



## 3M™ Simtronics™ GD10 P

IR Point Gas Detector

### Presentation

The GD10P infrared gas detector is the benchmark for combustible gas detection. It has set the standard for gas detectors in the areas of safety, 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<1.5s
- SIL 2 certified (SIL3 software)
- Early dirty optics warning for improved preventative maintenance

# 3M™ Simtronics™ 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 <sub>2</sub> see separate data sheet)
Self-test	Continuous
Calibration	Factory set, no field recalibration
Configuration	HART protocol (response time, fault settings)

#### Performance

Accuracy	±3% FS between 0-50 % reading Refers to -20°C to +45°C ±5% FS between 50-100 % reading	
Response time	Methane T20 = 0.3 Sec T50 = 0.7 Sec T90 = 1.4 Sec	Other gases T20 < 1.0 Sec T50 < 2.5 Sec T90 < 6.0 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 Faults (HART configurable)	Pre warning (2 mA)
- Early clean optics	Dirt accumulation (1 mA)
- Dirty optics	Internal fault (0 mA)
- Detector failure	

#### Electrical

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

#### Temperature range

Storage	-40°C to +70°C (-40°F to +158°F)
Operating	-40°C to +65°C (-40°F to +149°F)
Humidity (Operation)	0- 100% RH

#### Explosion proof housing

Ingress Protection	IP66/IP67
Housing material	Stainless Steel SIS2343 (ASTM316)
Weight	Approx. 2.9 Kg (6.4 Lbs)
Dimensions (LxWxH)	264 X 104 x 106 (mm) 10.4 X 4.1 X 4.2 (Inches)

#### Warranty

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

#### Approvals

ATEX	II 2 G / Ex d e IIC T5/T6 Gb
CSA	C22.2 No 152-M984 and ANSI/TSA 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)
IECEx	Ex d e IIC T5/T6 Gb
INMETRO	Ex d e IIC T6 Gb
Various	SIL 2 certified (software is SIL 3), ABS, MED

#### Versions

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

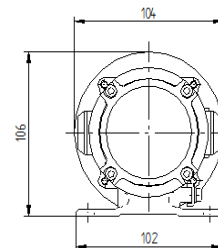
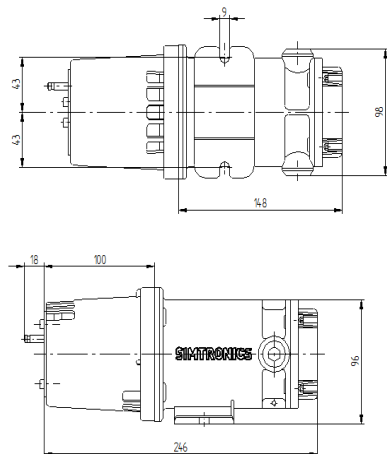
Other versions are available, please contact your dealer.

#### 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



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