# **OxyGuard LDO Optical Oxygen Probe**



OxyGuard's new optical oxygen probe is developed in cooperation with world-leading experts. Based on luminescence quenching of an oxygen sensitive dye immobilized on a support foil (sensor spot), it can be used for gas as well as for dissolved oxygen (DO) measurements.

The presence of oxygen quenches the luminescence, changing its intensity and lifetime fully reversibly. The measurement principle is very robust, it shows virtually no interference to other gases and has very low drift. Bleaching is not an issue because low energy red light excites the sensor spot and emission is near-infrared (NIR).

## **Special features**

- High-accuracy measurements of oxygen in gas or water (DO)
- Low drift
- Long lifetime
- Fast response
- Digital output of all major oxygen units
- No offset/zero point calibration



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# **TECHNICAL INFORMATION**

#### **Specifications**

Dimensions: Diameter = 58 mm, length = 59 mm. Weight: 0.2 kg without cable, 0.5 kg with 7 meter cable. Cable length: Standard 7 meters. Available at any length on request. Units of measure: ppm (mg/l), %sat, °C, °F. Medium: Air, water. Measuring range: 0-250 %sat, 0-23 ppm (mg/l),  $-5^{\circ}C - +45^{\circ}C$ . Accuracy:  $\pm 1$  %sat,  $\pm 0.1$  ppm (mg/l). Reponse time: Less than 15 sec in water. Less than 5 sec in air. Lifetime (minimum): Sensor spot: 2 years. Operating temperature:  $-10^{\circ}C - +60^{\circ}C$ .  $+14^{\circ}F - +140^{\circ}F$ . Output signal: 0xyGuard fieldbus data signal for Commander, Convoy or Pacific systems. Power supply: Nominal 24 V DC +/- 10%, abs. max. 28 V. Connection: P-NET fieldbus data cable

#### Installation

The OxyGuard LDO Optical Oxygen Probe is designed to be fitted to an OxyGuard Pacific unit or a Marlin.

#### **Ordering information**

D30: LD0 Optical oxygen/temperature probe, for Pacific, with 7 meters of cable

#### Spares

D30SPK: Sensor spot kit for optical oxygen probe

## **ATTENTION!**

#### Handle your Optical LDO probe with care.

Clean only with a water spray and a soft cloth to avoid damage. The sensor spot is highly sensitive and will be compromised if handled roughly.

Data subject to change without notice; D30 OxyGuard LD0 Optical Oxygen Probe brochure GB 2025 01