

GS01 Wireless Infrared Hydrocarbon Gas Detector

The **GS01** is based on innovative MEMS technology to achieve high reliability and ultralow power consumption for battery operation. The revolutionary optical design guarantees unrivalled signal stability, no interference from environmental changes and no need for recalibration. Wireless installation reduces system costs with 60-80%.

Reliable and rugged

- SIL2 certified (pending)
- Continuous monitoring
- Fast response
- No calibration
- Automatic self-test
- Explosion proof by intrinsic safe design
- Stainless steel housing
- Heated optics
- No dust filter to be clogged by particles or fluids

Wireless installation

- No cables gives a simple, flexible and low-cost installation
- Ideal for fixed installation and as transportable monitors
- ISA-100.11a or WirelessHART compatible with SIL2-rate safety layer
- New detectors are automatically added to the network
- In field replaceable battery pack

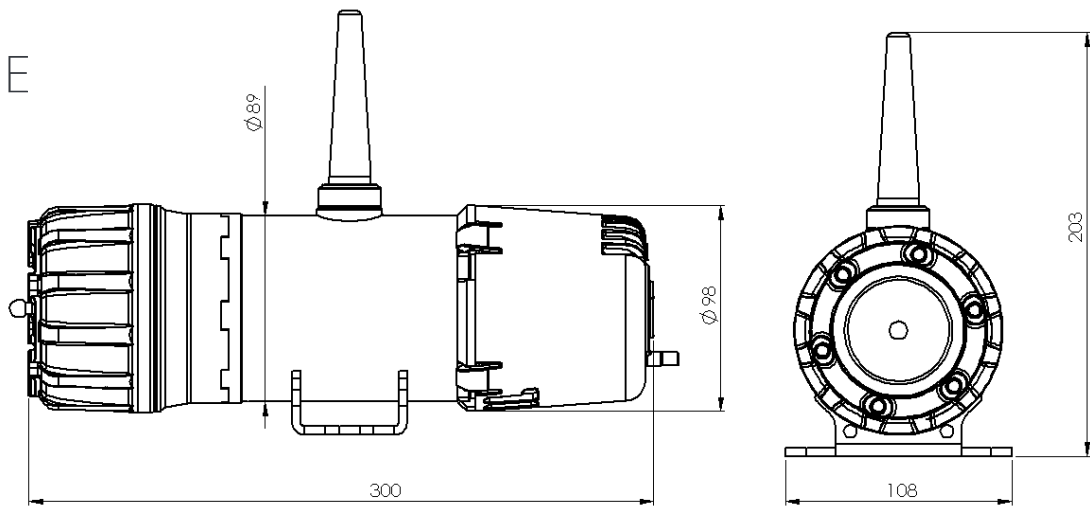


Low cost of ownership

- Expected lifetime greater than 15 years
- Drift free, no recalibration or re-zeroing
- Error signal is communicated in case of detector failure and when preventive maintenance is needed
- Dirty optics warning
- Low battery indication

The GS01 is developed following the SIL guidelines according to the standards IEC 61508 Ed2.0 and EN50402.

GAS SECURE



Technical data specifications*

Type	Wireless infrared hydrocarbon gas detector
Gases and range	Hydrocarbons, 0 to 100% LEL
Response time	T90 < 5s including wireless communication
Accuracy¹	+/- 3% LEL at <50% LEL reading +/- 5% LEL at >50% LEL reading
Zero-point lifetime stability¹	+/- 3% LEL
Calibration	Factory set, no field recalibration
Humidity	0 to 100% RH
Temperature range	-40°C to 65°C operating
Wireless communication protocol	ISA100.11a or Wireless HART IEEE802.15.4, 2,4GHz license free ISM band
RF Transmitter power	10 dBm
Digital output from Gateway	PROFINet for SIL2-rate or Modbus/TCP
Battery type	Lithium thionyl chloride (size D×2)
Power consumption	< 5mW
Battery lifetime	> 2 years
Dimensions	300 mm x $\varnothing 100$ mm
Weight	2,4 kg
Explosion protection	EEx ib IIC T4
Ingress protection	IP66/IP67

¹Refers to Methane and -20°C to +50°C
Accuracy is in addition to zero-point stability

* Under development and subject to modifications