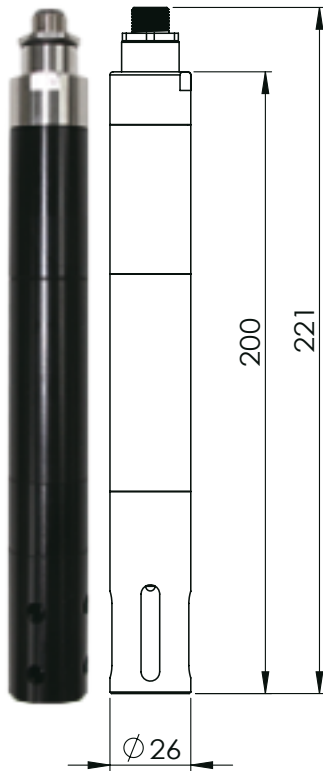


SMR07

RS485 Communication Conductivity Analyzer



The Conductivity 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, surface water, groundwater, industry, water treatment, wastewater

Measurement Method

Theoretically, water free of any contaminants will not conduct electricity. The ability to carry on electric current depends on the presence of ions; conductivity increases with increasing ion concentration. Conductance of a solution is calculated by measuring the electrical current between two chemically inert platinum(Pt) coating electrodes set a fixed voltage source and immersed in water sample. Conductivity is customarily reported in micromhos per centimetre. In the International System of Units, the reciprocal of the ohm is the siemens (S) and conductivity is reported as millisiemens per meter (mS/m); 1 mS/m=10 µmho/cm and 1 µs/cm=1 µmho/cm. The constant(K) of electrode: K=10.0 for conductivity>20 ms/cm; K=1.0 for conductivity 0.02~20 ms/cm

Advantages

- Robust IP68 Water Submersible Enclosure, Solution Without Cabinet
- On-line Realtime Measurement
- Ultra Low Power Consumption, Ideal for Outdoor Applications
- Temperature Compensation
- 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
- 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: 3.6~12 V DC ±10%, 15 mA
- Protection: polarity, overload, short circuit
- Safety: CE, FCC

Measurement range	SMR07-2: 0 ~ 50 mS/cm SMR07-3: 0 ~ 500 mS/cm SMR07-6: 0 ~ 5 mS/cm
Accuracy	±1% FS
Resolution	0.1 µS/cm
Repeatability	±0.5% FS
Operation pressure	Max. 10 Kg/cm ²
Operating temperature	0 ~ 85 °C
Cell constant	1.00; 10.0
Response time	1 sec
Protection	IP68
Temperature sensor	Pt1000
Temperature measurement range	0 ~ 85 °C
Temperature accuracy	±0.5 °C; ±0.1 °C(optional)
Process connection	M28x1.5
Housing	POM
Dimension	Φ 26 X 221 mm
Weight	analyzer: approx. 150 g cable: 80 g/m



RoHS

CE

FCC



Ordering

Type

Refer to the table

Temperature Sensor

Built-in

Cable Length (m)

0	000
3	003
5	005
10	010
Custom	001~999

Cable Type

None	0
PUR	3

Housing

POM	0
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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

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