TELEDYNE
OLDHAM SIMTRONICS
Everywhereyoulook™

GD10PE

IR Extended Point Gas Detector



Presentation

The GD10PE is designed for critical applications involving large volumes of air with high velocity. In places where you need fast reliable detection of low gas concentrations. GD10PE is in a class of its own.

The versatile GD10PE is suitable for monitoring, among others, the HVAC air intakes of living quarters, temporary refuges and local equipment rooms. In addition the ventilation air and combustion air intakes of gas turbines can be monitored along with the ventilation air extract duct, the only location where you can guarantee to detect a gas leak on a turbine package.

With a measuring range of 0-20% LEL the GD10PE is 5 times more sensitive than standard point detectors.

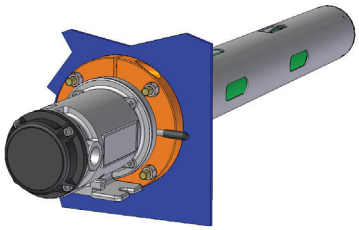
The GD10 range of infrared gas detectors differ from all other models, because they utilise si licon based solid-state infrared sources. The complete optomechanical design and construction is so stable that an ultra fast speed of response can be achieved whilst providing unparalleled service life and detector stability, thus saving on maintenance and service costs.

An industry standard HART® interface is used for configuration of the levels as well as access to maintenance data.

Features and benefits include an independently heated mirror and lens for high performance detection in rough environmental conditions and guaranteed continuous operations at 85°C which make this instrument suitable for turbine ventilation extract ducts .

Features

- Solid state IR sources (SimSourceTM) for superior long term performance compared to filament lamps
- No recalibration, monitors and accounts for all changes in optical path thanks to true dual path, double compensation optical design
- Selectable response rate
- Dual layer weather protector (No mesh, gauze, hydrophobic filters or sinters = No delay, no failure on demand)
- Early dirty optics warning for improved preventative maintenance



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Technical data

General

Detection method	Ir-absorption, dual wavelength, dual path
Ir-source	Solid state ir source, 50hz flash
Detection range	0-20% Lel (0-1% vol.) Methane
Gases detected	Hydrocarbons
Self-test	Continuous
Calibration	Factory set, no field recalibration

Performance

Accuracy Refers to -20°c to +60°c (-4°f to +140°f)	±1,4% Lel full scale ±1% Lel (0-10% lel reading) ±1.4% Lel (10-20% lel reading)		
Response time	Detector reading: T20 T50 T90	100% Lel test gas: 0.5 Sec. 0.8 Sec. 1.1 Sec.	20% Lel test gas: 0.8 Sec. 2.1 Sec. 5 Sec.

Output signal

Standard	Current source 4 – 20 mA, max. Load Impedance 500 ohm
Option	Current sink 4 – 20 mA
Hart®	Maintenance and configuration
Detector warnings: - Early clean optics - Dirty optics - Detector failure	 2 mA 1 mA 0 mA

Electrical

Power supply	24V DC, range (18 - 32V DC)
Power consumption	Approx. 3.5 W
Connection	3 Wires (0.5mm_2 - 2.5 mm_2)
Cable entry	M20 exe cable gland

Environment

Storage	-40°C to + 70°c (-40°f to +158°f)
Operating	-40°C to + 60°C (-40°F to +140°F)
Probe, inside duct	Up to +85°c (185°f)
Humidity (operation)	100% RH

Explosion proof housing

Main compartment	Exd IIC T6
Terminal comp.	Exe
Protection category	Ip66/ip67 din 40050
Housing material	Stainless steel SIS2343 (ASTM316)
Dimensions (lxwxh)	805x104x106 (mm) 31.7x4.1x4.2 (Inches) overall
Weight (detector)	Approx. 6.5 Kg (14.3 Lbs)
Weather protection	Approx. 0.3 Kg (0.7 lbs)
Duct mount kit	Approx. 2. 1 Kg (4.6 lbs)

Warranty

5 Years full warranty on a complete instrument
15 Years warranty on the IR-sources

Approvals

ATEX / IECEX / INMETRO	II 2G Ex d e IIC T5/T6 Gb
CSA	C22.2 No 152-M1984 and ANSI 12.13.01-2000 ex de IIC T6 (Canada) Class I, Division 2, groups A, B, C and D (US and Canada)
Others	SIL2 (Software SIL3), ABS, MED

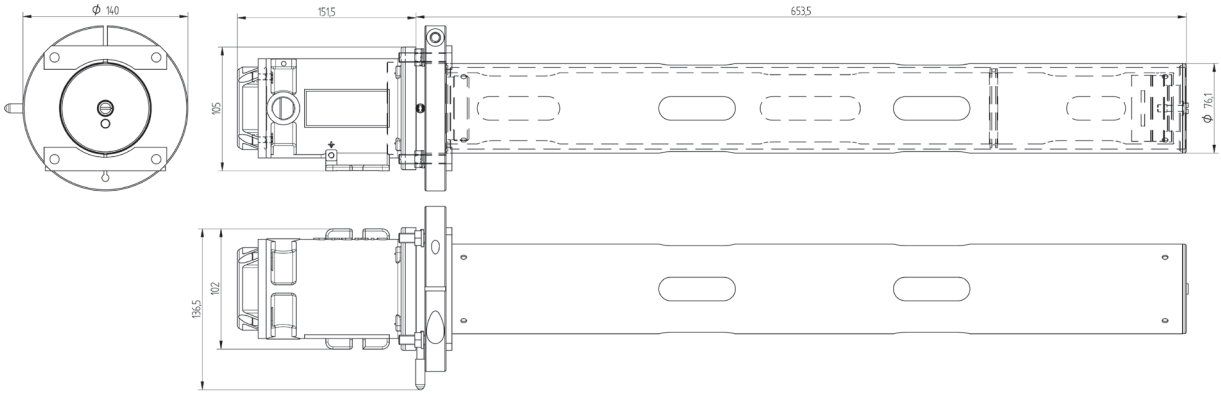
Versions

Gas	Ranges
Methane	0-20%Lel
Ethylene	5,000 Ppm

Other versions are available, please contact your dealer.

Accessories

Weather protection	Required for standard installation
Sample flow housing	For sampling systems and testing
Duct mount kit	For through wall installation



Teledyne Oldham Simtronics quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification. Please contact Teledyne Oldham Simtronics or their representative if you require more details.

TELEDYNE
GAS AND FLAME DETECTION
Everywhereyoulook™

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