



# Model GD10L

## Open Path Infrared Hydrocarbon Gas Detector

GAS DETECTION SENSORS ■ INTEGRATED CONTROL SYSTEMS ■ SMARTWIRELESS® ■ PIPELINE ANALYZERS ■ ALARMS

## Description

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.

The GD10L safeguards life, environment and property through reliable gas detection over path lengths from 2m (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 its long service life.

The unit combines a transmitter / receiver into a single housing and utilizes 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
- ▶ FPSO's
- ▶ Refineries
- ▶ Fuel Loading Facilities
- ▶ Compressor Stations
- ▶ Chemical Plants

## Features

- ▶ Enhanced coverage
- ▶ Solid state IR sources
- ▶ Dual IR sources / detectors
- ▶ Precision designed retro-reflector
- ▶ Heated retro-reflector
- ▶ Handheld configuration tool
- ▶ Reduced cabling

## Benefits

- Fewer devices needed to cover installation
- Ultra-stability and long life
- Well proven auto compensated design
- Less prone to misalignment
- Minimizes icing and condensation
- Simple one-man set up & commissioning
- Cable to one end only for indoor applications

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853-814562-R03

## 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 Ohm  
**Option:** Current sink 4-20 mA  
**Detector warnings:**  
Clean Optics - 1 mA (Option 2mA)  
Sensor Failure - 0 mA

## Electrical

**Detector Power Supply:** 18-32 VDC  
**Power Consumption:** Approx. 5W  
**Electrical Connection:** 3 wires (M20 EExe cable gland)  
**RFI/EMI:** Complies with EN50081-1, EN50081-2,  
EN50082-1 and EN50082-2  
**Retro-reflector:**  
Power supply 230 VAC, option 110 VAC  
Power consumption 120W (Max) 30m (100 feet) range

## Environmental

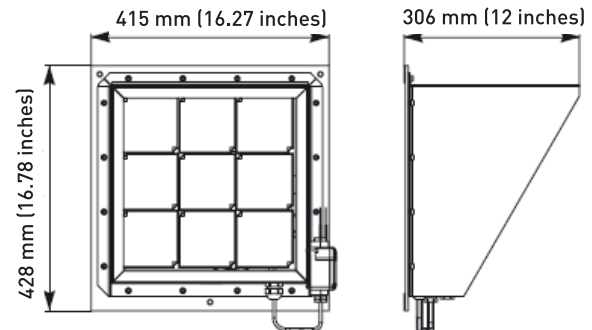
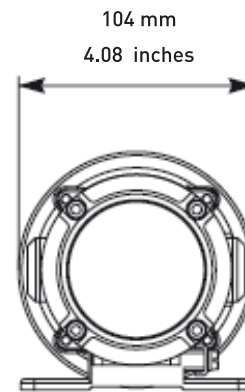
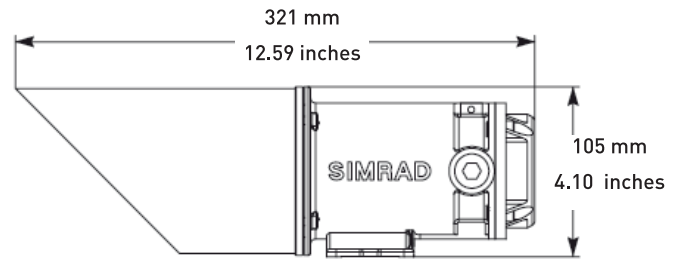
**Operating:** -20°C to +60°C (-4°F to +140°F)  
**Humidity (operation):** 99% RH non-condensing

## Approvals

**ATEX Certified:** ATEX 2 II G EExde IIC T6  
**IEC Ex:** Ex de IIC T6  
**Temperature Range:** -40°C to +65°C; -40°F to +149°F

## 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:** ~14 Kg (30.8 lbs)  
**Mounting Bracket:** ~5.5 Kg (12.1 lbs)

## Accessories

Alignment tool  
Hand held terminal  
Gas simulation filter

Specifications subject to change without notice



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ISO 9001: 2008  
Certified