

SH-UVCOD200 COD digital probe

● Overview

SH-UVCOD200 is a dual-beam COD intelligent digital probe, which effectively reduces turbidity interference through compensation; it comes with a cleaning brush to avoid the influence of adherents and air bubbles on the measurement. The probe adopts RS485 interface and standard Modbus protocol, the measurement data can be converted into COD, BOD, TOC, etc., rapid response to the water body changes. Differential optical detection, with temperature compensation, high signal accuracy and good stability.



● Product features

- Self-cleaning function removes light window stains and air bubbles, maintenance-free
- Dual optical path detection, automatic deduction of turbidity interference on COD detection
- Corrosion-resistant housing, waterproof grade IP68, can work underwater for a long time
- RS485 communication interface, standard Modbus protocol for easy integration.

● Technical specifications

Working principle	Dual-wavelength ultraviolet absorption		
Meas. Wavelength	254nm, 545nm		
Measurement range	COD: (0~100/200/500) mg/L	Turbidity: 100 NTU (0~100 mg/L) 400 NTU (0~200 mg/L) 600 NTU (0~500 mg/L)	
Turb. Comp. range	50 NTU (0~100 mg/L)	100 NTU (0~200 mg/L)	200 NTU (0~500 mg/L)
Repeatability	<1 %		
Accuracy	≤5 % of the measured value		
Precision	±5 %		
Zero drift (24h)	±2 % F.S. (100 mg/L) ±1 % F.S. (500 mg/L)		
Range drift (24h)	±3 % F.S.		
Detection limit	1 mg/L		
Resolution	0.1 mg/L		
Response time T90	< 30 sec		
Protection class	IP68		
Comm. interface	RS485, standard Modbus protocol, baud rate 9600		
Dimensions	(0-100) mg/L: (φ33*236) mm, cable 10 m (customizable) (0-500) mg/L: (φ33*221) mm, cable 10 m (customizable)		
Materials	316 Stainless-steel/Titanium alloy available		
Weight	1 kg		
Mounting threads	Upper NPT3/4 thread		
Operating voltage	12/24 Vdc		
Power absorption	0.9 W (motor brushes rotating), 0.4 W (motor brushes not working)		

Cleaning method	Mechanical brush
Calibration period	1~3 months
Operating temp.	(0~50) °C (non freezing)

- **Product applications**

- Environmental surface water, municipal sewage, industrial wastewater