

Oxygen Dissolved Measuring

Last generation optical sensors



Indication of the dissolved oxygen on the display, as overlay text on the image. Can be used with Inspecam PT/HD/DW/Diver series cameras.

Typical Applications

- Wastewater
 - Aeration tanks
 - Aerobic digesters
 - Plant effluent monitoring
 - Anaerobic digesters
- Aquaculture
- Brewing / Fermentation
- Bio-processing
- Chemical process, food & dairy, pulp/paper, etc.

Conventional techniques used to measure dissolved oxygen, such as electrochemical or galvanic diffusion methods, have traditionally struggled to maintain accurate measurement over long periods of time without frequent recalibration due to sensor drift.

Drawbacks such as limited membrane life have made it difficult to achieve long-term accuracy and reliability. Moreover, the need for electrochemical sensors to be inspected, serviced and recalibrated, in some cases as often as every two weeks, adds to the overall cost of ownership.

Optical sensors have provided a much more stable measurement, but many types on the market are still slow to respond and require regular calibration due to degradation of the lumiphore material.

Sensor type	Optical (luminescent) dissolved oxygen sensor
IP rating	IP68, 10 bar 0.1 MPa
Range	0 to 50 mg/l concentration; 0 to 600 % saturation
Accuracy	±0.1 mg/l, 0 to 8 mg/l ±0.2 mg/l, 8 to 20 mg/l ±10 % of reading, 20 to 50 mg/l
Resolution	0.01 mg/l
Response time	T90 < 45 sec; T95 < 60 sec @ 25 °C (77 °F)
Storage	-5 to 60 °C (23 to 140° F)
Dimensions	Ø 47 mm x 203 mm length
Sensor cap life	2 years
IP rating	IP68 (when fitted)