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

Application

- Offshore Drilling and Production Platforms
- FPS0'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

Minimises icing and condensation

Simple one-man set up & commissioning

Cable to one end only for indoor applications





GD10L

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 Option: Other ranges

Path Length 2-20m or 2-30m

7 – 65 feet or 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.

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 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)

Retro-reflector power supply

Power supply 230V AC Option: 110 V AC Power consumption 60 W (Max) 20m (65 feet) range

400M (MA) 00 (400 ())

120W (Max) 30m (100 feet) range

ENVIRONMENTAL

Operating: $-0^{\circ}\text{C to } +45^{\circ}\text{C}$ [$-4^{\circ}\text{F to } +113^{\circ}\text{F}$]
Option: $-30^{\circ}\text{C to } +60^{\circ}\text{C}$ [$-22^{\circ}\text{F to } +140^{\circ}\text{F}$]

Humidity (operation) 99% RH non-condensing

CERTIFICATION

ATEX certified ATEX 2 II G EExde IIC T6

RFI/EMI PROTECTION

Complies with EN50081-1, EN50081-2,

EN50082-1 and EN50082-2.

MECHANICAL

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

WEIGHT

Transceiver ~3.5 Kg (7.7 lbs)

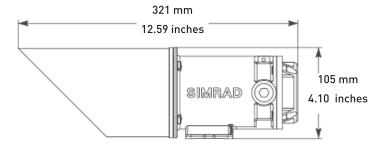
Retro-reflector ~8.5 Kg (18.7 lbs), 20m range

~14Kg (30.8 lbs), 30m range

Mounting bracket ~5.5 Kg (12.1 lbs)

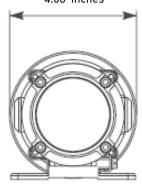
ACCESSORIES

Alignment tool 708-812800.1 Hand held terminal 109-813103.9 Gas simulation filter 419-813183.1

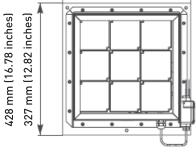


104 mm

4.08 inches



415 mm (16.27 inches) 315 mm (12.35 inches)



306 mm (12 inches) 238 mm (9.88 inches





Simtronics ASA

Kabelgaten 4 B, Økern Næringspark P.O. Box 314, Økern, NO-0511 Oslo, Norway Tel. +47 2264 5055 Email: mail@simtronics.no

Simtronics SAS

792, av de la Fleuride BP 11016, 13781 AUBAGNE CEDEX - FRANCE Tel : +33 (0) 442 180 600 Email: contact@simtronics.fr