DETECTORS-TRANSMITTERS FOR FLAMMABLE AND TOXIC GASES AND OXYGEN

SERIES 50 CO2, NH3, Cl2, O3, NO, H2, HCN, SIHA



Approval: IS or FLP



Pre-calibrated cell unit



Resistant to corrosive agents



IP 66



OLDHAM

Your environment, your safety, let's master them together



Let's secure your safety together



Together we will make your operations safe. In order to do this, it is essential to monitor the levels of gas in the atmosphere to avoid asphyxia, poisoning or explosions.

OLDHAM has developed the OLC 50 SERIES, a new generation of high quality gas detectors designed for assemblers and other industries to cater for all detection requirements at an excellent price.

OLC 50 detectors

♦ OLC 50 DETECTOR

The casing, which is made of alloy AS7 606 is covered with polyester epoxy paint (stainless-steel is also an option), is robust and resistance to corrosive agents.

The **OLC 50** detectors are practical and easy to use.

The flammable cells are insensitive to poisons.

Quick response times and reliable information.

OLO

OLC 50

OLC 50D DETECTOR

Based on the **OLC 50** detector-transmitter, the **OLC 50D** allows the cell unit to be used in remote mode.

The detector is equipped with a 15 metre long cable (standard) and a packing gland for direct connection to a data logger to allow for detection in seemingly inaccessible locations.



OLC 50D

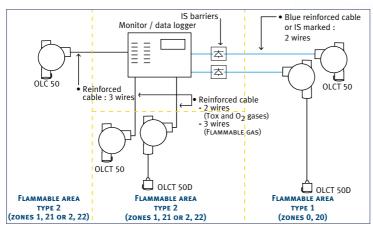
OLCT 50 transmitters

OLCT 50 TRANSMITTER

The casing of the new generation **OLCT 50** transmitters is especially resistant to external contaminants. These transmitters are practical and easy to use. Their precalibrated cells carry "FLP" or "IS" approval (depending to which gases they detect).

OLCT 50D TRANSMITTER

Based on the **OLCT 50**, the **OLCT 50D** allows the cell to be used in remote mode. The detector is equipped with a 15 metre long cable (standard) and a packing gland for direct connection to a data logger to allow for detection in seemingly inaccessible locations.





DRAWING OF CONNECTIONS PER ZONE

New generation: new advantages

The cells, which are made of 316L stainless steel, are robust and resistance to corrosive agents.

Certified IP 66, **OLC 50** and **OLCT 50 SERIES** are tightly sealed to avoid contamination from dust and liquid splashes.

Pre-calibrated cells of the **OLCT 50** and **OLCT 50D** can be disconnected by simply turning the head of the unit.

The cells, which are equipped with a printed circuit, can be calibrated outside hazardous areas on a bench.

Accessories

- 1 Tool kit
- 2 Gas input device:
 -standard model: EXPLO, O2, CO, H2S, NO, H2
 -model for special gases: NO2, SO2, Cl2, HCl, HCN, HF, NH3, ETO, O3, ClO2, PH3, AsH3, SiH4...
- (3) Gas circulation head for explosive gases, CO, H₂S, O₂
- (4) Splash guard
- (5) Remote gas introduction head
- 6 PTFE protective filter/ Activated carbon filter
- (7) Fastening
- **8** Gas collectors
- (9) Pitot tube
- 10 Fixing kit for remote cell block



