

# OLCT IR

## Infrared Transmitter Detector

- Onshore and offshore installations
- Resistant to poisons and corrosion
- Long-life, infrared (IR) sensor
- Minimal maintenance
- Non-intrusive calibration
- SIL2 Capability according to EN 50402 / EN 61508 (pending)



Offshore platforms, petrochemical and chemical industries, naval installations, waste water treatment plants... the OLCT IR is built to withstand these harsh environments which require the most efficient gas and flame detection.

You encounter some of the most severe constraints; infrared technology is very often the only solution.

The extra-tough OLCT IR detector with an infrared sensor provides top performance, flammable gas detection and reliability.

# OLCT IR

## Proven Leading-Edge Technology

### Efficiency

The semi-conductor electronics of the OLCT IR guarantee extreme accuracy and constant stability.

Costs are considerably reduced :

- after an initial calibration the detector remains stable throughout its lifetime
- the OLCT IR requires minimal maintenance => operating costs are negligible

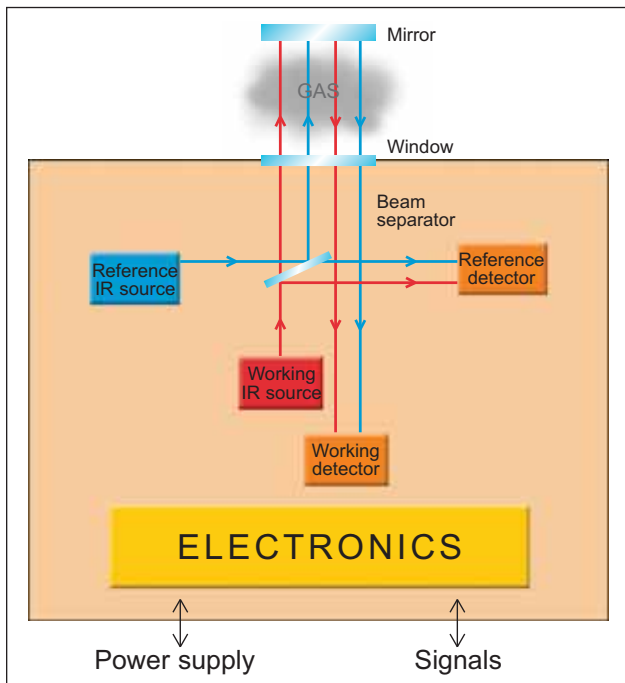
### The answer to false alarms

In addition to hydrocarbon emissions, false alarms can very quickly become a major and recurrent problem. The economic implications have led us to design the OLCT IR with the ability to ignore external elements that trigger false alarms.

### Non-intrusive calibration

The OLCT IR is equipped with a non-intrusive system allowing a single operator to access a protected menu. The detector can therefore be calibrated in an explosive area in total compliance with safety rules.

### A reliable operating principle (Dual Beam)



## Accessories

- Magnetic key
- Weatherproofing
- Mounting bracket
- Gas intake pipe
- Calibration cup

# Unrivaled Performance

The OLCT IR includes a case fitted with a mounting system and a wiring compartment for electrical connections in explosive zones.

Using a magnetic system housed in this compartment, the user can calibrate the detector locally in explosive zones by setting the zero and sensitivity without opening the compartment cover.



## Reliability

- Resistant to poisoning by silicon vapors, hydrogen sulfide, chlorinated products, silicones etc.
- High gas concentration does not saturate the transmitted signal
- Accurate response to various gases
- Overcomes the disadvantages of an optical system. All vital functions are maintained even if an accumulation of dust or other substances reduces transmission by 70%. In such cases, the OLCT IR reports the anomaly.
- The mirror and window are heated to prevent misting or icing of the optics
- Operates if there is an oxygen deficiency in the atmosphere
- SIL2 Capability according to EN 50402 / EN 61508 (pending)

## Durability

- The housing includes a stainless steel explosion-proof compartment and a secure connection compartment
- The mirror is made of quartz
- External optics are made of quartz capable of withstanding high pressure and abrasive substances.

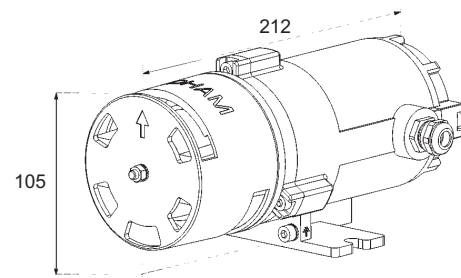
## Special Version

Simultaneously optimizes the response to various hydrocarbons, meeting the requirements for multi-hazard sites.



Type:	OLCT IR
Detection principle:	Optics : Infrared absorption
Gases detected:	Hydrocarbons, Methane, propane/butane as standard, CO <sub>2</sub> , Others on request
Detection range:	0-100 % LEL, 0-100% Vol (methane) 0-3% CO <sub>2</sub>
Housing:	Stainless steel 316L
Ingress protection:	IP 66
Sensitivity:	1 % LEL
Accuracy:	+/- 2 % LEL HC or +/- 5 % of the reading from -25°C to +55°C
Response time:	T50 < 7sec
Selftest:	Continuous
Calibration:	In factory or locally
Relative humidity:	0 to 99 % (without condensation)
Output signal:	4-20 mA
Max. load resistance:	300 Ω
Trouble signals:	Line fault (0 mA) Optics fault or T° outside limit (1 mA) Calibration mode (2 mA) Scale overrun (23 mA)
Power supply:	15 to 30 VDC at detector terminals
Power consumption:	< 5W
Connection:	Shielded cable, 3 active wires
Maximum resistance per conductor of detector / central unit cable:	8 Ω (250m of 1.5mm <sup>2</sup> ) under central unit 21 VDC
Type of cable inlet:	M20, cable gland not included cable diameter 7 to 11 mm
Operating temperature:	-30°C to +55°C
Storage temperature:	0°C to +30 °C (dry place)
Weight and dimensions:	L 212 x H 105 x W 120mm - 1.6 kg

CE Electromagnetic compatibility:	Complies with EN50270
IECEX - ATEX	
Explosive atmospheres:	Ex d e ia IIC T4 - Ex II 2 GD Ex tD A21 IP66 T135°C T. amb: -50°C to 65°C IECEX INE 07.0005X - INERIS 03ATEX0141X
SIL Approval:	SIL2 Capability according to EN 50402 / EN61508 (pending)



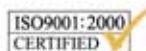
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