

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 its 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
- 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

Minimises icing and condensation

Simple one-man set up & commissioning

Cable to one end only for indoor applications



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°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

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

