

Dissolved Oxygen Sensor

Model CS512



The CS512 is a rugged, low-maintenance sensor that is manufactured by OxyGuard. This sensor consists of a self-polarizing galvanic cell that generates a millivolt signal proportional to the amount of oxygen present in the measured medium (typically water). Oxygen diffuses through its membrane onto a cathode that produces a chemical reaction. An electrical current is produced by this reaction that is converted from microamps to millivolts by an in-line resistor.

Benefits/Features

The CS512 provides the following advantages over the older dissolved oxygen sensors:

- No gas buildup in the probe preventing blown membranes
- Completely sealed case (i.e., no vent hole)
- Plastic-to-plastic seal (i.e., no o-ring)
- Improved long term stability

Ordering Information

CS512 - Dissolved oxygen sensor. Fitted with 10 m cable as standard. Supplied with 5 spare membranes and 50 ml electrolyte.

Options and Spares

010315 - DO Electrolyte, 1 litre

010314 - Teflon Membrane kit, 10 pack

Agitators and auto-cleaners are available to special order.

Specifications

Range: 0 to 50 mg l⁻¹ dissolved oxygen, 0 to 100% volume gaseous oxygen

Output: 2.5 to 5 mV per mg l⁻¹

Output impedance: ~1 kohm

Repeatability: better than 0.2 mg l⁻¹

Response Time: After equilibrium, 1 minute for 95% of final value

Minimum water velocity: 1 cm s⁻¹ across membrane

Minimum submersion depth: 6.35 cm

Operating temperature range: 0° to 40°C

Pressure: 0 to 2 bar

Temperature Compensation: Self compensating

Dimensions: diameter: 5.8 cm, height: 5.9 cm

Weight: 0.45 g

Datalogger compatibility: CR200 series, CR510, CR10X, CR1000, CR23X, CR5000, CR7, CR9000(X); call for compatibility with older dataloggers

