OLCT 60

Fixed Gas Detector

Introducing the OLCT 60
A new generation of high quality gas detectors designed for the detection of flammable, toxic gases or oxygen.

- SIL 2 compatible
- Pre-calibrated sensors
- Non-intrusive calibration

New - New - New - New - New - New - New - New - New - New - New - New - New - New

INFRARED
XP IR
SENSOR

Certifications

ISO 9001

CE ATEX

The Fixed Gas Detection People

For any further information please contact us.
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OLCT 60

The OLCT 60 Series is available in several versions:

- **Explosion-proof XP** or **intrinsically safe IS sensor** (combustible, toxic or oxygen versions).
- **Remote** or **on-board sensor.** The OLCT 60 can be remotely mounted, allowing detection in inaccessible locations or in Zone 0 or 20 in the case of the intrinsically safe (IS) version.
- **Infrared XP IR** sensor or **OLCT IR transmitter.**

The OLCT 60 is equipped with a local display and non-intrusive access to a safe menu. In hazardous areas, calibration can be done without the need of a hot work permit.

The detector units are made of 316L stainless steel, and are rugged and resistant to corrosion.

Certified IP66, the OLCT 60 is sealed against dust and splash water. The versatile instrument is the ideal solution for gas detection covering all industrial needs for a wide variety of applications.

NEW XP IR sensor now available

The OLCT 60 can now be equipped with an infrared sensor, allowing the detection of explosive gases or CO_2 in severe environmental conditions where the presence of poisons could harm a catalytic cell.

Guaranteed for 3 years, the OLCT 60 XP IR version requires minimal maintenance and provides guaranteed extreme accuracy and constant stability.

Infrared XP IR Sensor

The OLCT 60 can be combined with our infrared OLCT IR transmitter for harsh applications such as refinery, onshore or offshore installations.
This combination offers outstanding reliability (the OLCT IR has an MTBF of 28 years) and simple operation.

OLCT 60 with OLCT IR

SENSORS TECHNICAL SPECIFICATIONS

Gas		Measuring Range (ppm)	XP Version	IS Version	Temperature Range (°C)	% RH	Accuracy (ppm)	Average Life Expectancy (month)	Response Time T_{50}/T_{90} (s)	Storage Condition
Explosive Gases	Infrared OLCT IR	0-100% LEL	■		-25 to +55	0 - 99	+/- 5% (CH_4) +/- 3% (HC)	> 60	9/15 (CH_4) with cover 7/8 (CH_4) without cover	(a)
	Infrared XP IR	0-100% LEL	■		-25 to +55	0 - 95	+/- 5%	48	11/30 (CH_4)	(a)
	Catalytic	0-100% LEL	■		-25 to +55	0 - 95	+/- 1% LEL (de 0 à 70% LEL)	40	6/15 (CH_4)	(b)
AsH_3	Arsine	1.00		■	-20 to +40	20 - 90	+/- 0.05	18	30/120	(a)
Cl_2	Chlorine	10.0		■	-20 to +40	10 - 90	+/- 0.4	24	10/60	(a)
ClO_2	Chlorine dioxide	3.00		■	-20 to +40	10 - 90	+/- 0.3	24	20/120	(a)
CO	Carbon monoxide	100 300 1000	■ ■ ■	■ ■ ■	-20 to +50	15 - 90	+/- 3 (range 0-100)	40	15/40	(a)
CO_2	Carbon dioxide	0-5% vol.	■		-25 to +55	0 - 95	+/- 3	48	11/30	(a)
$COCl_2$	Phosgene	1.00		■	-20 to +40	15 - 90	+/- 0.05	12	60/180	(c)
ETO	Ethylene oxide	30.0		■	-20 to +50	15 - 90	+/- 1.0	36	50/240	(a)
H_2	Hydrogen	2000	■	■	-20 to +50	15 - 90	+/- 5%	24	30/50	(a)
H_2S	Hydrogen sulfide	30.0 100 1000	■ ■ ■	■ ■ ■	-25 to +50	15 - 90	+/- 1.5 (range 0-30)	36	15/30	(a)
HCl	Hydrogen chloride	30.0 100		■ ■	-20 to +40	15 - 95	+/- 0.4 (range 0-10)	24	30/150	(a)
HCN	Hydrogen cyanide	10.0 30.0		■ ■	-25 to +40	15 - 95	+/- 0.3 (range 0-10)	18	30/120	(c)
HF	Hydrogen floride	10.0		■	-10 to +30	20 - 80	+/- 5%	12	40/90	(c)
NH_3	Ammonia	100 1000 5000	■ ■ ■	■ ■ ■	-20 to +40	15 - 90	+/- 5 +/- 20 +/- 150 or 10%	24	25/70 20/60 60/180	(a)
NO	Nitrogen monoxide	100 300 1000	■ ■ ■	■ ■ ■	-20 to +50	15 - 90	+/- 2 (range 0-100)	36	10/30	(a)
NO_2	Nitrogen dioxide	10.0 30.0		■ ■	-20 to +50	15 - 90	+/- 0.8	24	30/60	(a)
O_2	Oxygen	0-30% vol.	■	■	-20 to +50	15 - 90	0.4% Vol (from 15 to 22% O_2)	28	6/15	(a)
O_3	Ozone	1.00		■	0 to +40	10 - 90	+/- 0.03 (from 0 to 0.2 ppm) +/- 0.05 (from 0.2 to 1 ppm)	18	40/120	(c)
PH_3	Phosphine	1.00		■	-20 to +40	20 - 90	+/- 0.05	18	30/120	(a)
SiH_4	Silane	50.0		■	-20 to +40	20 - 95	+/- 1.0	18	25/120	(a)
SO_2	Sulfur dioxide	10.0 30.0 100		■ ■ ■	-20 to +50	15 - 90	+/- 0.7 (range 0-10)	36	15/45	(a)
CH_3Cl	Methyl chloride	500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
CH_2Cl_2	Methylene chloride	500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R12		1% vol.	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R22		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R123		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
FX56		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R134 a		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R142 b		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R11		1% vol.	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R23		1% vol.	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R141 b		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R143 a		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R404 a		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R507		2000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R410 a		1000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R32		1000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R227		1% vol.	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R407 c		1000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Freon R408 a		1000	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/90	(d)
Ethanol		500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/60	(d)
Toluene		500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/60	(d)
Isopropanol		500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/60	(d)
2-butanone (MEK)		500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/60	(d)
Xylene		500	■		-20 to +55	20 - 95	+/- 15% (from 20 to 70% FS)	40	25/60	(d)

