

# SMR36 Blue Green Algae Analyzer

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

The Blue Green Algae (BGA) 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**

- 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
- Surge Protection for Power and RS485 Communication
- RS485 Digital Communication, Minimize Cabling and Engineering Cost
- Standard Modbus RTU Protocol, Direct Connected with PLC, HMI
- 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 toexcite 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













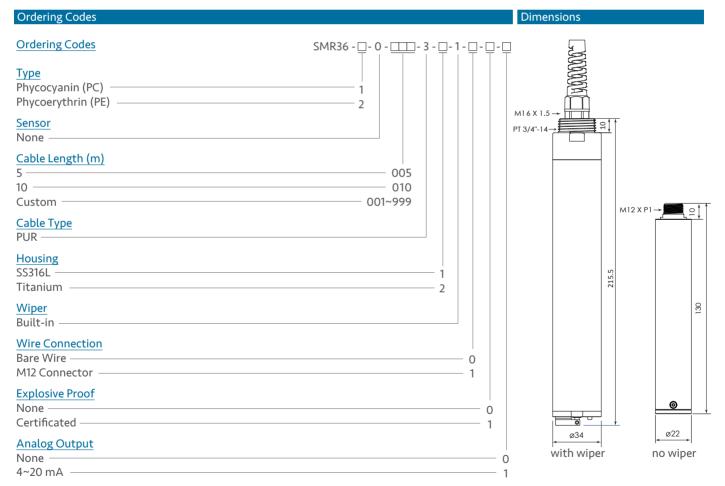


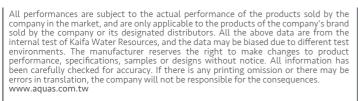




## **Specifications**

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, 78 mA
Protection	Polarity, Overload, Short circuit
Safety	CE, FCC
Blue Green Algae	
Parameter	SMR36-1: Phycocyanin (PC); SMR36-2: Phycoerythrin (PE)
Measurement Range	SMR36-1: 0~4,500 μg/L; SMR36-2: 0~750 μg/L
Accuracy	Linearity R <sup>2</sup> > 0.999 for serial dilution of Rhodamine WT solution equivalents
Resolution	0.01 µg/L ; 1 cells/mL
Repeatability	±2% FS
Light Source	SMR36-1: LED 580 nm ; SMR36-2: LED 530 nm
Operating Pressure	Max. 10 Kgf/cm <sup>2</sup>
<b>Operating Temperature</b>	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 34X215.5 (with wiper)
Weight	analyzer: approx. 500 g (SS316L); 400 g (Titanium); Cable: 80 g/m







AQUAS Inc.
Taipei Office
Add: 4F.-2, No. 56, Ln. 321, Yangguang St.,
Neihu Dist., Taipei City 11491, Taiwan. R.O.C.
T: +886-2-2657-8926
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

