



Physico-chemical sensor : OPTOD

OPTOD : OPTICAL DISSOLVED OXYGEN

Digital technology for optimized measures

- Optical Technology : no membrane or electrolyte
- Mesure de l'oxygène dissous (mg/L), saturation en oxygène (%) et température
- No drift, reduced maintenance
- Digital Technology (Modbus RS-485)
- Body in Stainless steel (316 L) or Titanium



Applications :

- Urban wastewater treatment
- Industrial effluent treatment
- Surface water monitoring
- Sea water monitoring, fish farming, aquarium
- Drinking water

Optical technology :

The OPTOD[®] (Optical Dissolved Oxygen technology) is based on luminescent optical technology. The OPTOD sensor is approved by the ASTM International Method D888-05.

Without calibration requirements and thanks to an ultra low power technology, the OPTOD sensor meets the demands of field works and short or long term campaigns. Only the DODisk has to be replaced every 2 years. Without oxygen consumption, this technology allows you an accurate measure in all situation and especially in very low oxygen concentrations.

Digital communication/integrated transmitter:

Thanks to the Universal Modbus RS485 protocol, the sensor can be connected directly to the datalogger Ijinus LOG V3

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

Body :

Compact, strong and light, the sensor allows a portable or in fixed/permanent use. Compact, strong and light, the sensor allows a portable or in fixed/permanent use for applications in corrosive environment.



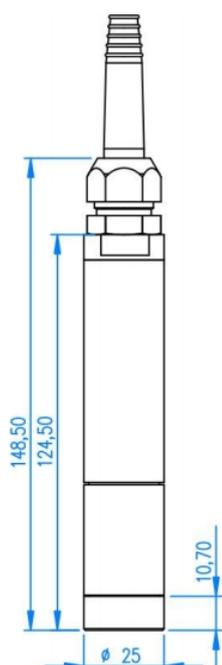
Measure

Measure principle	Optical measure by luminescence
Measure range	0,00 to 20,00 mg/L 0,00 to 20,00 ppm 0-200%
Resolution	0,01
Accuracy	+/- 0,1mg/L +/- 0,1ppm +/- 1 %
Reponse time	90% of the value in less than 60 seconds
Frequency of recommended measure	>5 s
Water moves	No water moves needed
Temperature compensation	Via NTC
Stocking temperature	- 10°C to + 60°C
Signal interface	Modbus RS-485
Sensor power-supply	5 to 12 volts
Electric consumption	Standby : 25 µA Average RS485 (1 measure/seconde) : 4,4 mA Current pulse : 100 mA

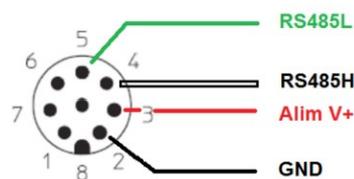
Sensor

Dimensions	Diameter : 25 mm ; Lenght : 146mm
Weight	450g (sensor + cable 3m)
Material	Stainless steel 316L
Maximale pressure	5 bars
Protection	IP68

Dimensions



Wiring



Connecteur M12 8Pts Vue côté mâle

2	Black	GND
3	Red	Alimentation V+
4	White	RS485H
5	Green	RS485L