(a) +4°C to +20°C
20 % to 60 % HR
1 bar ± 10 %
6 month maximum

(b) -25°C to +60°C
20 % to 60 % HR
1 bar ± 10 %
6 month maximum

(c) +4°C to +20°C
20 % to 60 % HR
1 bar ± 10 %
3 month maximum

(d) -20°C to +50°C
20 % to 60 % HR
1 bar ± 10 %
6 month maximum

OLCT 60

	XP Transmitter with XP sensor
Sensor:	• Catalytic / Electrochemical / Semi conductor / Infrared
Detected gases:	• Explosive or toxic gases, O_2, freons or VOC
Material:	• Epoxy coated aluminium + 316 stainless steel sensor
Pre-calibrated block :	• yes
Power supply:	• 16 to 30 V DC
Average consumption:	• 140 mA (catalytic) • 80 mA (electrochemical) • 155 mA (OLCT 60 / OLCT IR, max. current peak 550 mA) • 120 mA (infrared XP IR)
Output signal:	• 0 - 23 mA (4-20 mA reserved for measurement)
Cable:	• 3 active wires, shielded cable
Max. cable loop resistance / lenght with OLDHAM controller:	• Catalytic: 32 Ω / 1 km at 1.5 mm² (16 AWG) • Electrochemical and XP IR: 48 Ω / 1.5 km at 1.5 mm² (16 AWG) • OLCT 60 / OLCT IR: 8 Ω / 200 m at 1.5 mm² (16 AWG)
Ingress protection:	• IP 66
Approvals:	• ATEX II 2 GD • EEx d IIC T6 (OLCT 60) • Ex d e IIC T4 (OLCT IR) • SIL 2 according to EN 50271 • SIL 2 according to EN 61508 (OLCT IR only) • Electromagnetic compatibility according to EN 50270
Weight:	• 2.1 kg • 4.08 kg for OLCT 60 / OLCT IR
Dimensions:	• 154 x 186 x 121 mm / 6.06 x 7.32 x 4.76 inches • 317.5 x 129.3 x 169 mm / 12.50 x 5.08 x 6.65 inches for OLCT 60 / OLCT IR
Operating temperature:	-25°C to +55°C

	XP transmitter with IS sensor
Sensor:	• Electrochemical
Detected gases:	• Toxic gases or O_2
Material:	• Epoxy coated aluminium + 316 stainless steel sensor
Pre-calibrated block:	• yes
Power supply:	• 16 to 30 V DC
Average consumption:	• 80 mA
Output signal:	• 0-23 mA (4-20 mA reserved for measurement)
Cable:	• 3 active wires, shielded cable
Max. cable loop resistance / lenght with OLDHAM controller:	• 48 Ω / 1.5 km at 1.5 mm² (16 AWG)
Ingress protection:	• IP 66
Approvals:	• ATEX II 2 GD • EEx d [ia] ia IIC T4 • SIL 2 according to EN 50271 • Electromagnetic compatibility according to EN 50270
Weight:	• 2.1 kg • 4.08 kg for OLCT 60 / OLCT IR
Dimensions:	• 154 x 186 x 121 mm / 6.06 x 7.32 x 4.76 inches • 317.5 x 129.3 x 169 mm / 12.50 x 5.08 x 6.65 inches for OLCT 60 / OLCT IR
Operating temperature:	-25°C to +55°C

ACCESSORIES

A Calibration cup (6331141)
allows introduction of calibration gas on the sensor

B Bypass adapter (6327910)
allows measurement of samples

C Splash guard system (6329004)
protects the detector from liquid projections

D Remote gas introduction head (6327911)
allows introduction of gas without opening the detector

E Removable protective filter (6335975)
protects the sensor against projections and dust

F Duct measurement kit (6793322)
allows gas monitoring in a duct

G Mounting bracket (6322420)
allows the mounting of the detector to the ceiling

H Protective cover (6123716)
protects the detector against bad weather conditions or against direct sun radiations

I Adapter plate (6793718)
allows the replacement of another OLDHAM detector without re-drilling

J Wall mounted collecting cone (6331169)
for use with lighter-than-air gases

K Ceiling mount collecting cone (6331168)
for use with lighter-than-air gases

L Tool kit (6147877)

ISO 9001:2008 CERTIFIED
ISO 14001:2004 CERTIFIED

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