Sensor spec

GASES	Type of sensor	RANGE (PPM)	OPERATING TEMPERATURE	
02	ELECTROCHEMICAL	30,00%	-20°C to +50°C	
CO	ELECTROCHEMICAL	100, 300 and 1000	-20°C to +50°C	
H ₂ S	ELECTROCHEMICAL	30, 100 and 1000	-20°C to +50°C	
NO	ELECTROCHEMICAL	100, 300 and 1000	-20°C to +50°C	
NO ₂	ELECTROCHEMICAL	10 and 30,0	-20°C to +50°C	
S0 ₂	ELECTROCHEMICAL	10,0 30,0 and 100	-10°C to +50°C	
Cl ₂	ELECTROCHEMICAL	10	-20°C to +50°C	
H ₂	ELECTROCHEMICAL	2000	-20°C to +50°C	
HCl	ELECTROCHEMICAL	30,0 and 100	-20°C to +40°C	
HCN	ELECTROCHEMICAL	10,0 and 30,0	-20°C to +40°C	
HF	ELECTROCHEMICAL	10	-10°C to +30°C	
NH ₃	ELECTROCHEMICAL	100	-20°C to +40°C	
		1000	-20°C to +40°C	
ETO/PRO	ELECTROCHEMICAL	30	-20°C to +50°C	
03	ELECTROCHEMICAL	1	-10°C to +40°C	
PH ₃	ELECTROCHEMICAL	1	-20°C to +40°C	
ClO ₂	ELECTROCHEMICAL	3	-20°C to +50°C	
SiH ₄	ELECTROCHEMICAL	50	-20°C to +40°C	
COCl ₂	ELECTROCHEMICAL	3	-10°C to +40°C	
AsH ₃	ELECTROCHEMICAL	1	-10°C to +40°C	
CH ₄	CATHAROMETRE	0-100% VOL	-20°C to +50°C	
H ₂	CATHAROMETRE	0-100% vol	-20°C to +50°C	
NH ₃	CATALYTIC	0-5000	-20°C to +50°C	
FLAMMABLE GAS	CATALYTIC	0-100% LEL	-20°C to +70°C	
			-20°C to 200°C	

^{*} temperature at 20°C and at Atmospheric Pressure

GASES	SI	ADF
02	YES	YES
CO	YES	YES
H ₂ S	YES	YES
NO	YES	YES
NO ₂	YES	NO
S0 ₂	YES	NO
Cl ₂	YES	NO
H ₂	YES	YES
HCl	YES	NO
HCN	YES	NO
NH ₃	YES	YES
ETO/PRO	YES	NO
03	YES	NO
PH ₃	YES	NO
AsH ₃	YES	NO
ClO2	YES	NO
cocl ₂	YES	NO
SiH ₄	YES	NO
HF	YES	NO

ifications

RELATIVE HUMIDITY UNCONDENSED	Pressure	ACCURACY AT FULL SCALE (AT ATMOSPHERIC PRESSURE)	LIFE SPAN (IN MONTH)	T (50)	IP
10% to 95% RH	ATM +/- 10%	from 5 to 30% = 0,4%vol	28	6	66
10% to 95% RH	Атм +/- 10%	+/- 2 PPM (RANGE 0-100)	48	10	66
10% to 95% RH	ATM +/- 10%	+/- 1,5 PPM (between 0-30 PPM)	48	15	66
10% to 95% RH	Атм +/- 10%	+/- 2 PPM (RANGE 0-100)	36	15	66
10% to 95% RH	ATM +/- 10%	+/- 0,8 PPM	26	20	66
10% to 95% RH	Атм +/- 10%	+/- 0,7 PPM RANGE 0-10	36	15	66
10% to 95% RH	ATM +/- 10%	+/- 0,5 PPM	26	50	66
10% to 95% RH	ATM +/- 10%	+/-5 PPM RANGE 0-100	26	50	66
10% to 95% RH	ATM +/- 10%	+/- 0,5 PPM RANGE 0-10	26	50	66
10% to 95% RH	Атм +/- 10%	+/- 0,3 PPM RANGE 0-10	26	40	66
10% to 95% RH	ATM +/- 10%	+/- 0,5 PPM	20	50	66
10% to 95% RH	ATM +/- 10%	+/- 5 PPM	26	50	66
10% to 95% RH	ATM +/- 10%	+/- 10 PPM RANGE 0-1000	26	50	66
10% to 95% RH	ATM +/- 10%	+/- 1 PPM	36	50	66
10% to 95% RH	Атм +/- 10%	+/-0,05 ppm	20	50	66
10% to 95% RH	ATM +/- 10%	+/- 0,05 PPM	20	40	66
10% to 95% RH	Атм +/- 10%	+/- 0,3 PPM	26	50	66
10% to 95% RH	ATM +/- 10%	+/- 1 PPM	20	40	66
10% to 95% RH	Атм +/- 10%	+/- 0,05 PPM	20	50	66
20% to 95% RH	ATM +/- 10%	+/- 0,05 PPM	26	40	66
10% to 95% RH	Атм +/- 10%	1% VOL	60	5	66
10% to 95% RH	ATM +/- 10%	1 % VOL	60	5	66
10% to 95% RH	Атм +/- 10%	100 ррм	36	8	66
10% to 95% RH	ATM +/- 10%	1 % LEL between 0- 60 % LEL	60	5	66
10% to 95% RH	ATM +/- 10%	1 % LEL between 0- 60 % LEL	60	5	66



