Recorder Flow Pressure Temp Analyzer Level

Datasheet

Digital conductivity sensor

SUP-TDS8002

Supmea®

Datasheet

Digital conductivity sensor
SUP-TDS8002

TDS8002 conductivity and salinity digital sensor is designed for aquaculture, river sewage, seawater salinity, environmental protection engineering and other industries. It is equipped with a special quadrupole alloy sensor for breeding, which can be used to measure the changes of conductivity and salinity in the aqueous system within the range of (0~500) mS/cm. It has a standard RS485 Modbus RTU protocol interface function, which can communicate with the host computer remotely.

Applications

- Aquaculture
- River sewage
- Seawater salinity
- Environmental protection engineering

SUP-TDS8002

Features

- Isolated power supply design, data stability, strong anti-interference ability
- 4-pole stainless steel, corrosion-resistant alloy conductivity/salinity sensor
- Shell material: POM (wet part)
- Corrosion resistance、high stability, Suitable for continuous detection of fresh water and sea water
- Built-in temperature sensor

Parameters

|	
Measure	Salinity /Conductivity/TDS
Measurement range	Conductivity:(100~60000) μS/cm; (0.1~500.00) mS/cm; TDS: (0~9999) ppm; salinity: (0~100.00) ppt
Display resolution	1uS/cm; 0.01mS/cm; 1ppm; 0.01ppt

Accuracy	1.5%FS
Calibration period	＞3 months
Body material	POM (wet part)
Cable length	5m as standard, other lengths are optional
Display resolution	1μS/cm; 0.01mS/cm; 1ppm;0.01ppt
Temperature	0~60℃
Accuracy	0.1℃
Sensor type	Quadrupole conductivity sensor
Measurement accuracy	＜1.5%F.S, 2%reading, take the smaller of both
Accuracy	±0.5℃
Temperature compensation	Automatic compensation coefficient:2%/℃,coefficient adjustable(default compensating temperature is 25.0℃)
Communication	RS485
Communication protocol	MODBUS-RTU
Communication method	Baud rate 9600,8,1, N ID:1-255 default ID:1 (0×01)
Calibration and parameter setting mode	RS485 remote setting
Power supply	12 VDC
Power consumption	30mA @12 VDC

Wiring

Color	Description
Red	V+
Black	GND
Green	485A
White	485B

Note: Please check the color and wiring definition carefully, if the wiring is wrong, the sensor may be damaged.

Dimension
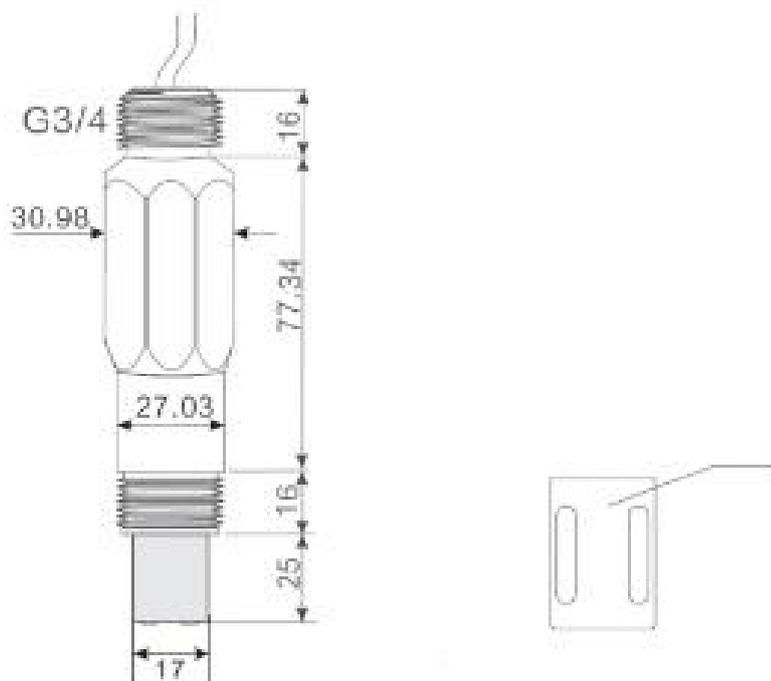
Ordering code

SUP-TDS-8002-HM1E1D1CS5							Description
SUP-TDS8002	-	-	-	-	-	-	
Serial number TDS-8002							Conductivity:(100`60000) μS/cm; (0.1`500.00) mS/cm; TDS: (0`9999) ppm Salinity: (0`100.00) ppt Temperature range:(0~60)℃, Accuracy±0.5℃(±0.2℃optional)
Material	HM1						POM（wet part）
Electrode material		E1					HC
Communication method			D1				RS485, MODBUS-RTU
Cable length					C55		5m(standard)
					CSxx		Customized