

SH-OIL200 Oil in Water digital sensor

● Overview

SH-OIL200 Oil in Water digital sensor adopts specific UV monochromatic light to stimulate aromatic hydrocarbon compounds and compounds containing conjugated double bonds in petroleum to emit fluorescence, receiving its fluorescence signal through highly sensitive photoelectric sensor, and obtains the density of oil 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

- Measurement without reagents, no pollution, more economical and environmentally friendly
- Self-cleaning function removes influence of oil 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	Ultraviolet fluorescence
Excitation/emission wavelengths	254/360 nm
Measurement range	0-5mg/L NDSA, equivalent to 0-1.1 mg/L BTEX
Linearity	$R^2 > 0.999$
Detection limit	Determined by the actual oil sample
Resolution	0.01 ppb
Protection class	IP68
Comm. Interface	RS485, standard Modbus protocol, baud rate 9600
Dimensions	($\phi 50 \times 176$) mm, cable 10 m (customizable)
Materials	316 Stainless-steel/Titanium alloy available
Weight	0.5 kg
Mounting threads	Upper NPT3/4 thread
Operating voltage	12~24 Vdc
Power absorption	current absorption < 50 mA (when not cleaning)
Cleaning method	Mechanical brush
Calibration period	1-3 months



Max. depth	30 meters
Operating temp.	(0~50) °C

- **Product applications**

Environmental surface water, municipal sewage, industrial wastewater