

SH-MLSS200 Mixed Liquor Suspended Solids digital sensor

● Overview

SH-MLSS200 Mixed Liquor Suspended Solids digital sensor is an intelligent device for measuring the concentration of suspended solids in aeration tanks during the activated sludge process. The sensor adopts infrared light scattering method, i.e. light scattering occurs on the sludge surface after the incident light enters into the water body, and the intensity of the scattered light is detected on the light path which is in a certain angular direction with the incident light, so that the concentration of suspended solids in the water body can be obtained through the proportionality relationship between the intensity of the scattered light and the concentration of suspended solids.



● Product features

- Monochromatic infrared light source, unaffected by sample chromaticity
- Self-cleaning function removes light window stains and air bubbles, maintenance-free
- Sampling optics and digital filtering technology to eliminate the effects 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 parameters

Working Principle	Infrared light scattering
Meas. Wavelength	860nm
Meas. Range	(0-10/30) g/L
Repeatability	±2 %
Accuracy	±5 %
Zero drift (24h)	±1 %
Range drift (24h)	±5 %
Linearity error	±5 %
Detection limit	1 mg/L
Resolution	0.1 mg/L
Protection class	IP68
Comm. Interface	RS485, standard Modbus protocol, baud rate 9600
Dimensions	($\phi 33 \times 178$) mm, cable 10 m (customizable)
Materials	316 Stainless-steel
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	2-3 months
Operating temp.	(0~50) °C

- **Product applications**

- Wastewater treatment plant treatment process, outfall water quality monitoring, sludge tank monitoring water quality monitoring