

# 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.sg.endress.com/COS61D](http://www.sg.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

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### Characteristic

Digital, optical measurement of dissolved oxygen based on fluorescence quenching

Measurement possible in still water

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### Measurement range

0 to 20 mg/l

0 to 200 %SAT

0 to 400 hPa

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### 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.

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### Design

Calibration data saved in sensor

High degree of EMC protection

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### Material

Sensor shaft: stainless steel 1.4435

Membrane cap: POM

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### Dimension

Diameter: 40 mm (1.57 inch)

Shaft length: 186 mm (7.32 inch)

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### Process temperature

-5 to 60 °C

(20 to 140 °F)

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## Oxygen

### Process pressure

Max. 10 bar abs  
(Max. 145 psi)

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### Temperature sensor

NTC 30K

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### Connection

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

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More information [www.sg.endress.com/COS61D](http://www.sg.endress.com/COS61D)