

THE INFRARED DETECTOR WITH AN EXCEPTIONAL LIFETIME FOR COMBUSTIBLES GASES

The GPIOP fixed infrared detector has been designed for the detection of combustible gases in industrial environments such as industrial boilers or offshore drilling platforms as well as NVG vehicle stations.

The IR source is guaranteed for 15 years, and the product for 5 years.

Its particularity : entirely stainless steel and equipped with a semiconductor infrared source, which gives them an exceptional life span.

The infrared source has other benefits: an optimized maintenance with little manpower and no cells to change as well as an ultra fast and response time (<1s).

ATEX certified for use in explosive atmospheres.
 Qualified for SIL2 and SIL3 systems.
 Configuration via HART protocol.



GD10P versions

GD10P: for the detection of C₂H₄, C₃H₈, C₄H₁₀, CH₄

GD10P-CO₂: for the specific detection of CO₂

BENEFITS :

- The presence of oxygen is not necessary for the measurement, the GD10P can be used in an inert atmosphere.
- There is no risk of poisoning contrary to other technologies (e.g. catalytic or semi-conductor) since no chemical reaction occurs. For example, silicone vapors and H₂S have no effect on the the detector or its measurement.
- The gas flow rate has no influence on the accuracy.
- No saturation effect, therefore no false measurements. The detector is able to measure gas concentrations up to 100 % vol. up to 100 % vol.
- The detector has a continuous self-test function and signals of dirty optics or malfunctions to the control system.
- The GD10P reduces operating costs significantly.
- Because of its reliability, the GD10P requires few functional tests and no on-site calibration during its lifetime.

TECHNICAL CHARACTERISTICS :

- Technology :** Infrared absorption
- Material :** Stainless steel SIS2343 (ASTM316)
- Dimensions :** 264 x 104 x 106 mm
- Weight :** ± 2,9 kg (6.4 lbs)
- Temperature :** - 40 to +60 °C
- Humidity :** 0 to 100% RH (non-condensing)
- Protection rating :** IP66/IP67
- Cable entry :** M20
- Power supply :** 24 DC (18-32 VDC)
- Power consumption :** ± 3,5 W
- Current output :** 4-20 mA, max. load impedance 500ohm
- Cable :** Shielded Tierce (0.5mm2-2.5mm2)
- Certifications :** ATEX / IECEx / INMETRO II 2 G / Ex db eb IIC T6 Gb SIL 2 certified (SIL 3 software), ABS, MED
- Warranty :** 15 years (infrared source), 5 years (detector)

STANDARD FEATURES :

- Solid-state infrared source (SimSource™) for superior long-lasting performance over filament lamps
- No recalibration or control of the optical beam due to dual beams and dual wavelengths
- T90<1.0 response time
- Dual weather protection (no louvre, no filter=no delay, no fault)
- Preventive maintenance with dirty optical alarm signal

DISCOVER ALSO :

GD10PE : Due to its design, it is conceived for areas that are difficult to access with traditional detectors : detection of hydrocarbons in ventilation systems, gas turbines, air extraction gas turbines, air extraction ducts.

