



- 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 solid-state 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™ Simtronics GD10P

IR Point Gas Detector

TECHNICAL DATA

GENERAL									
Technology	IR-absorption, dual wavelength, dual path								
IR-Source	Solid state IR source								
Gases detected	Hydrocarbons, see separate data sheet for CO ₂ detection								
Self-test	Continuous								
Calibration	Factory set, no field recalibration								
Configuration	via HART (response time, 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	<table border="0"> <tr> <td>Methane</td> <td>Other gases</td> </tr> <tr> <td>T20 = 0.3 sec</td> <td>T20 < 1.0 sec</td> </tr> <tr> <td>T50 = 0.7 sec</td> <td>T50 < 2.5 sec</td> </tr> <tr> <td>T90 = 1.4 sec</td> <td>T90 < 6.0 sec</td> </tr> </table>	Methane	Other gases	T20 = 0.3 sec	T20 < 1.0 sec	T50 = 0.7 sec	T50 < 2.5 sec	T90 = 1.4 sec	T90 < 6.0 sec
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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:	Configurable (HART)								
- Early clean optics	Pre warning (2 mA)								
- Dirty optics	Dirt accumulation (1 mA)								
- Detector failure	Internal fault (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								
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)	100% RH								

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	
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	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

