

GD10P

IR POINT GAS DETECTOR

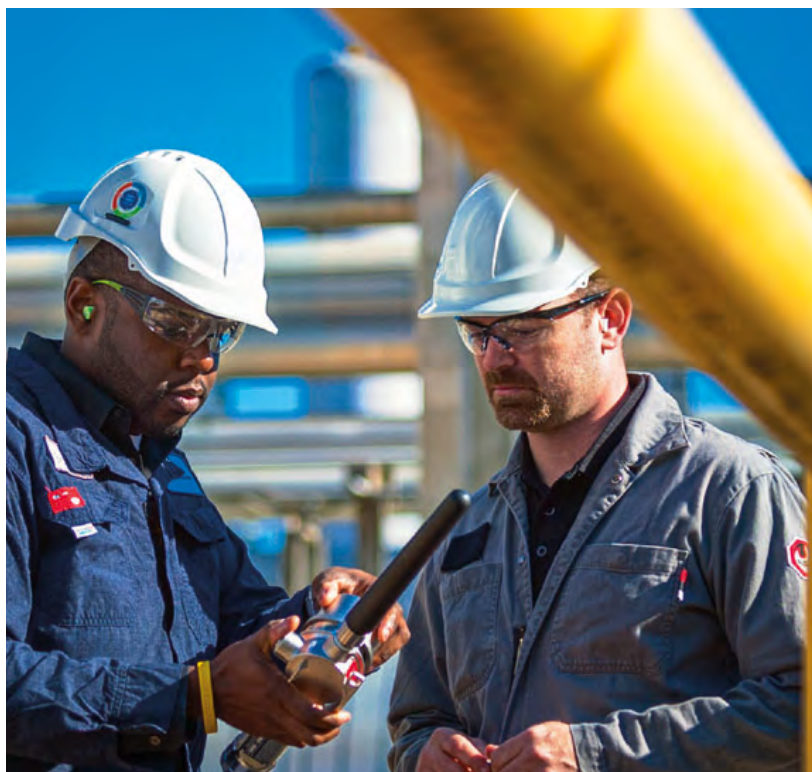


KEEPING YOUR CREW SAFE JUST GOT EASIER.

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.



GD10P Features

- 5 years warranty
- 15 years warranty semiconductor IR source (Simtronics patent)
- Zero maintenance
- Response Time $T_{90} < 1.0s$
- SIL 2 certified (SIL3 software)
- Early dirty optics warning for improved preventative maintenance

TECHNICAL SPECIFICATIONS

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 Refers to -20°C to +45°C	±3% FS between 0-50 % reading ±5% FS between 50-100 % reading								
Response Time	<table> <tr> <td>Methane</td><td>Other gases</td></tr> <tr> <td>T20 = 0.2 Sec</td><td>T20 < 1.0 Sec</td></tr> <tr> <td>T50 = 0.4 Sec</td><td>T50 < 2.5 Sec</td></tr> <tr> <td>T90 = 1.0 Sec</td><td>T90 < 6.0 Sec</td></tr> </table>	Methane	Other gases	T20 = 0.2 Sec	T20 < 1.0 Sec	T50 = 0.4 Sec	T50 < 2.5 Sec	T90 = 1.0 Sec	T90 < 6.0 Sec
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T20 = 0.2 Sec	T20 < 1.0 Sec								
T50 = 0.4 Sec	T50 < 2.5 Sec								
T90 = 1.0 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)	<table> <tr> <td>- Early clean optics</td><td>- Pre warning (2 mA)</td></tr> <tr> <td>- Dirty optics</td><td>- Dirt accumulation (1 mA)</td></tr> <tr> <td>- Detector failure</td><td>- Internal fault (0 mA)</td></tr> </table>	- Early clean optics	- Pre warning (2 mA)	- Dirty optics	- Dirt accumulation (1 mA)	- Detector failure	- Internal fault (0 mA)		
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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 (6.4 Lbs)								
Dimensions (LxWxH)	264 X 104 x 106 (mm) 10.4 X 4.1 X 4.2 (Inches)								
WARRANTY									
Warranty	5 years full warranty on a complete instrument 15 years warranty on the infrared sources								
APPROVALS									
ATEX / IECEx / IN-METRO	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								

