

DIGISENS RANGE

OPTOD: Optical Dissolved Oxygen & Temperature

Digitally optimised measurement technology

- Optical luminescence technology requires minimal maintenance
- Digital sensor: Modbus RS-485
- No calibration required and therefore little to no drift occurs
- Robust and Watertight

Applications

- Industrial effluent treatment
- Urban waste water treatment
- Surface water monitoring
- Drinking water

Optical technology :

The OPTOD sensor is based on luminescent optical technology and is approved by the ASTM International Standard Method D888-05.

Without calibration requirements, and thanks to an ultra low power technology, the OPTOD sensor is suitable for field work as well as long and short term monitoring.

With no oxygen consumption, this technology gives an accurate measure in all situations, even in very low oxygen concentrations.

Digital Technology :

The “smart” OPTOD sensor stores calibration and history data within the sensor. This allows you a “plug and play” system without re-calibration.



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Measurement

Measurement principle	Optical measure by luminescence
Measurement ranges	0.00 to 20.00 mg/L
Resolution	0,01
Accuracy	+/- 0.1mg/L, +/- 0.1 ppm, +/- 1 %
Response time	90% of the value in less than 60 seconds
Flow	No flow necessary
Temperature compensation	Via CTN
Operating temperature	- 10°C to + 60°C
Signal interface	Modbus RS-485 (standard) and SDI-12 (option)
Maximum refreshing time	< 1 second
Sensor power-supply	5 to 12 volts
Consumption	Standby 25 µA, Average RS485 (1 measure/ second) : 4.4 mA Average SDI12 (1

Sensor

Dimensions	Diameter : 25 mm ; length : 146 mm
Weight	Weight 450g (sensor + cable 3 metres)
Material	Stainless steel 316L
Maximum pressure	5 bars
Connection	9 armoured connectors, polyurethane jacket, barewires or waterproof Fisher
Degree of protection	IP68 up to gland

