

# Dissolved oxygen sensor Oxymax COS61

## Optical oxygen sensor for water, wastewater and utilities



More information and current pricing:

[www.endress.com/COS61](http://www.endress.com/COS61)

### Benefits:

- Minimum maintenance, maximum availability
- Fast, drift-free measurement for aeration control and process monitoring
- Long-term stability for increased process safety
- High-performing in all aeration processes (SBR, Anamox, etc.)
- Chemical-free: no electrolyte handling
- Easy measuring point changeover to optical technology compatible with COS31 and COS41

### Specs at a glance

- **Measurement range** 0mg/l ... 20mg/l 0%SAT ... 200%SAT 0 ... 400hPa
- **Process temperature** -5°C ... 60°C ( 23 - 140°F)
- **Process pressure** max. 10bar (145psi)

**Field of application:** Oxymax COS61 is a high-performance 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.

## 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 (luminescence) dissolved oxygen measurement.  
No flow needed - measurement possible in still water.

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### Measurement range

0mg/l ... 20mg/l  
0%SAT ... 200%SAT  
0 ... 400hPa

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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 body : stainless steel 1.4571 Membrane cap : POM

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### Dimension

Diameter : 40mm  
(1.56inch) Length : 220mm  
(8.58inch)

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### Process temperature

-5°C ... 60°C  
( 23 - 140°F)

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## Oxygen

### Process pressure

max. 10bar  
(145psi)

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### Temperature sensor

NTC temperature sensor, 0 to 50°C  
(32 - 122°F)

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### Connection

Process connection: G1" thread  
Cable connection : fixed cable or TOP68 plug-in-head.

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