

Optical Fiber Chlorophyll Sensor



Introduction

fiber optic chlorophyll sensor measures the concentration of chlorophyll A in the water by using fluorescence principle. According to spectral absorption characteristic of chlorophyll A, the water body is illuminated by a high-energy LED light, chlorophyll A in water body is stimulated to produce fluorescence of specific wavelength. The sensor adopts fiber optic structure, which has excellent repeatability and stability. It does not affected by ambient light. With automatic cleaning brush, it can eliminate bubbles, reduce the impact of contamination on measurement. The sensor has the longer maintenance cycle. It has excellent stability after long-term online use.

Feature

- Digital sensor, RS-485 output, support MODBUS.
- With automatic cleaning brush, prevent contamination, eliminate bubbles.
- Direct measurement is more convenient than traditional analysis method
- On-line continuous monitoring, real-time control water quality dynamics

Technical Specifications

Item	Fiber Chlorophyll Sensor	Self-Cleaning Chlorophyll Sensor
Model	20101899	20101901
Photo		
Principle	fluorescence principle	
Measuring Range	0~400ug/L or 0~100RFU	
Resolution	0.1 µg/L or 0.1% RFU	
Linearity	R2>0.99	
Protection Rate	IP68	
Deepest Depth	Underwater 60 meters	Underwater 10 meters
Temperature Range	0 ~ 50°C	
Output	Support RS-485, MODBUS protocol	
Power Supply	DC 5~12V, current <50mA	DC 5~12V, current <50mA (not clean)
Installation	Input type, circulation type	Input type
Size	Φ22mm*120mm	Φ33mm*156mm
Cable Length	10 m, customizable 5 m, 15 m and 30 m cable	
Self-Cleaning System	NO	Yes
Optical Window	POM	