanium
Cable	Kevlar reinforced PUR cable, 1500N tensile strength
Dimensions	ø 39X441 (H) mm
Weight	analyzer: approx. 1 Kg ; cable: 80 g/m
Temperature	
Sensor	NTC10K
Measurement Range	0~50 °C
Accuracy	± 0.1 °C
Resolution	0.01 °C
Repeatability	0.1 °C

Ordering Codes

Ordering Codes: SMR09 - 4 - 1 - 005 - 3 - 2 - □ - □ - □

- Sensor
  - Temperature: 4
- Cable Length (m)
  - 5: 005
- Cable Type
  - PUR: 3
- Housing
  - Titanium: 2
- Wiper
  - None: 0
  - Built-in: 1
- Wire Connection
  - Bare Wire: 0
  - M12 Connector: 1
- Explosive Proof
  - None: 0
  - Certificated: 1

Dimensions



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