

DOS-118G Portable Optical Dissolved Oxygen Meter

The company recently launched a new optical dissolved oxygen meter. Unlike traditional electrochemical sensors, optical dissolved oxygen sensor use fluorescence quenching techniques. This technique is based on a proven method for accurately measuring dissolved oxygen concentrations. The concentration of oxygen in the water can be measured by the quenching effect of the fluorescent substance on the surface of the sensor, without the need for internal filling, and without the need for preheating. The sensor has a fast response, does not consume dissolved oxygen, from the flow rate and the impact of test solution dirt and so on.

Principles and methods:

- 1) The sensor surface contains fluorescent or dye substances
- ②LED emits blue light onto the sensor surface
- 3Blu-ray causes the fluorescent substance to excite and emits red light
- (4) The time to emit red light is measured by the optical sensor
- ⑤The red LED lamp is used as a reference light source
- ©The higher the dissolved oxygen concentration, the red light emission time will be shortened, the optical sensor thus calculated by the oxygen concentration

Tproprietary algorithms are more accurate than common linear algorithms

Technical Indexes

Range	0-20 ppm DO (0-200% saturation)
Accuracy	$\pm 0.1 \text{ mg/L}$ ($0\text{-}20 \text{ mg/L}$)
Response time	<60 second

Features:

- The price is reasonable
- Maintenance-free: no need to add electrolyte solution
- High stability, no need to regularly calibrate or replace the sensor cap
- High repeatability, no drift measured
- Simple operation, no agitation, no flow-dependent and accurate from dirt
- Automatic temperature and pressure compensation, plug and use
- Salinity compensation function: to test the sea water and a variety of salt solution dissolved oxygen



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