

Optical Dissolved Oxygen Meter

OD-10

ISO9001
CERTIFIED
JQA
MANAGEMENT SYSTEM
QUALITY SYSTEM
JQA-0950

Measurement of dissolved oxygen for aeration flow rate control at sewage treatment plants and monitoring of water quality

- Light emission lifetime evaluation system to ensure long-term stable measurement without being affected by temporal change of the light source.
- No incident flow is required because the OD-10 optical system does not consume oxygen during measurement.



- Easy maintenance with no use of electrolyte solution.
- No re-configuration of the detector is needed when replacing the sensing cartridge, because the characteristic parameters of sensing membrane are stored on a memory chip in each sensing cartridge.
- Easy operation with large icon switches on the CV-200 converter.

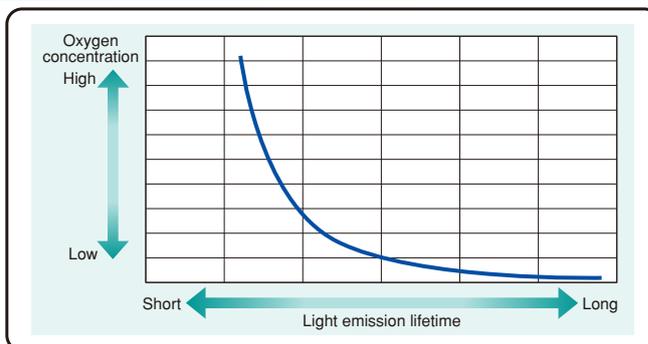
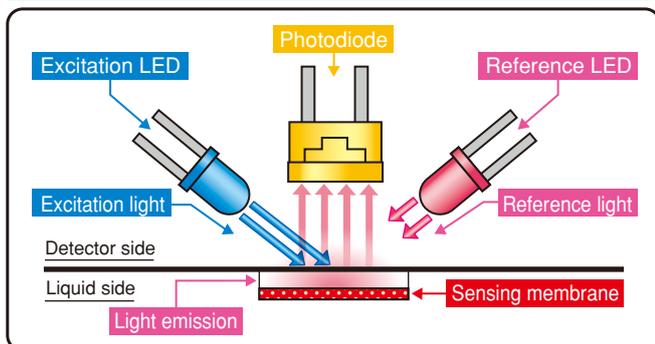


JFE Advantech Co., Ltd.

Optical Dissolved Oxygen Meter OD-10

 Please read the operation manual before using the product.

Measuring Principle



The sensing membrane emits light by returning to the ground state after the sensing material is excited by the excitation light. The light-emission depends on the oxygen concentration around the sensing membrane. The long-term stable measurement can be conducted by use of the reference light which gives standard light-emission.

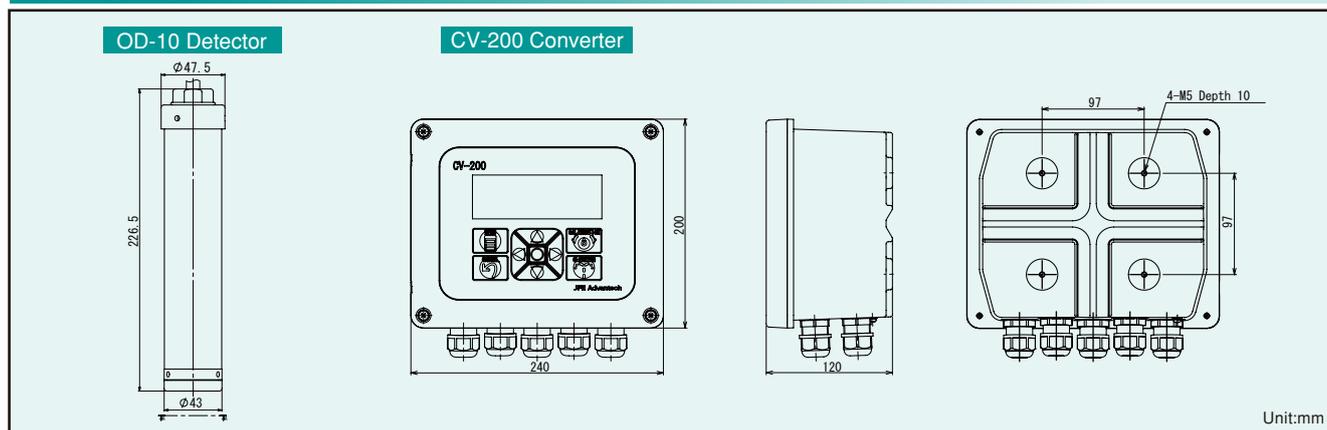
The lower the oxygen concentration around the sensing membrane, the longer the light emission lifetime, and vice versa. Thus the OD-10 evaluates the light emission lifetime which is correlated to the oxygen concentration.

Specifications

Measuring range	Dissolved oxygen concentration:0.00 to 20.00 mg/L O ₂ Saturation:0.0 to 200.0% Water temperature: 0.0 to 50.0°C	Transmission outputs	DC 4 to 20mA x 2ch(load resistance 800 Ω) • Dissolved oxygen concentration saturation / O ₂ Saturation • Water temperature
Accuracy ⁽¹⁾	±2%F.S.	Contact outputs	4 (no-voltage contact output) • Malfunction:1 • Cleaning control:1 • User-configured:2 selected from the following: Lower-/Upper-Alarm and Cartridge replacement Alarm
Repeatability	±0.5%F.S.		
90% response time at 25°C	<30sec		
Estimated usable life of the sensing membrane	1 year or more		
Operating temperature range	Detector:0 to 50°C ⁽²⁾ Converter:-10 to 55°C	Control output	1 (AC power output)
Water pressure limits of detector	1MPa	Contact input	1 (no-voltage contact input) • Remote Cleaning/Hold control.
Converter protection class	IP66	Power source	90 to 264 VAC,50/60Hz
Cable length	10m (standard)		
Weight	Detector: approx.2.4kg(including 10m cable) Converter:approx.3.6kg		

Note (1): Reproduction accuracy after 24 hours at air-saturated water.
Note (2): There shall be no freezing.

External Dimensions



Unit:mm

* Specifications in this catalog are subject to change without prior notice due to product improvement.



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