

## Dissolved Oxygen

OPTOD



### Oxygen Monitoring

The oxygen probe utilizes optical measuring technology, and conforms to the ASTM International D888-05 norm for the measurement of oxygen. This technology does not consume oxygen, allowing a highly accurate measurement under all circumstances.

The intelligent sensor saves data such as calibration directly in the sensor. This enables „play-and-play“ usage without requiring recalibration.

Transfer of data is accomplished by means of a Modbus protocol.

- **Calibration data** stored directly in sensor
- For **highly diverse** applications
- **Data transfer** via Modbus RS-485
- **Robust housing** made of stainless steel or titanium
- For **mobile or stationary** applications

# Technical Data

## *General*

Dimensions	Diameter: 25 mm Length: 146 mm
Weight	Stainless steel: 450 g (sensor + 3 m cable) Titanium: 300 g (sensor + 3 m cable)
Material	Stainless steel 316L or titanium
Storage temp.	-10 to +60 °C
Communication	Modbus RS485 (optional: SDI-12)
Connector	Specialized cable with Fisher connector or open ends
Power Requirement	5 to 12 V
Energy Consumption	Standby: 25 µA Average (1 measurement/s): 4.4 mA
Impulse Current	100 mA
Maximum Pressure	5 bar
Protection Class	IP 68

## *Dissolved Oxygen Measurement*

Measuring Principle	Optical
Measuring Range	0 - 20.00 mg/l 0.00 - 20.00 ppm* 0 - 200 %*
Resolution	0.01
Accuracy	± 0.1 mg/l ± 0.1 ppm ± 1 %
Response Time	< 60 s in 90 % of the measurements
Measuring Interval	> 5 s
Temp.Compensation	NTC
Movement of Media	Not required

\*Optional