

# Online Dissolved Oxygen Meter T4046 Function

Industrial online dissolved oxygen meter is an online water quality monitor and control instrument with microprocessor. The instrument is equipped with fluorescent dissolved oxygen sensors. The online dissolved oxygen meter is a highly intelligent online continuous monitor. It can be equipped with fluorescent electrodes to automatically achieve a wide range of ppm measurement. It is a special instrument for detecting oxygen content in liquids in environmental protection sewage related industries.

# **Typical Use**

The online dissolved oxygen meter is a special instrument for detecting oxygen content in liquids in environmental protection sewage related industries. It has the characteristics of fast response, stability, reliability, and low use cost, and is suitable for large-scale use in water plants, aeration tanks, aquaculture, and sewage treatment plants.

# **Mains Supply**

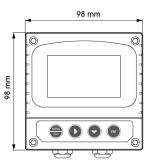
85~265VAC±10%,50±1Hz, power ≤3W; 9~36VDC, power consumption≤3W;

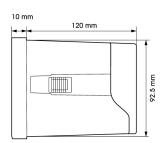
# **Measuring Range**

Dissolved Oxygen: 0~20mg/L, 0~200%;

Customizable measuring range, displayed in ppm unit.







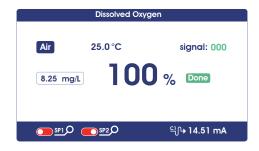
## **Online Dissolved Oxygen Meter T4046**

#### **Features**

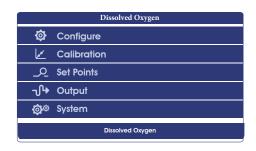
- 1. Large display, standard 485 communication, with online and offline alarm, 98\*98\*130 meter size, 92.5\*92.5 hole size, 3.0 inch large screen display.
- 2. Fluorescent dissolved oxygen electrode adopts optical physics principle, no chemical reaction in the measurement, no influence of bubbles, aeration/anaerobic tank installation and measurement are more stable, maintenance-free in the later period, and more convenient to use.
- 3. Carefully select materials and strictly select each circuit component, which greatly improves the stability of the circuit during long-term operation.
- 4. The new choke inductance of the power board can effectively reduce the influence of electromagnetic interference, and the data is more stable.
- 5. The design of the whole machine is waterproof and dustproof, and the back cover of the connection terminal is added to extend the service life in harsh environments.
- 6. Panel/wall/pipe installation, three options are available to meet various industrial site installation requirements.



Measurement mode



Calibration mode

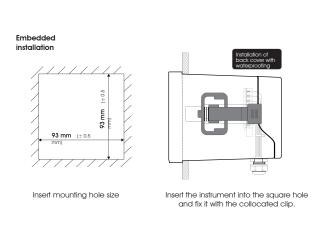


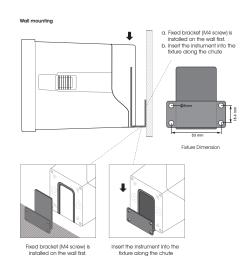
Setting mode

## **Electrical connections**

Electrical connection The connection between the instrument and the sensor: the power supply, output signal, relay alarm contact and the connection between the sensor and the instrument are all inside the instrument. The length of the lead wire for the fixed electrode is usually 5-10 meters, and the corresponding label or color on the sensor Insert the wire into the corresponding terminal inside the instrument and tighten it.

## Instrument installation method





# **Technical specifications**

Measurement range	0~20.00mg/L; 0~200.0%
Measurement unit	mg/L; %
Resolution	0.01mg/L; 0.1%
Basic error	±1%F.S
Temperature	-10~150°C
Temperature Resolution	0.1°C
Temperature Basic error	±0.3°C
Current Output	4~20mA,20~4mA,(load resistance<750Ω)
Communication output	RS485 MODBUS RTU
Relay control contacts	5A 240VAC,5A 28VDC or 120VAC
Power supply (optional)	85~265VAC,9~36VDC,power consumption≤3W
Working conditions	No strong magnetic field interference around except the geomagnetic field.
Working temperature	-10~60°C
Relative humidity	≤90%
IP rate	IP65
Instrument Weight	0.6kg
Instrument Dimensions	98×98×130mm
Mounting hole dimensions	92.5*92.5mm
Installation methods	Panel, Wall mounted, pipeline

## **CS4760D Digital Dissolved Oxygen Sensor**



Fluorescent dissolved oxygen electrode adopts optical physics principle, no chemical reaction in the measurement, no influence of bubbles, aeration/anaerobic tank installation and measurement are more stable, maintenance-free in the later period, and more convenient to use. Fluorescent oxygen electrode.

Fluorescence method dissolved oxygen sensor is based on the principle of fluorescence quenching. When the green light irradiates the fluorescent substance, the fluorescent substance will be excited and emit red light. Since oxygen molecules can take energy away, the time of the excited red light is inversely proportional to the concentration of oxygen molecules. Without calibration and designed with ultra-low energy consumption in mind, the sensor can meet all the requirements of field operations as well as long and short term tests. Fluorescence technology can provide accurate measurement data for all measurement environments, especially those with low oxygen concentration, without consuming oxygen.

The electrode lead is made of PVC material, which is waterproof and anti-corrosion, which can cope with more complicated working conditions.

The electrode body is made of 316L stainless steel, which is corrosion-resistant and more durable. The sea water version can also be plated with titanium, which also performs well under strong corrosion.

The fluorescent cap is anti-corrosion, the measurement accuracy is better, and the service life is longer. No oxygen consumption, low maintenance and long life.

Model No.	CS4760D
Power/Outlet	9~36VDC
Measure methods	Fluorescence method
Housing material	POM+ 316 Stainless steel
Waterproof grade	IP68
Measurement range	0-20mg/L
Accuracy	±1%F.S
Pressure range	≤0.3Mpa
Temperature compensation	NTC10K
Temperature range	0-60℃
Signal Output	RS485 or 4-20mA
Calibration	Anaerobic water calibration and air calibration
Connection methods	4 core cable
Cable length	Standard 10m cable, can be extended to 100m
Installation thread	G3/4 End thread
Application	General application, river, lake, drink water, environmental
Application	protection, etc.