

Digital oxygen sensor

Oxymax COS61D

Memosens optical oxygen sensor for water, wastewater and utilities



Benefits:

- Minimum maintenance, maximum availability
- Fast, drift-free measurement for precise aeration control and process monitoring
- Long-term stability for increased process safety
- Outstanding performance in all aeration processes (SBR, Anamox, etc.)
- Chemical-free: no electrolyte handling

Specs at a glance

- **Measurement range** 0 to 20 mg/l 0 to 200 %SAT 0 to 400 hPa
- **Process temperature** -5 to 60 °C (20 to 140 °F)
- **Process pressure** Max. 10 bar abs (Max. 145 psi)

More information and current pricing:

www.ca.endress.com/COS61D

Field of application: Oxymax COS61D is a high-performance, digital oxygen sensor that offers fast, accurate and drift-free measurement. It supports your process with low maintenance, high availability and easy handling. The sensor's long-term stable fluorescence layer is exclusively oxygen-selective (interference-free), ensuring consistently reliable measurement. Thanks to Memosens digital technology, the Oxymax COS61D combines maximum process and data integrity, and facilitates simple lab calibration.

Features and specifications

Oxygen

Measuring principle

Optical oxygen measurement

Oxygen

Application

Aeration tank, river monitoring, water treatment, fish farming

Characteristic

Digital, optical measurement of dissolved oxygen based on fluorescence quenching

Measurement possible in still water

Measurement range

0 to 20 mg/l

0 to 200 %SAT

0 to 400 hPa

Measuring principle

Oxygen-sensitive molecules (marker) are integrated in an optical active layer (fluorescence layer). The fluorescence layer surface is in contact with the medium. The sensor optics are directed at the back of the fluorescence layer. The sensor optics transmit green light pulses to the fluorescence layer. The markers respond (fluoresce) with red light pulses. The duration and intensity of the response signals depend directly on the oxygen contents or partial pressure.

Design

Calibration data saved in sensor

High degree of EMC protection

Material

Sensor shaft: stainless steel 1.4435

Membrane cap: POM

Dimension

Diameter: 40 mm (1.57 inch)

Shaft length: 186 mm (7.32 inch)

Process temperature

-5 to 60 °C

(20 to 140 °F)

Oxygen

Process pressure

Max. 10 bar abs
(Max. 145 psi)

Temperature sensor

NTC 30K

Connection

Process connection: G1, NPT 3/4"
Cable connection: fixed cable or TOP68 plug-in-head

More information www.ca.endress.com/COS61D