



**GROVELEY DETECTION**

**Groveley Detection Limited**

Anchor Works, Groveley Road

Christchurch, Dorset

BH23 3HB

UK

T: +44 (0)1202 483497

F: +44 (0)1202 486658

E: sales@groveley.co.uk

## Point Infrared Detector GD10P-CO<sub>2</sub>

The Simtronics GD10P has been designed with features that provide an effective response to the detection of CO<sub>2</sub> in a wide range of industrial environments from boiler plant rooms to offshore petrochemical installations.

These infrared gas detectors differ from all other models, because they utilise patented silicon based solid-state infrared sources. These sources are so stable that once a detector is factory calibrated it needs no adjustment on site throughout its' working life, thus saving on maintenance and service costs.

### **Features**

- No field calibration - The GD10P-CO<sub>2</sub> does not require re-calibration during its service life
- Solid State IR Source, the SimSource technology carries 15 years warranty
- The dual wavelength, dual path concept has been applied, with great success, since 1985 in all types of operating conditions ranging from arctic to subtropical
- Simple retrofit capability / Enhanced fault diagnostics

### **Benefits**

- Unique advantage of using two solid-state, silicon based IR sources and two Lead Selenide detectors
- The IR source is 100% stable and has an expected life of about 60 years. Competing products use technology based on filament lamps, which only have an expected life of about 3 to 5 years
- Offers two dirty optic signals, as standard. The ability to detect gas is not immediately lost when the optical assembly becomes dirty
- The detector comes with five year full warranty



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buying quality...*

# Point Infrared Gas Detector GD10P-CO<sub>2</sub>

## TECHNICAL DETAILS

### Models Available

- Carbon Dioxide 0 to 100% Volume  
(Compensated for methane interference)
- Carbon Dioxide 10,000 ppm (1%), 3%,  
5%, 10%, 100%

*Other versions on request*

### Response Time

- Standard 5 second T20 = 1.0 seconds  
T50 = 2.5 seconds  
T90 = 6.0 seconds
- Start-up time Less than 60 seconds

### Output(s)

- Current source 4-20 mA  
max load 500 ohms
- Option Current sink
- HART® Maintenance & configuration
- Warning levels Early clean optics  
Configurable (HART) Dirty optics  
Sensor failure

### Temperature

- Operating -20°C to +45°C
- Storage -40°C to +70°C
- Humidity 0 to 100% RH (non condensing)

### Electrical

- Voltage 24V DC Nominal (18V to 32V DC)
- Typical power consumption 3.5W



### Wiring

- 3 Wire

### Explosion Proof Housing

- Main compartment EExd IIC T6
- Terminal comp. EExe
- Ingress Protection IP66/67 DIN 40050
- Shipping weight 2.9KG
- Material 316 stainless steel
- Entries 2 x M20
- 264L x 106H x 104W overall (mm)

### Hazardous Area Certification

- ATEX Directive 94/9/EC
- CSA Standard C22.2.No. 0-M91
- IECEX NEM 07.006
- ABS # 04-LD444057-PDA
- Gost R
- SIL Qualified for SIL2 & SIL3 systems
- EMC Directive 89/336/EEC Article 4

### Accessories

- Weather protector
- Sample flow housing
- Duct mounting bracket
- Digital gas concentration display
- Test gas kit
- Sunshades
- Insect guard

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