DETECTORS	OLCT		OLCT		OLC 50	OLC 50D
MANUFACTURER	• OLDH/		• OLDHA		OLDHAM SA	OLDHAM SA
Туре	• Flameproof transmitter	• 15 transmitter	Flameproof transmitter	• IS remote transmitter	Flameproof detector	• Remote Flameproof detector
GAS DETECTION PRINCIPLE	• Catalytic / chemical	• Chemical	Catalytic / chemical	• Electrochemical	• Catalytic	Catalytic
DETECTED GASES	Flammable and toxic gases, oxygen	Toxic and oxygen	Flammable and toxic gases, oxygen	Toxic and oxygen	• Flammable gases	Flammable gases
CELL RANGE	gases, oxygen		See inside the br	ochure		
Casing			• Alloy AS7 606 - epoxy j			
CELL						
MATERIAL			• INOX 316	L		
PRE-CALIBRATED SENSOR	yes	yes	yes	yes	no	no
Power supply at the detector	15 to 30 VDC (catalytic)10 to 30 VDC (chemical)	• 10 to 26 VDC	• 15 to 30 VDC (catalytic) • 10 to 30 VDC (chemical)	• 10 to 26 VDC	• 2,7 VDC max	• 2,7 VDC max
MAXIMUM POWER	• 100 mA (catalytic)	• 25 mA	• 100 mA (catalytic)	• 25 mA	• 350 mA max	• 350 mA max
CONSUMPTION	• 25 mA (chemical)		• 25 mA (chemical)			
OUTPUT SIGNAL	• 4-20	mA	• 4-20 ।	mA	Wheastone bridge	Wheastone bridge
LOAD IMPEDANCE	 250 Ω (catalytic) Depinding on power supply (chemical) 	• 47 Ω max	 250 Ω (catalytic) Depinding on power supply (chemical) 	• 47 Ω max	• Not applicable	Not applicable
Wiring	3 reinforced wires (catalytic) 2 reinforced wires (chemical)	• 2 reinforced wires	3 reinforced wires (catalytic) 2 reinforced wires (chemical)	• 2 reinforced wires	• 3 reinforced wires	• 3 reinforced wires
LOOP IMPEDANCE	• 32 Ω (catalytic)	• 32 Ω (catalytic)	• 32 Ω (catalytic)	• 32 Ω (catalytic)	• 32 Ω (catalytic)	• 32 Ω (catalytic)
WITH OLDHAM	(1 km in 1,5 mm²)	(1 km in 1,5 mm²)	(1 km in 1,5 mm²)	(1 km in 1,5 mm²)	(1 km in 1,5 mm ²)	(1 km in 1,5 mm²)
MONITOR	• 128 Ω (chemical)		• 128 Ω (chemical)			
	(4 km in 1,5 mm²)		(4 km in 1,5 mm²)			
WIRING CONNEXION			• Gland - cable 2 to 12 n			
FASTENING			• 2 x 7 mm ho	oles		
Ingress			• IP 66			
PROTECTION CERTIFICATION	• 🐼 EEx d IIC T6 • ATEX II 2 GD	• 🕞 EEx ia IIC T4	• (Ex) EEx d IIC T6 • ATEX II 2 GD	• 🖘 EEx ia IIC T4 • ATEX II 1 GD	• 🐼 EEx d IIC T6	• 🐼 EEx d IIC T6 • ATEX II 2 GD
	• INERIS 01ATEX0027X	• INERIS 01ATEX0027X	• INERIS 01ATEX0027X	• INERIS 01ATEX0027X	• INERIS 01ATEX0027X	• INERIS 01ATEX0027X
CEM MARK	• EN 50270	• EN 50270	• EN 50270	• EN 50270	• EN 50270	• EN 50270
WEIGHT	• 1,9		• 1,1 kg (c		• 1,1 kg	• 1,1 kg
DIMENSIONS	• L 154 x l 233 x H 121	• L 154 x l 233 x H 121	• L 154 x l 170 x H 121	• L 154 x l 170 x H 121		• L 154 x l 170 x H 121
OPERATING TEMPERATURE	• -25°C to		• -25°C to		• -25°C to) +70°C) +200°C
		121		154	in HT ve	ersion
				1	OLC	50
	<u></u>		160			
	1		180			





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