

CROSS SMART SENSOR


DO7: Fluorescence Dissolved Oxygen

Digital Smart Optical

Introducing the NEW Rugged Dissolved Oxygen Sensor exclusively for the meter DO7. The DO7 sensor utilizes lifetime-based optical fluorescence sensor technology to provide an extremely stable, precise and low maintenance dissolved oxygen sensor. Unlike traditional DO sensors, DO7 does not require membranes, stirring, and cleaning and allows deployment for many months without need for re-calibration!



Conform to the following EU Directives & Standards:

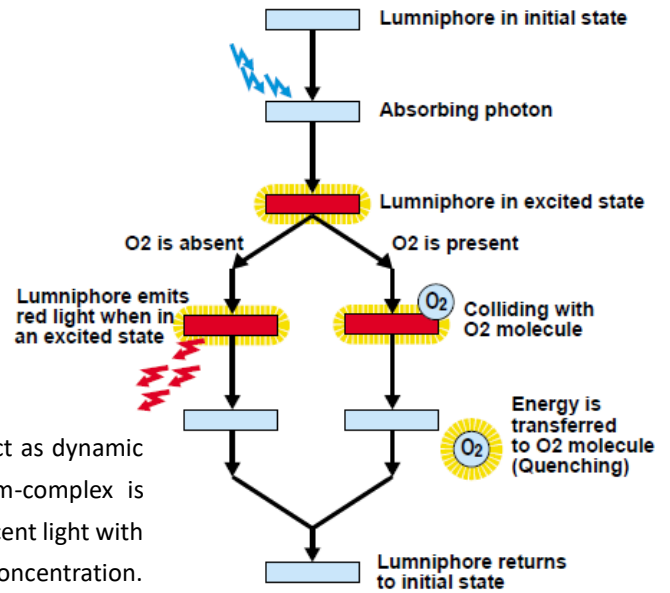
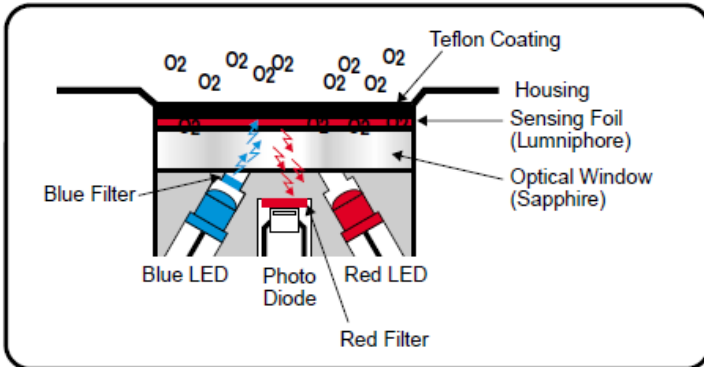
	Low Voltage Directive 2014/35/EU
	Electromagnetic Compatibility Directive 2014/30/EU
	RoHS 2 Directive 2011/65/EU
	EN 61010-1:2010; EN 61326-1:2013

FEATURES & BENEFITS:

- ❖ High precision and accuracy. Measure absolute oxygen concentrations without field calibrations
- ❖ Integrates directly into the DO7 with Smart Sensor technology - "Plug & Play"
- ❖ No membrane, stirring/flow, or cleaning required
- ❖ Ultra-rugged construction – 316L, Titanium options
- ❖ Sapphire sensor window - extremely scratch resistant
- ❖ All of the optics and electronics are solid-state with no moving parts
- ❖ Optical sensor is not damaged by ambient light, unlike other luminescent DO technologies
- ❖ Fully compatible with PC software for easy setup and data logging
- ❖ Low sensitivity to fouling
- ❖ Fast response time

SPECIFICATIONS

Optical DO Technology



Sensor measurements are based on selected substances that can act as dynamic fluorescence quenchers. For example, for oxygen, if a ruthenium-complex is illuminated with a blue LED it is excited and emits back a red luminescent light with an intensity, or lifetime, which directly depends on the oxygen concentration. Lifetime based measurements are superior for both long-term (no drift) and fast response applications.

DO7	
Range	0.00~20.00ppm, 0.00~20.00mg/L, 0~200% Air Saturation
Typical response limit	>25mg/L
Accuracy	±0.1mg/L, ±0.1ppm, ±1%
Respond Time	T90<16 seconds, oxygen increasing
Technology	Fluorophor impregnated membrane optical sensor, dynamic luminescence quenching technique
Calibration	1 or 2 point, typical calibration duration 12 months
Operate Temp.	32~122°F (0~50°C)
Store Temp.	14~140°F (-10~60°C)
Protection	Immersible, >IP68
Pressure	5bar
Sensor Material	316L, Titanium optional
Digital Interface	Modbus RTU
Power	24VDC (18-36VDC)
Dimension	Dia. 1.42", & 8.27" length (∅ 36 mm x 210 mm)
Weight	2.2 lbs. (1 kg) with SS housing and 33ft cable

ORDER CODE

DO7 Optical Dissolved Oxygen	
	-C10 10' cable
	-C30 30' cable
	-C50 50' cable
	Please contact factory for other cable length
DO7	-C30

GDC-01/02 Terminal
Single or dual-channel

GDC-04/06/08 Terminal
Multi-channel up to 8

GDC-H Transmitter
Handheld Terminal