

GD10P-CO2

IR Point Gas Detector

Fast reliable response
No field recalibration
Solid state IR-source

The GD10P-CO2 uses state of the art IR gas measurement, to give a fast, reliable response. The GD10P has set the standard for gas detection in the areas of safety, stability and low maintenance. The GD10P comes with 5 years warranty



The GD10P-CO2 has been designed with features that provide an effective response to the detection of CO2 in a wide range of industrial environments from boiler plant rooms to offshore petrochemical installations. The GD10P-CO2 differs from all other point infrared gas detectors, because they utilise silicon based solid-state sources. The complete optomechanical design and construction is so stable that an ultra fast speed of response can be achieved whilst providing unparalleled service life and detector stability, thus saving on maintenance and service costs.

We offer the longest combined detector and IR source warranty on the market.

Supplied with worldwide hazardous area approvals. Suitable for use in SIL 2 and SIL 3 systems.

Features

- Solid state IR sources (SimSource™)
- High IR source flash rate
- True dual path, double compensation optical design
- Selectable response rate
- Dual layer weather protector
- Early dirty optics warning
- Integral termination compartment
- Low power consumption
- Independently heated mirror and lens

Benefits

- Superior long term performance compared to filament lamps
- Improved stability and speed of response
- No recalibration, monitors and accounts for all changes in optical path
- Fastest IR point detector on the market, ideal for speed critical applications
- No mesh, gauze, hydrophobic filters or sinters = No delay, no failure on demand
- Improved preventative maintenance
- Reduced installation time, the unit is ready out of the box
- Reduces load on UPS
- High performance detection in rough environmental conditions



Technical Data

GENERAL

Detection method	IR-absorption, dual wavelength, dual path
IR-Source	Solid state IR source, 50Hz flash
Gases detected	C02
Self-test	Continuous
Calibration	Factory set, no field recalibration

PERFORMANCE

Lifetime stability	±7% of full scale (FS) reading
Accuracy	±5% FS between 0-50 % reading ±7% FS between 50-80 % reading
Response time	T20 = 1 sec. T50 = 2.5 sec. T90 = 6 sec.
Start-up time	Less than 60 sec.

OUTPUT SIGNAL

Standard	Current source 4 – 20 mA, max. load impedance 500 Ohm
Option	Current sink 4 – 20 mA
Option	HART®
Detector warnings:	
Early clean optics	Pre warning (1 mA pulse)
Clean optics	Dirt accumulation (1 mA) Option: Dirt accumulation (2mA)
Detector failure	Internal malfunction in the detector (0 mA)

ELECTRICAL

Power supply	24 V DC, range 18-32 V DC
Power consumption	Approx. 3.5 W
Connection	3 wires (0.5mm ² - 1.5mm ²)
Cable entry	M20 EExe cable gland

TEMPERATURE RANGE

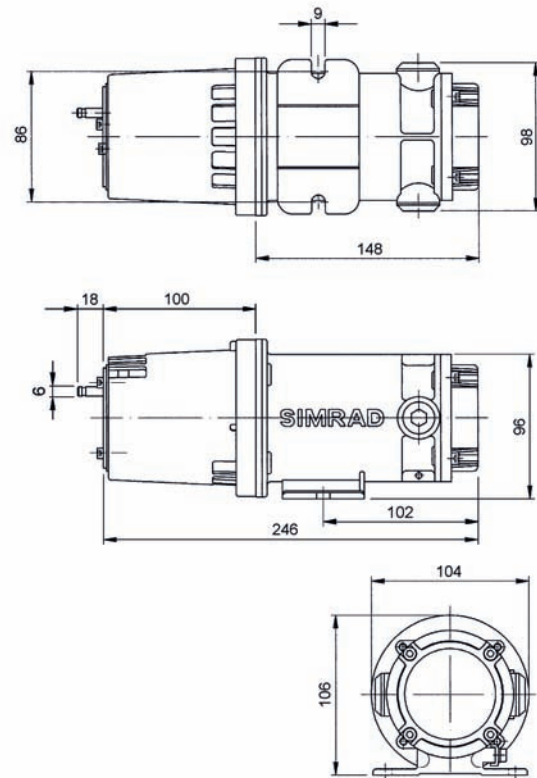
Storage	-40°C to + 70°C
Operating	-20°C to + 45°C
Humidity (operation)	100% RH

EXPLOSION PROOF HOUSING

Main compartment	EExd IIC T6
Terminal comp.	EExe
Protection category	IP66/IP67 DIN 40050
Housing material	Stainless steel SIS2343 (ASTM 316)
Weight	Approx. 2.9 kg

WARRANTY

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



APPROVALS

ATEX	Directive 94/9/EC, EMC directive 89/336/EEC Article 4
CSA	Standard C22.2.No. 152-M1984
IECEX	NEM 07.006
ABS	# 04-LD444057-PDA
GOST-R	
SIL	Qualified for SIL2 and SIL3 systems

VERSIONS

Standard ranges (Volume):
10000ppm (1%), 3%, 5% 10% and 100%
The 0-100% volume is also available compensated for Methane interference.
Other versions are available, please contact your dealer.

ACCESSORIES

Weather protection	Standard (Included)
Sample flow housing	For sampling systems and testing
Duct mount kit	Through wall installation
Mosquito net	Extra insect protection
Sun shade	Shielding for extreme radiation exposure