GD10P
Infrared IR gas detector

Product description

The GD10P gas detector was designed to face industrial gas risks, from industrial boilers to offshore drilling platforms. It distinguishes itself from the other absorption IR detectors on the market thanks to its use of a semiconductor IR source.

A detector offering the highest performances

The GD10P has a very solid optical bloc offering a high and unrivalled stability, a very fast response time and an exceptional service life that significantly reduce exploitation costs.

- 5 years warranty – 15 years warranty on semiconductor infrared source (Simtronics patent)
- Response time T90<1.5s
- SIL2 certified (SIL3 software)
- Automatic compensation of dirty or clogged optics
- Almost zero maintenance

Advantages of the infrared technology

- Oxygen presence is not necessary for measurements, thus the GD10P can be used in inert atmosphere.
- No risk of silicon vapor or H2S poisoning (unlike other technology like catalytic sensors).
- No saturation effect, no false measurements: the detector is able to monitor gas concentrations up to 100% vol.
- This detector has an auto test running continuously that signals defaults, dirty/clogged optics and malfunction to the controller system.
- The gas pressure flow does not influence measurements.
- Because of its reliability, the GD10P requires only few operation tests and no particular on-site maintenance for all of its service life thus significantly reducing maintenance costs.

Well-known around the world

Combustible gas detectors (natural gas, GPL, hydrocarbons, solvents, alcohols) represent the great majority of gas detection equipment used in the petrochemical industry where the infrared technology is highly recommended and preferred.

With its semiconductor infrared technology offering unrivaled stability and exceptional service life, the Simtronics GD10P gas detector is one of the best solutions on the market.

Detected gas:
Hydrocarbon vapors (various versions) & CO2

Operating principle: IR absorption IR, double wavelength - Source semiconductor IR source

Auto testing: Continuous Calibration: Factory gate, no re-calibration on site

Accuracy:
- ±3% full scale between 0 and 50%
- ±5% full scale between 50 and 100%
Response time T20 = 1 sec. / T50 = 2.5 sec. / T90 = 6 sec.
Power 24 VDC (18-32 VDC) – Consumption around 3.5 W

Output signal:
Power generator 4-20 mA, max. load impedance 500 Ohm (optional 4-20 mA current sink)

Environment: Humidity100% HR

Housing: Ex d IIC T6 Gb / Connection Ex e

Protection IP66/IP67 DIN 40050

Material: Stainless steel SIS2343 (ASTM 316)

Dimensions 264 x 104 x 106 mm (w, l, h) – Weight around 2.9 kg

Warranty:
- 5 years detector warranty
- 15 years IR sources warranty

Certifications:
- ATEX : II 2 G / ex d e IIC Ts/T6 Gb
  Ex d e IIC T6 (for Canada only) Class i, division 2, groups A, B, C AND D (for USA and Canada)