GD10P-C02

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-C02 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 systems.

An industry standard HART interface is used for configuration of special fault levels as well as access to extended maintenance data.

Features

optical design

Solid state IR sources (SimSourceTM)

High IR source flash rate
True dual path, double compensation

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 CO2
Self-test Continuous

Calibration Factory set, no field recalibration
Configuration HART (response time, fault levels)

PERFORMANCE

Lifetime stability $\pm 7\%$ of full scale (FS) reading Accuracy $\pm 5\%$ FS between 0-50 % reading

±7% FS between 50-80 % reading

Response time T20 = 1 sec. (0.3 sec) Configurable T50 = 2.5 sec. (0.7 sec)

T90 = 6 sec. (1.6 sec)

Start-up time Less than 60 sec.

OUTPUT SIGNAL

Option

Standard Current source 4 – 20 mA, max. load

impedance 500 Ohm 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 24 V DC, range18-32 V DC

Power consumption Approx. 3.5 W

Connection $3 \text{ wires } (0.5 \text{mm}^2 - 1.5 \text{mm}^2)$ Cable entry M20 EExe cable gland

TEMPERATURE RANGE

Storage $-40^{\circ}\text{C to} + 70^{\circ}\text{C}$ Operating $-20^{\circ}\text{C to} + 65^{\circ}\text{C}$ Humidity (operation) 100% RH

EXPLOSION PROOF HOUSING

Main compartment EExd IIC T6
Terminal comp. EExe

Protection category IP66/IP67 DIN 40050

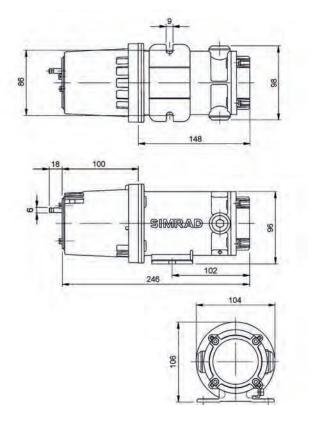
Housing material Stainless steel SIS2343 (ASTM 316)

Weight Approx. 2.9 kg

WARRANTY

5 years full warranty on complete instrument

15 years warranty on the IR-sources



APPROVALS

ATEX 07ATEX 1438
CSA 1773527
IECEx NEM 07.006
INMETRO AEX-11698

ABS # 04-LD444057-PDA SIL Qualified for SIL2 systems

VERSIONS

Standard ranges (Volume):

10000ppm (1%), 3%, 5% 10% and 100%

The 0-100% volume is also compensated for

Methane interference.

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 through wall installation

ACCESSORIES

Mosquito net Extra insect protection

Sun shade Shielding for extreme radiation exposure





Ex-Ox-Tox Gasdetectie Westerdreef 5V 2152 CS Nieuw-Vennep Telefoon: 0252 620885 E-mail: info@exoxtox.nl Website: www.exoxtox.nl