

SMR38 CDOM Analyzer

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

Colored Dissolved Organic Matter / Dissolved Organic Matter Fluorescence (CDOM/fDOM) 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 reservoir, river, drinking water, wastewater industry.

Advantages

- 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 Tensile Strength Kevlar Reinforced Cable
- Surge Protection for Power and RS485 Communication
- RS485 Digital Communication, Minimize Cabling and Engineering Cost
- Standard Modbus RTU Protocol, Direct Connected with PLC, HMI
- Sapphire Glass Windows to Prevent Scratch
- Innovative Nano Coating to Remain Window Clean
- 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

Surface water

Measurement Method

It is based on fluorescent optical technology. A fluorometer generates the wavelength of light required to excite the analyte of interest, it selectively transmits the wavelength of light emitted, then it measures the intensity of the emitted light. The emitted light is proportional to the concentration of the analyte being measured

Installation

Submersible



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, 118 mA
Protection	Polarity, Overload, Short circuit
Safety	CE, FCC
CDOM	
Measurement Method	Fluorescence
Measurement Range	0~3,000 ppb (µg/L)
Accuracy	Linearity R ² > 0.999 for serial dilution of Quinine Sulfate solution equivalents in 0.1 N H ₂ SO ₄ at concentrations ranging from 0~300 µg QL L ⁻¹
Resolution	0.01 µg/L
Repeatability	±1% FS
Light Source	LED 355 nm
Operating Pressure	Max. 10 Kgf/cm ²
Operating Temperature	0~50 °C
Process Flow Rate	0.1~10 m/s
Response Time	3 secs
Calibration Interval	Typical 24 months
Protection	IP68
Electrical Connection	M16X1.5 plug fixed cable, M12 connector, 5 pin
Housing	SS316L; Titanium
Cable	Kevlar reinforced PUR cable, 1500N tensile strength
Dimensions	ø 22X130 mm (no wiper) ; ø 39X186 mm (with wiper)
Weight	analyzer: approx. 500 g (SS316L) ; 400 g (Titanium) ; Cable: 80 g/m

Ordering Codes

Ordering Codes

Sensor

None

Cable Length (m)

5 005
10 010
Custom 001~999

Cable Type

PUR

Housing

SS316L 1
Titanium 2

Wiper

None 0
Built-in 1

Wire Connection

Bare Wire 0
M12 Connector 1

Explosive Proof

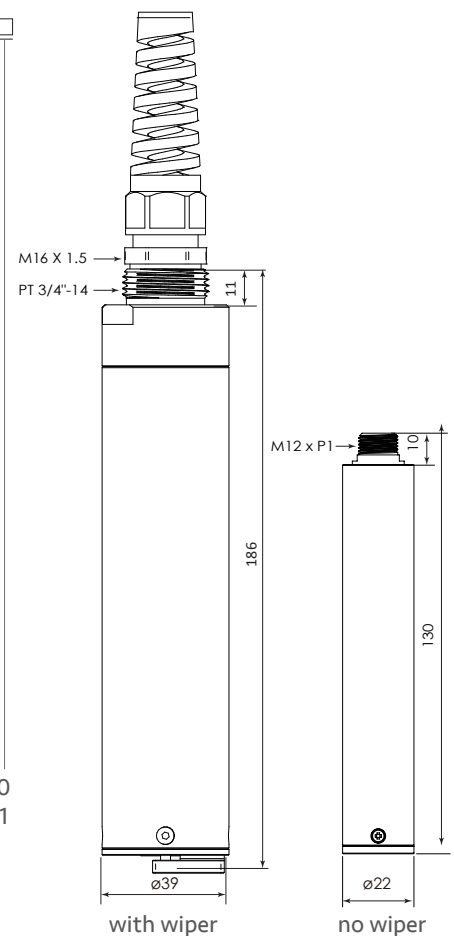
None 0
Certificated 1

Analog Output

None 0
4~20 mA 1

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Dimensions



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AQUAS Inc.
Taipei Office
Add : 4F.-2, No. 56, Ln. 321, Yangguang St.,
Neihu Dist., Taipei City 11491, Taiwan. R.O.C.
T : +886-2-8797-5358#240
F : +886-2-2657-8926
service@aquas.com.tw

Taichung Office
Add : 5F., No. 190, Dadun 14th St., Nantun Dist.,
Taichung City 408, Taiwan. R.O.C.
T : +886-4-2326-8307