

## **Gas & Flame Detection**

## 3M™ Simtronics GD10P

IR Point Gas Detector



- 5 years warranty
- Solid state IR source (SimSource™) for superior long term performance
- Zero drift no recalibration
- Fast Response Time T90<1.5s
- SIL 2 certified
- Early dirty optics warning for improved preventative maintenance

#### **PRESENTATION**

The GD10P infrared gas detector is the benchmark for combustible gas detection on offshore installations. It has set the standard for gas detectors in the areas of safety, stability and low maintenance. GD10P comes with 5 years warranty.

The GD10P differs from all other infrared gas detectors because it uses a silicon based solidstate infrared source. The optical block is so stable that it comes with a 15 year warranty and provides an unparalleled detector stability, an unmatched service life and a ultra fast response time.

For retrofit applications, a bridge interface is available allowing the detector to be connected directly to catalytic systems using the existing cabling and control modules.

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

# 3M<sup>™</sup> Simtronics GD10P

IR Point Gas Detector

## **TECHNICAL DATA**

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GENERAL		
Technology	IR-absorption, dual wavelength, dual path	
IR-Source	Solid state IR source	
Gases detected	Hydrocarbons, see separate data sheet for $\mathrm{CO}_2$ detection	
Self-test	Continuous	
Calibration	Factory set, no field recalibration	
Configuration	via HART (response t	ime, fault levels)
PERFORMANCE		
Accuracy refers to -20°C to +45°C	±3% FS between 0-50 % reading ±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 warnings: - Early clean optics - Dirty optics - Detector failure	Configurable (HART) Pre warning (2 mA) Dirt accumulation (1 mA) Internal fault (0 mA)	

ELECTRICAL
Dower oumply

24V DC, range (18 - 32V DC) Power supply

Power consumption Approx. 3.5 W

Connection 3 wires (0.5mm<sup>2</sup> - 2.5 mm<sup>2</sup>)

Cable entry M20 Exe 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	

100% RH (operation)

EXPLOSION PROOF HOUSING	
Protection category	IP66/IP67
Housing material	Stainless steel SIS2343 (ASTM316)
Weight	Approx. 2.9 kg (6.4 Lbs)
Dimensions (LxWxH)	264 × 104 × 106 (mm) 10.4 × 4.1 × 4.2 (inches)

#### WARRANTY

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

APPROVALS	
ATEX	II 2 G / Ex d e IIC T5/T6 Gb
CSA	C22.2 No 152-M1984 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 (for 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	

VERSIONS		
Gas	Ranges	
Methane	0-100%LEL, 0-100%Vol	

0-100%LEL Propane Other versions are available, please contact your dealer.

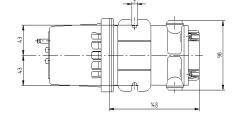
### FRONT COVER

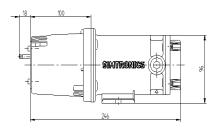
- Weather protection For standard point detector - Sample flow housing For sampling systems and testing

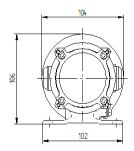
- Duct mount kit For duct monitoring

#### **ACCESSORIES**

Mosquito net	Extra insect protection
Sun shade	Shielding for extreme solar radiation exposure
Handheld Terminal	For maintenance







Simtronics is a world-class provider of sophisticated gas and flame detection systems. The company has more than 25 years' experience in supplying gas detection for use in applications ranging from plant boiler rooms to offshore petrochemical facilities. Simtronics' products are used worldwide to help protect life and assets.

