# GD10L

One person commissioning Reduced misalignment 15 years warranty IR sources

## Open Path Infrared Hydrocarbon Gas Detector

The GD10L provides an effective response to the detection of gas hazards in a wide range of industrial environments from boiler plant rooms to offshore petrochemical installations.

### **Description**

The GD10L safeguards life, environment and property through reliable gas detection over path lengths from 2 (6.5 feet) to 30m (100 feet).

The IR sources are more resistant to vibration/shock than competing technologies, hence replacement of the IR sources is not necessary during it's long service life.

The unit combines a transmitter / receiver into a single housing and utilises a novel retro-reflector. The whole system can be commissionable by a single person.

The retro-reflector is heated to minimise condensation and icing.

5 years warranty, 15 years on IR sources

### **Applications**

- Offshore Drilling and Production Platforms
- FPS0's
- Refineries
- Fuel Loading Facilities
- Compressor Stations
- Chemical Plants

Features Enhanced coverage	Benefits Fewer devices needed to cover installation
Solid State IR Sources	Ultra-stability and long life
Dual IR sources / detectors	Well proven auto compensated design
Precision designed retro-reflector	Less prone to misalignment
Heated retro-reflector	Minimises icing and condensation
Handheld configuration tool	Simple one-man set up & commissioning
Reduced cabling	Cable to one end only for indoor

applications





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### **Technical Data**

GENERAL

Detection method IR-absorption, dual wavelength, dual path

IR-Source Solid state IR source, 50Hz flash

Self-test Continuous

Calibration Factory set, no field recalibration

**PERFORMANCE** 

Detection range 5 LEL.m Methane

Path Length 2-30m

7 - 100 feet

Long-term stability\*) Better than 0.2 LEL.m Repeatability\*) Better than 0.1 LEL.m

Response time T50 = 2.5 sec T90 = 5 sec.

\*)Refers to -20°C to +45°C

**OUTPUT SIGNAL** 

Standard Current source 4 - 20 mA, max. load

impedance 500 Ohms

Option Current sink 4 - 20 mA

Detector warnings:

Clean optics 1 mA (Option 2mA)

Sensor failure 0 mA

**ELECTRICAL** 

Detector power supply 18-32 V DC Power consumption Approx. 5 W

Electrical connection 3 wires (M20 EExe cable gland)

RFI/EMI Complies with EN50081-1, EN50081-2,

EN50082-1 and EN500082-2

Retro-reflector

Power supply 230V AC Option: 110 V AC Power consumption 120W (Max) 30m (100 feet) range

**ENVIRONMENTAL** 

Operating:  $-20^{\circ}\text{C} \text{ to } +60^{\circ}\text{C}$   $\left(-4^{\circ}\text{F to } +140^{\circ}\text{F}\right)$ 

Humidity (operation) 99% RH non-condensing

**APPROVALS** 

ATEX certified ATEX 2 II G EExde IIC T6

IEC Ex Ex de IIC T6
Temperature Range -40°C to +65°C

**MECHANICAL** 

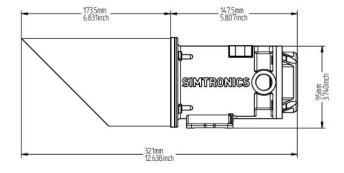
PROTECTION CATEGORY IP66/IP67 DIN 40050 (NEMA 4X) Housing material Stainless steel SIS2343 (ASTM 316)

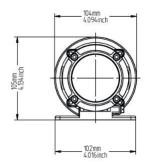
**WEIGHT** 

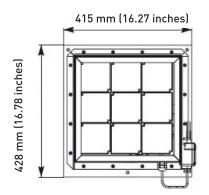
Transceiver ~3.5 Kg (7.7 lbs)
Retro-reflector ~14Kg (30.8 lbs)
Mounting bracket ~5.5 Kg (12.1 lbs)

#### **ACCESSORIES**

Alignment tool Hand held terminal Gas simulation filter











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