



**SenseCAP ECTDS10
EC & TDS Sensor**





PRODUCT DESCRIPTION

The EC & TDS Sensor measures the conductivity, salinity, and total dissolved solids (TDS) in a liquid. The output signal can be RS485 or Analog Voltage. Determining the conductivity, salinity, and TDS of a liquid has many important applications.

The EC & TDS Sensor is widely used in monitoring water quality. The EC & TDS Sensor was designed with industry standards. It is designed with ATC (automatic temperature compensation), making sure the data is accurate regardless of the temperature changes. This EC & TDS Sensor is IP65 rated, waterproof in a tight seal, capable of withstanding long-term constant use in professional application scenarios. It comes with a cover that is rated IP68.

This EC & TDS Sensor has a MODBUS-RTU RS485 serial communications protocol or 0- 2V output. It can be easily connected to and integrated with other devices such as dataloggers, controllers, and displays, etc. This cost-effective EC & TDS Sensor features lowpower consumption, compact size, portability, and high integration, making it widely applicable in both indoor and outdoor environments.

FEATURES

- High performance: high accuracy, fast response, good repeatability
- Universal protocol: MODBUS RS485, 0-2V
- Wide-range power supply: 3.9V ~ 30V
- Robustness: suitable to be immersed in water for a long time
- Durable: anti-corrosion, automatic temperature compensation
- User-friendly: Easy to install and integrate

APPLICATION

- Agriculture
- Hydroponics and Aquaponics
- Sewage treatment
- Research
- Environmental monitoring

SPECIFICATIONS

PRODUCT MODEL

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|-------|---------|
| Model | ECTDS10 |
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GENERAL PARAMETER

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|--------------------------|---|
| Output Interface | Analog Voltage 0-2V (Output resistance ~0ohm) RS485 Modbus-RTU |
| Power Supply | 3.9-30V/DC |
| Power Consumption (Idle) | 40mA@24V DC |
| Power Consumption (Max) | 80mA@24V DC |
| Start-up Time | < 2 seconds |
| EC Measurement | Isolated Sensor Input, Range: 0 - 20000us/cm Resolution: 0-10000us/cm, 10us/cm; 100000-20000us/cm, 50us/cm Accuracy: 0-10000us/cm, ±3%; 10000-20000us/cm, ±5% EC temperature compensation: 0-50°C |
| Temperature Measurement | Range: -40~80°C, Resolution: 0.1°C, Accuracy: ±0.5°C |
| IP Rating | Electrode : IP68 Transmitter : IP65 |
| Operating Temperature | -40 ~ +85°C |
| Installation | Electrode : 1/2"NPT screw threads Transmitter : Mounting hole |
| Cable Length | Power and Signal Cable : 2 meters or Customize Electrode Cable : 5 meters |
| Dimension | Electrode : 1/2"NPT screw threads Transmitter : 128*70*42mm |