

SMR28

RS485 Communication Nitrite (NO₂-N) Analyzer

The **Nitrite (NO₂-N) Analyzer** is connected directly via RS485 communication interface, providing simple, reliable, cost-saving process data with remote monitoring, calibration, configuration and diagnostics 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.

Typical Applications

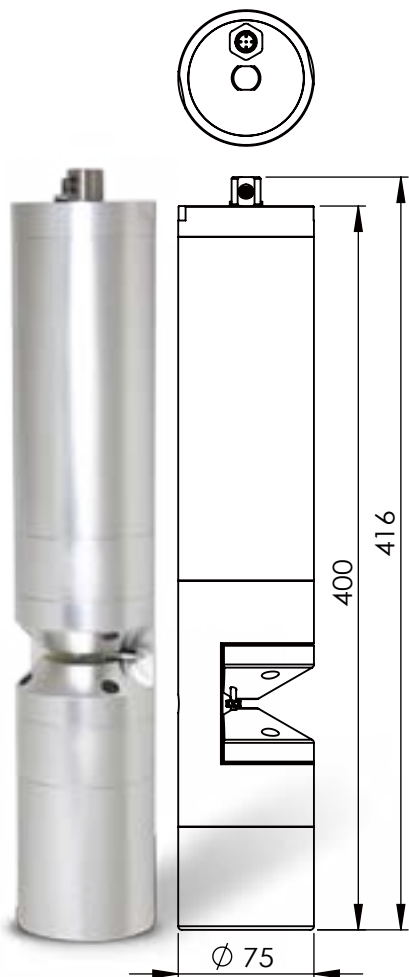
Drinking water, water treatment, wastewater, fishery

Measurement Method

The Xenon flash lamp emits UV-Vis light passing through the sample to be analysed. The spectrometer resolve the wavelength into high resolution spectrum with advanced algorithms to provide the concentration and eliminates mutual interferences such as chemicals, turbidity and color.

Advantages

- Robust IP68 Water Submersible Enclosure, Solution Without Cabinet
- On-line Realtime Measurement
- Ultra Low Power Consumption, Ideal for Outdoor Applications
- High Reliability, Drift Free
- Surge Protection for Power and RS485 Communication
- 1.2 Km RS485 Digital Communication, Minimize Cabling and Engineering Cost
- Software Configuration Calibration and Data Monitoring
- Standard Modbus RTU Protocol, Direct Connected with PLC, HMI, Eliminate I/O Module Cost
- Optional Auto Cleaning Wiper, Almost No Maintenance
- Turbidity or Total Suspended Solids Measurement and Compensation
- Onboard memory allowing users to easily calibrate and configure sensor at lab and distribute to various fields sites



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: 4000 V DC
- Power: 12 V DC ±10%, 0.5A
- Protection: polarity, overload, short circuit
- Safety: CE, FCC

Type	Optical
Measurement range	SMR28-1: 0~2 mg/L SMR28-2: 0~5 mg/L SMR28-3: 0~10 mg/L SMR28-4: 0~100 mg/L SMR28-5: 0~1,000 mg/L
Accuracy	±5% of standard solution
Resolution	0.01 ppm
Repeatability	±3% of standard solution
Light source	Xenon flash lamp
Beam Angle	180°
Light Path Length	1, 10, 20, 50, 100 mm
Process Flow Rate	0.1~10 m/s
Operating pressure	Max. 5 Kg/cm ²
Operating Temperature	0 ~ 85 °C
Response time	30 secs
Protection	IP68
Turbidity sensor	LED 880 nm
Turbidity (or total suspended solids) measurement range	SMR28-1: 0~50 NTU (or 100 mg/L) SMR28-2: 0~100 NTU (or 200 mg/L) SMR28-3: 0~200 NTU (or 500 mg/L) SMR28-4: 0~2,000 NTU (or 4,000 mg/L) SMR28-5: 0~4,000 NTU (or 10,000 mg/L)
Turbidity (or total suspended solids) accuracy	±5% FS
Housing	Titanium; Aluminum
Dimension	Φ75x416 mm
Weight	analyzer: approx. 5 Kg (Titanium); 3.5 Kg (Aluminum); cable: 80 g/m



Ordering

Type	Refer to the table	SMR28 - □ - □ - □ - □ - □ - □
Sensor		
Turbidity	2	
Total Suspended Solids (TSS)	3	
Cable Length (m)		
0	000	
3	003	
5	005	
10	010	
Cable Type		
None	0	
PUR	3	
Housing		
Titanium	2	
Aluminum	3	
Wiper		
None	0	
Built-in	1	

Optionals



Order	Description
PRO	Wireless Controller
ECO	Wireless Logger
ARK	Water Quality Monitoring Buoy
FLO	Open Channel Flow Meter
PRV	Wireless PRV Controller
AWS	Automatic Water Sampler
HMI	Multiparameter Controller
PAD	Handheld Meter
SFC	Flow Chamber
CAB06	Configuration cable (1.5 m, USB interface)
CAB12	2 ports RS485 cable
CAB16	4 ports RS485 cable
PIM02	Pipe mounting
SAO01	Analog output module(4~20 mA, 1 channel)

Specification and product information contained herein are subject to change without notice. Performance varies depending on hardware, software and overall system configuration. Warranty and RMA policy varies with countries, please check with your local distributors or visit www.aquas.com.tw/en