

GD10 P

IR Point Gas Detector



Presentation

The GD10P infrared gas detector is the market reference for combustible gas detection. It has set the standard for gas detectors in the areas of performance, response time, stability and low maintenance. GD10P comes with a 5 year warranty.

The GD10P differs from all other infrared gas detectors because it uses a solid-state infrared source. The optical block is so robust that it comes with a 15 year warranty and provides an unparalleled detector stability and an unmatched service life.

The GD10P also features heated optics to prevent condensation, a HART interface, fail-safe operation and global approvals.

Features

- 5 years warranty
- 15 years warranty semiconductor IR source (Simtronics patent)
- Zero maintenance
- Response Time T90 < 1.0 s
- SIL 2 certified (SIL3 software)
- Early dirty optics warning for improved preventative maintenance



GD10 P

IR Point Gas Detector

Technical data

General

Technology	IR-absorption, dual wavelength, dual path
IR-source	Solid state IR source
Gases detected	Hydrocarbons (for CO ₂ see separate data sheet)
Self-test	Continuous
Calibration	Factory set, no field recalibration
Configuration	HART protocol

Performance

Accuracy	±3% FS between 0-50 % reading
Refers to -20 °c to +45 °c	±5% FS between 50-100 % reading
Response time	All gases T20 = 0,7 sec T50 = 1,7 sec T90 = 4 sec

Output signal

Standard	Current source 4 – 20 mA, max. Load Impedance 500 ohm
Option	Current sink 4 – 20 mA
HART®	Maintenance and configuration HART 7

Detector faults (HART configurable)

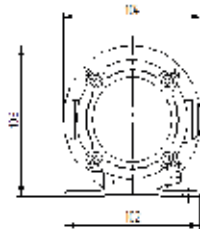
- Early clean optics	Pre warning 2 mA
- Dirty optics	Dirt accumulation 1 mA
- Detector failure	Internal fault 0 mA

Electrical

Power supply	24V DC (18 - 32V DC)
Power consumption	Approx. 3.5 W
Connection	3-wire shielded cable (0.5-2.5mm ²)
Cable entry	M20 Ex e cable gland

Temperature range

Storage	-40 °C to +70 °C (-40 °F to +158 °F)
Operating	-40 °C to +60 °C (-40 °F to +140 °F)
Humidity (Operation)	0- 100% RH



Explosion proof housing

Ingress Protection	IP66/IP67
Housing material	Stainless Steel SIS2343 (ASTM316)
Weight	Approx. 2.9 Kg
Dimensions (LxWxH)	264 X 104 x 106 mm

Warranty

5 years full warranty on a complete instrument
 15 years warranty on the infrared sources

Approvals

ATEX / IECEx / INMETRO	II 2 G / Ex db eb IIC T6 Gb
CSA	C22.2 No 152-M984 and ANSI 12.13.01-2000 Ex d e IIC T6 (for Canada only) Class I, Division 2, Groups A, B, C and D (USA and Canada)
Various	SIL 2 certified (software is SIL 3), ABS, MED

Versions

Gas	Ranges
Methane	0-100%LEL, 0-100%vol
Propane	0-100%LEL, 0-100%Vol

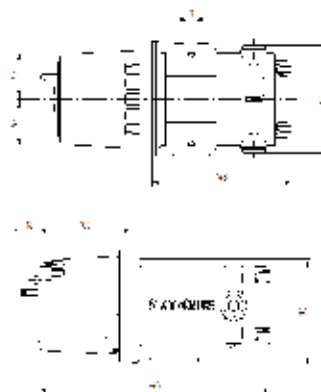
Other versions are available, please contact your dealer.

Front cover

Required, select one	
Weather protection	Supplied as standard
Sample flow housing	For sampling systems and bump test
Duct mount kit	For duct monitoring

Accessories

Mosquito net	Extra insect protection
Sun shade	Shielding for extreme solar radiation exposure or snow deposit



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.



Copyright © 2022 Teledyne Technologies. GF-00270L-EN . All rights reserved.
 gasandflamedetection@teledyne.com

AMERICAS

14880 Skinner Rd
 Cypress, TX 77429
 USA
 Tel.: +1 713-559-9200
 Fax: +1 281-746-3064

EMEA

ZI Est, Rue Orfila,
 CS 20417
 62027 ARRAS CEDEX, France
 Tel.: +33-3-21-60-80-80
 Fax: +33-3-21-60-80-00

ASIA PACIFIC

Room 04, 9th Floor, 275
 Ruiping Road,
 Xuhui District, Shanghai,
 China
 TGFD_APAC@teledyne.com

www.teledynegasandflamedetection.com