SEN101-C0D 106 Intelligent COD Sensor

Product Description

Many organic substances dissolved in water absorb ultraviolet light. Therefore, the sensor can accurately measure the content of organic pollutants dissolved in water by measuring the absorption of 254nm wavelength ultraviolet light by these organic substances. The sensor uses two light sources, one ultraviolet light is used to measure the COD content in water, and one reference light is used to measure the turbidity of water. In addition, a specific algorithm is used to compensate for the attenuation of the light path and to eliminate the interference of particulate suspended impurities to a certain extent, thereby achieving more stable and reliable measurement.



Features

- No reagents required, no pollution, economical and environmentally friendly.
- Small size, more convenient installation, and can monitor water quality online continuously.
- Can measure parameters such as COD, turbidity and temperature.
- Automatically compensate for turbidity interference.
- With a cleaning brush to prevent biological attachment.
- Small drift, fast response, and more accurate measurement.
- Excellent stability even for long-term monitoring.
- Maintenance-free, long service life, and low cost of use.
- Digital sensor, RS-485 interface, Modbus/RTU protocol.
- Low power consumption design, anti-interference design.

Specifications

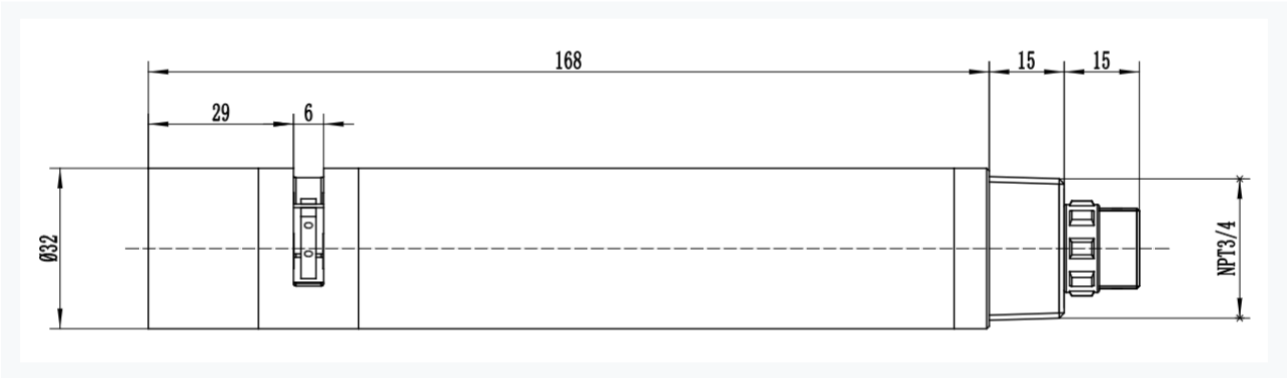
Measurement principle	Dual wavelength UV absorption method		
Main parameters	-	COD	Turbidity
	Range	0.5~500mg/L equiv. KHP	0~500NTU
	Accuracy	±5% FS	±5% or 0.5NTU
	Resolution	0.1mg/L	0.1NTU
Calibration method	Two-point calibration		
Output method	RS-485 (Modbus/RTU)		

SEN101-C0D 106 Intelligent COD Sensor

Power supply	12~30VDC	Installation method	Submersible installation
Working conditions	0~50℃	Cable length	5 meters, other lengths can be customized
Storage temperature	-5~65℃	Casing material	316L stainless steel
Protection level	IP68		

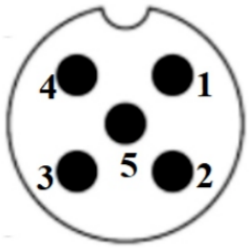
Note: If the technical specifications and cable definitions differ from the actual product, please refer to the order technical specifications.

Dimensions



Note: The sensor connector is a M16-5-core waterproof male connector.

Electrical Connection

Connectors	Pin number	Line color	Definition
 M16 aviation plug (male connector shown in the picture)	1	Red	Power line Vcc+
	2	Green	RS485 A
	3	Black	Ground line (GND) (4~20mA(-))
	4	White	RS485 B
	5	Blue	4~20mA(+)

Before powering on, carefully check the wiring sequence to avoid unnecessary losses due to wiring errors.
Wiring instructions: Considering that the cables are immersed in water (including seawater) or exposed to the air for a long time, all wiring points are required to be waterproofed, and the user cables should have a certain anti-corrosion ability.

SEN101-C0D 106 Intelligent COD Sensor

Ordering Guide

Example:SEN101-C0D106211314
①　②　③④⑤⑥⑦⑧

① Product series model　② Product model code　③ Range code　④ Accuracy code
⑤ Output code　⑥ Process connection code　⑦ Electrical connection code　⑧ Shell material code

SEN101-	Company code + product series code								
	COD106	Product model code							
		2	0-100 mg/L						Range
			1	0-1000mg/L					Accuracy
				2	±10%FS or 1mg/L whichever is greater				Output/power supply
					3	RS485 12-24VDC			Process connection
						3	NPT3/4		Electrical connection
							3	M16 aviation plug	Shell material
							4	POM	