CROSS SMART SENSOR

DO7: Fluorescence Dissolved Oxygen

Digital technology for optimized measures

The new generation of DO7 dissolved oxygen sensor utilizes lifetime-based optical fluorescence technology to determine the oxygen concentration in water. The fluorescence quenching method of the DO7 provides for extremely stable, precise and low maintenance measurements of dissolved oxygen. Unlike traditional DO sensors, DO7 does not require membranes, stirring, and/or manual cleaning allowing for many months of calibration and maintenance free operation.

FEATURES & BENEFITS

- High precision and accuracy. Measure absolute oxygen concentrations without field calibrations
- Integrates directly into Delta-Phase transmitters with Smart Sensor technology - "Plug & Play"
- Ultra-rugged and Anti-Corrosion: PVC housing with full crown protection
- Sapphire sensor window - extremely scratch resistant
- All optics and electronics are solid-state with no moving parts
- Optical sensor is not sensitive to ambient light
- Optional 316L SS or Titanium housing for corrosive environments
- Low sensitivity to fouling
- RS485/Modbus Protocol allow up to 300-meter long communication to Controllers or PC with Delta-Phase View™ software
- Built-in Bluetooth module enables wireless connection to Smartphone/Pad running iOS, Android or PC with the Delta-Phase Apps of Delta-Phase for easy setup and data logging

Conform to the following EU Directives & Standards:

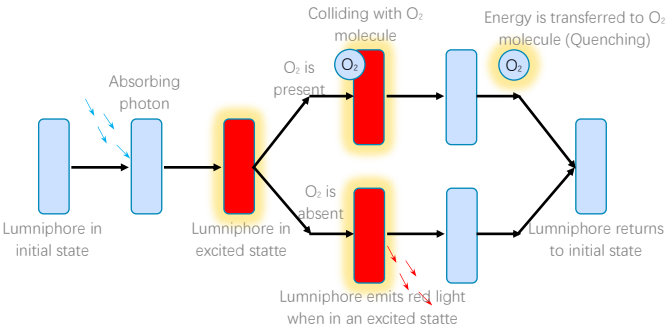
CE	Low Voltage Directive 2014/35/EU
	Electromagnetic Compatibility Directive 2014/30/EU
	RoHS 2 Directive 2011/65/EU
	EN 61010-1:2010; EN 61326-1:2013

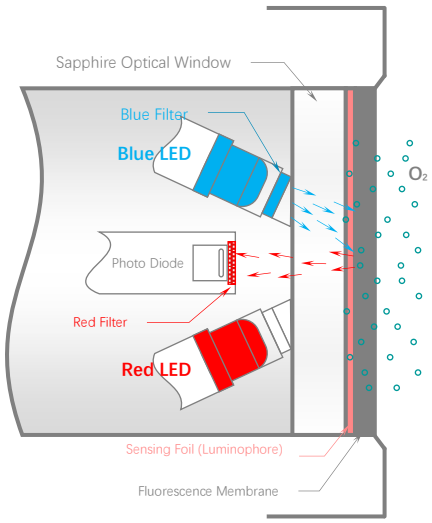
Delta Phase
WATER GAS MONITORING

CROSS SMART SENSOR

OPTICAL DO TECHNOLOGY

DO7 Sensor measurements are based on selected substances that can act as dynamic fluorescence quenchers. For example, for oxygen, when a ruthenium-complex is illuminated with a blue LED it will emit red fluorescence light whose lifetime intensity directly depends on the oxygen concentration. Lifetime based measurements are superior for both long-term (no drift) and fast response applications.





SPECIFICATIONS	
Range	0.00~20.00ppm, 0.00~20.00mg/L, 0~200% Air Saturation
Resolution	0.01 mg/L or 0.01% Saturation
Accuracy	<±2% of measured range
Respond Time	T90<120 seconds, consult factory for optional model of faster response time
Technology	Fluorophore 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	>IP68 Immersible
Pressure	<10 bar
Material	PVC Housing, Sapphire Optical Window. Optional 316L SS or Titanium housing
Digital Interface	RS-485 Modbus RTU
Power	24VDC (12-36VDC)
Dimension	Dia. 1.42" x 8.27" (Ø 36 mm x 210 mm)
Weight	2 lbs. (0.9 kg) with PVC housing and 30 ft cable

ORDER CODE

DO7 Optical Dissolved Oxygen

Housing Material

- Default PVC **-SS** 316L SS **-Ti** Titanium

Cable Length

-C10 10' cable **-C30** 30' cable **-C50** 50' cable

Please contact factory for more cable length

DO7 -C30

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Represented by: