

DETECTORS-TRANSMITTERS FOR FLAMMABLE AND TOXIC GASES AND OXYGEN

SERIES 50

CH₄, CO, O₂, H₂S
CO₂, NH₃, Cl₂, O₃, NO, H₂, HCN, SiH₄



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.



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

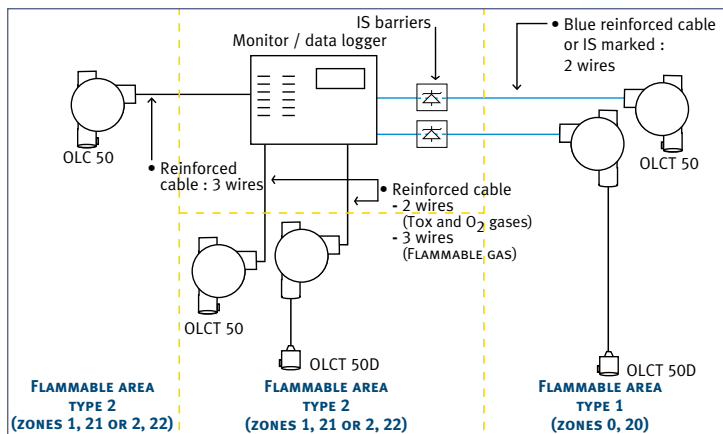
The casing of the new generation **OLCT 50** transmitters is especially resistant to external contaminants. These transmitters are practical and easy to use. Their pre-calibrated cells carry "FLP" or "IS" approval (depending to which gases they detect).

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.



OLCT 50



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



| GASES | TYPE OF SENSOR | RANGE (PPM) | OPERATING TEMPERATURE |
|-------------------|-----------------|-------------------|----------------------------------|
| O ₂ | 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 |
| SO 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 1000 | -20°C to +40°C -20°C to +40°C |
| ETO/PRO | ELECTROCHEMICAL | 30 | -20°C to +50°C |
| O ₃ | 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

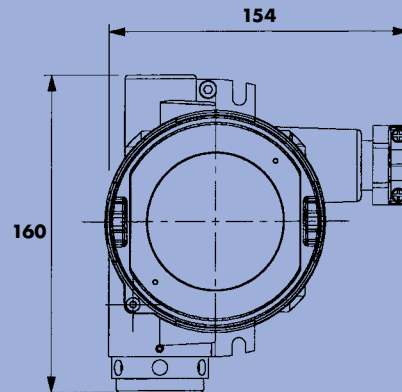
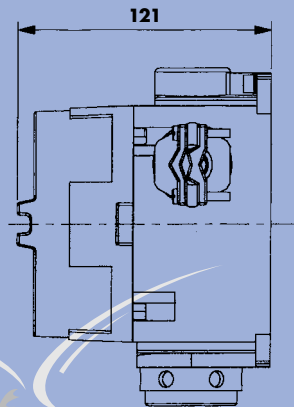
| GASES | SI | ADF |
|-------------------|-----|-----|
| O ₂ | YES | YES |
| CO | YES | YES |
| H ₂ S | YES | YES |
| NO | YES | YES |
| NO ₂ | YES | NO |
| SO ₂ | YES | NO |
| Cl ₂ | YES | NO |
| H ₂ | YES | YES |
| HCl | YES | NO |
| HCN | YES | NO |
| NH ₃ | YES | YES |
| ETO/PRO | YES | NO |
| O ₃ | YES | NO |
| PH ₃ | YES | NO |
| AsH ₃ | YES | NO |
| ClO ₂ | YES | NO |
| COCl ₂ | YES | NO |
| SiH ₄ | YES | NO |
| HF | YES | NO |

| 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 | ATM +/- 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 | ATM +/- 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 | ATM +/- 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 | ATM +/- 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 | ATM +/- 10% | +/-0,05 PPM | 20 | 50 | 66 |
| 10% to 95% RH | ATM +/- 10% | +/- 0,05 PPM | 20 | 40 | 66 |
| 10% to 95% RH | ATM +/- 10% | +/- 0,3 PPM | 26 | 50 | 66 |
| 10% to 95% RH | ATM +/- 10% | +/- 1 PPM | 20 | 40 | 66 |
| 10% to 95% RH | ATM +/- 10% | +/- 0,05 PPM | 20 | 50 | 66 |
| 20% to 95% RH | ATM +/- 10% | +/- 0,05 PPM | 26 | 40 | 66 |
| 10% to 95% RH | ATM +/- 10% | 1% VOL | 60 | 5 | 66 |
| 10% to 95% RH | ATM +/- 10% | 1 % VOL | 60 | 5 | 66 |
| 10% to 95% RH | ATM +/- 10% | 100 PPM | 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 |



TECHNICAL CHARACTERISTICS

| DETECTORS | OLCT 50 | | OLCT 50D | | OLC 50 | OLC 50D |
|------------------------------------|--|---|--|---|--|--|
| MANUFACTURER | • OLDHAM SA | | • OLDHAM SA | | • OLDHAM SA | • OLDHAM SA |
| TYPE | • Flameproof transmitter | • IS 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 | See inside the brochure | | | | | |
| CASING | • Alloy AS7 606 - epoxy polyester paint | | | | | |
| 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 26 VDC | • 15 to 30 VDC (catalytic) | • 10 to 26 VDC | • 2,7 VDC max | • 2,7 VDC max |
| MAXIMUM POWER CONSUMPTION | • 100 mA (catalytic) | • 25 mA | • 100 mA (catalytic) | • 25 mA | • 350 mA max | • 350 mA max |
| OUTPUT SIGNAL | • 4-20 mA | | • 4-20 mA | | • Wheastone bridge | • Wheastone bridge |
| LOAD IMPEDANCE | • 250 Ω (catalytic) | • 47 Ω max | • 250 Ω (catalytic) | • 47 Ω max | • Not applicable | • Not applicable |
| WIRING | • 3 reinforced wires (catalytic) | • 2 reinforced wires | • 3 reinforced wires (catalytic) | • 2 reinforced wires | • 3 reinforced wires | • 3 reinforced wires |
| LOOP IMPEDANCE WITH OLDHAM MONITOR | • 32 Ω (catalytic) (1 km in 1,5 mm ²) | • 32 Ω (catalytic) (1 km in 1,5 mm ²) | • 32 Ω (catalytic) (1 km in 1,5 mm ²) | • 32 Ω (catalytic) (1 km in 1,5 mm ²) | • 32 Ω (catalytic) (1 km in 1,5 mm ²) | • 32 Ω (catalytic) (1 km in 1,5 mm ²) |
| WIRING CONNEXION | • Gland - cable 2 to 12 mm (standard) | | | | | |
| FASTENING | • 2 x 7 mm holes | | | | | |
| INGRESS PROTECTION | • IP 66 | | | | | |
| CERTIFICATION | • EEx d IIC T6 • ATEX II 2 GD • INERIS 01ATEX0027X | • EEx ia IIC T4 • ATEX II 1 GD • INERIS 01ATEX0027X | • EEx d IIC T6 • ATEX II 2 GD • INERIS 01ATEX0027X | • EEx ia IIC T4 • ATEX II 1 GD • INERIS 01ATEX0027X | • EEx d IIC T6 • ATEX II 2 GD • INERIS 01ATEX0027X | • EEx d IIC T6 • ATEX II 2 GD • INERIS 01ATEX0027X |
| CEM MARK | • EN 50270 | • EN 50270 | • EN 50270 | • EN 50270 | • EN 50270 | • EN 50270 |
| WEIGHT | • 1,9 kg | | • 1,1 kg (casing) | | • 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 160 x H 121 | • L 154 x l 170 x H 121 |
| OPERATING TEMPERATURE | • -25°C to +60°C | | • -25°C to +60°C | | • -25°C to +70°C • -25°C to +200°C in HT version | |



OLC 50

Subject to operation conditions

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DETECTION GAZ / MESURE A L'EMISSION
GAS DETECTION / STACK GAS MONITORING

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