

OLCT 20

Fixed Gas Detector



Description

The OLCT 20 series sensors are designed for initial assembly applications, which can be installed in shelters, on skids, for monitoring in very small spaces or for on-board applications.

They are mounted via M25 or 3/4" NPT threads or a special accessory to ensure a robust mounting without the need for an additional junction box.

The OLCT 20 transmitters provide a 4-20mA output that can be directly connected to PLCs with a maximum current consumption of 100mA at 24VDC.

They are certified ATEX explosion-proof by INERIS. Their IIC T6, makes them perfectly suited for the detection of hydrogen.

The stainless steel detectors offer protection and resistance to corrosive agents. IP 66 rated, they are resistant to dust and water splashes.

The OLCT 20's pre-calibrated sensors can be disconnected from the holder by rotation. These "smart" sensors can be calibrated on a workbench, outside of hazardous areas.

Catalytic oxidation sensors for combustible gases are specially treated to resist poisons. They benefit from extremely fast response times and total reliability.

Features

- Stainless steel base
- Small size
- Atex certification for H₂ applications
- Pre-calibrated sensor

Applications

- Machine
- Shelter
- Small spaces
- Mobility
- Refrigeration industry
- Water treatment



Sensor specifications

Gases	Type of sensor	Range (ppm)	Operating temperature*	Relative humidity uncondensed*	Pressure	Accuracy at full scale (at atmospheric pressure)	Life spo (in mont	in T (50) th) (s)	IP
Flammable gas	oxidation catalytic	0-100 % LIE	-25°C to +70°C	10% to 95% RH	Atm +/- 10%	1 % LIE between 0- 60 % LIE	48	6 (CH4)	66
O ₂	electrochemical	0-30% Vol	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	from 15 to 22% = 0,4% vol	30	6	66
СО	electrochemical	100, 300 and 1000	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	+/- 2 ppm (range 0-100)	36	15	66
H ₂ S	electrochemical	30, 100 and 1000	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	+/- 1,5 ppm (between 0-30 ppm)	36	15	66
NO	electrochemical	100, 300 and 1000	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	+/- 2 ppm (range 0-100)	26	15	66
H_2	electrochemical	2000	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	+/-5 ppm range 0-100	24	50	66
		100			Atm +/- 10%	+/- 5 ppm	24	25	66
NH ₃	electrochemical	1000	-20°C to +40°C	10% to 95% RH	Atm +/- 10%	+/- 10 ppm range 0-1000	24	20	66
		5000			Atm +/- 10%	+/150 ppm or 10%	24	60	66
CH ₄	catharometric	0-100 % Vol	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	1% vol	48	5	66
H ₂	catharometric	0-100 % Vol	-20°C to +50°C	10% to 95% RH	Atm +/- 10%	1% vol	48	5	66

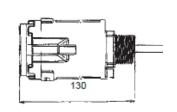
 $^{^{\}star}$ Temperature at 20 $^{\circ}\text{C}$ and at Atmospheric Pressure

Accessories



- 1 Tool kit (6147869)
- 2 Calibration cup (6331141) allows introduction of calibration gas on the sensor
- 3 Bypass adapter (6327910) allows measurement of samples
- f 4 Splash guard system (6329004) protects the detector from liquid projections
- $\textbf{5} \ \text{Remote gas introduction head (6327911) allows gas injection without having to access the sensor}$
- 6 Removable protective filter (6335975) protects the sensor against projections and dust
- **7** Wall mounted collecting cone (6331169) for use with lighter-than-air gases
- 8 Pitot tube (6793322)





Specifications

Tuna	XP transmitter				
Type Gas detection principle	Catalytic/Electrochemical / Catharometric				
Detected gases	Flammable, toxics and oxygen				
Measuring range	see chart				
Sensor housing	Stainless steel type 316L				
Precalibrated sensor	YES				
Power supply at the detector	15 to 30 VDC				
Maximum power consumption	100 mA (catalytic)				
Output signal	4-20 mA				
Load impedance	250 Ω (catalytic) Depending on power supply (chemical)				
Wiring	3 reinforced wires (catalytic)				
Loop impedance with Oldham monitor	32 Ω (catalytic) (1 km with 1.5 mm²) 128 Ω (chemical) (4 km with 1.5 mm²)				
Wiring connection	delivered with a 6 mm-diameter cable				
Mounting	M25 thread or 3/4" NPT or via accessory				
Ingress protection	IP66				
Certification	II 2 GD Ex db IIC T6 Gb Ex tb IIIC T85°C Db T.Amb: -20°C to 70°C INERIS 01 ATEX 0004X				
CEM Marking	EN 50270:2015 (type 2)				
Weight	800 g				
Dimensions	L 130 x D 60				
Operating temperature (for electronics)	-25°C to +60°C				

Teledyne Oldham Simtronics quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification. Please contact Teledyne Oldham Simtronics or their representative if you require more details.



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