

SH-BGA200 Blue-Green Algae digital sensor

● Overview

SH-BGA200 Blue-Green Algae digital sensor adopts specific wavelength and high brightness monochromatic light to stimulate algal blue protein to emit fluorescence, and receives its fluorescence signal through highly sensitive photoelectric sensor, and obtains the density of blue-green algae in the water body according to the proportionality relationship between fluorescence intensity and algal density. The device has digital intelligent design, adopts RS485 interface and standard Modbus protocol, comes with cleaning brush and temperature compensation, and has the functions of calibration, recording, analysis and diagnosis.



● Product features

- Self-cleaning function removes light window stains and air bubbles, maintenance-free
- Optical and digital filtering technology to eliminate the influence of stray light
- 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	Fluorescence
Measurement range	Blue-green algae: (200~300,000) Cells/mL; Temperature: (0~50) °C
Repeatability	≤1 %
Zero drift (24h)	±1 % F.S.
Range drift (24h)	±3 % F.S.
Detection limit	200 Cells/mL
Resolution	30 Cells/mL
Protection class	IP68
Comm. Interface	RS485, standard Modbus protocol, baud rate 9600
Dimensions	(φ33*178) mm, cable 10 m (customizable)
Materials	316 Stainless-steel/PVC/POM/Titanium alloy available
Weight	0.5 kg
Mounting threads	Upper NPT3/4 thread
Operating voltage	9~36 Vdc
Power absorption	1 W (motor brushes rotating), 0.4 W (motor brushes not working)
Cleaning method	Mechanical brush
Calibration period	3 months
Max. depth	30 meters
Operating temp.	(0~50) °C

- **Product applications**

- Environmental surface water, aquaculture water bodies