



# **RS485** Communication Total Nitrogen (TN) Analyzer

The Total Nitrogen (TN) 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**

Surface water, water treatment, wastewater

### Measurement Method

The lamp emits UV-Vis light passing through the sample to be analysed. The spectrometer resolve the wavelength into 1 nm. Using the high resolution spectrum, field testing, lab experiment data and 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: parity current at events

- Protection: polarity, overload, short circuit
  Safety: CE, FCC

#### Measurement range

	SMR75-2: 0~10 mg/L SMR75-3: 0~20 mg/L SMR75-4: 0~50 mg/L SMR75-4: 0~50 mg/L SMR75-5: 0~100 mg/L	
Accuracy	±5% in standard solution	
Resolution	0.01 mg/L	
Repeatability	±3% in standard solution	
Light source	UV-Vis lamp	
Beam angle	180°	
Light path length	5 mm, 10 mm, 35 mm	
Process flow rate	Max. 3m/sec	
Operation pressure	Max. 10 Kgf/cm <sup>2</sup>	
Operating temperature	0 ~ 85 °C	
Response time	<1 min	
Protection	IP68	
Turbidity (or total suspended solids) measurement range	SMR75-1: 0~100 NTU (or 0~200 mg/L) SMR75-2: 0~200 NTU (or 0~500 mg/L) SMR75-3: 0~500 NTU (or 0~1,000 mg/L) SMR75-4: 0~1,000 NTU (or 0~2,000 mg/L) SMR75-5: 0~2,000 NTU (or 0~4,000 mg/L)	
Turbidity (or total suspended solids) accuracy	±5%FS	
Housing	Titanium	
Dimension	Φ 75 X 416 mm	
Weight	analyzer: approx. 1 Kg; Cable: 80g/m	
ANTER SOLUTOR		

RoHS

CE

FC

SMR75-1: 0~2 ma/L

#### SMR75-----Type Refer to the table Sensor Turbidity Total Suspended Solids (TSS) Cable Lenath (m) 000 3 -003 005 10 -010 Cable Type None PIIR -Housing Titanium Wiper None Built-in Optionals SFC CABO6 CAB12 CAB16 PIM ----PRO Wireless Controller ECO Wireless Logger Water Quality Monitoring Buoy ARK FLO **Open Channel Flow Meter** Wireless PRV Controller PRV Automatic Water Sampler AWS Multiparameter Controller HMI Handheld Meter PAD SFC Flow Chamber CAB06 Configuration cable (1.5 m, USB interface) CAB12 2 ports RS485 cable CAB16 4 ports RS485 cable

PIM02

SAO01

Pipe mounting

**Smart Water Solutions** 

1 Year

Warranty

ISO9001 Certification

Analog output module(4~20 mA, 1 channel)

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