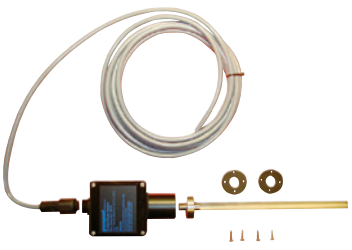
GP-SA

Pipe mounted

Duct mounted



Geopal GP-SA
Stand-alone detector

The Geopal GP-SA stand-alone detector is designed for industry and marine, and is available with semiconductor, catalytic and infrared sensor.

The GP-SA detector uses an integrated microprocessor for continuously monitoring the gas concentration, whether it is in the 0-100% LEL range (lower explosion level) or the 0-40,000 ppm range, for e.g. refrigerants.

The signals of the Geopal GP-SA detector are converted to a linear output signal of 4-20mA or 0-5/10V. The detector is equipped with alarm relays for low alarm, high alarm and system fault.

As an option the detector is available for pipe mounting, duct mounting and with a DIN plug for easy mounting / dismounting.

Further the Geopal GP-SA with infrared sensor is available for a range of HFC gasses, hydrocarbons and SF6 (see page 3 and 4).

Features

Easy to calibrate
The servicing of Geopal GP-SA requires no special tools or equipment, only a test gas with the given gas concentration. The actual calibration can be carried out by one person in less than 10 minutes, using a simple push-button system with associated light indicators.

Simple installation
For the external wiring of the detector a three-conductor cable is normally all you need. Depending on how many relay functions are required, the number of conductors would be increased accordingly.

Linear output
Based on a mathematic analysis of the characteristic formed by the semiconductor sensor, the detector generates a model, which results in an analogue output that will be linear in the entire detection range.

geopal®
Bygmarken 19 • DK-3520 Farum
+45 4567 0600 • info@geopal.dk • www.geopal.dk

PENDING ITS-I 23ATEXQ36745 DBI reg. no 233.301 DIC444QMS

GP-SA

Semiconductor	
Supply voltage	10 to 32 V DC
Power consumption	6 W max
Available gases	Methane (CH4), Propane (C3H8), Butane (C4H10), Hydrogen (H2), Hexane (C6H14), Benzene (C6H6), Ethane (C2H6), Carbon Monoxide (CO), Pentane (C5H12), Ethylene (C2H4), Ammonia (NH3), R404A, R407C, R417A, R245fa, R134a, etc.
Detection range	0-40,000 ppm, 0-100 % LEL
Response time T90	< 5 seconds, depending on gas type
Repeatability	+/- 5 %
Long-term stability	< 5 % FS / 12 months
Self-diagnostics	Continuous
Electrical output	4–20mA / (2mA fault), 1–5V / (0,5V fault), 2–10V / (1V fault), 0-5V, 0-10V
Relay outputs	2 relay outputs for alarm 1 and alarm 2 1 relay output for fault Signal contact 30V/1A
Material housing	Polycarbonate, black
IP rating	IP 65 DIN 60529
Weight	0,3 kg
Mechanical dimensions	150 x 80 x 60 mm
Max operating conditions Detector with build in heater (option)	Temperature -30 °C to +55 °C Humidity 0 %RH to 100 %RH not condensing Pressure 1013 mbar ±10% Temperature -45 °C to +55 °C
Storage	Temperature -25 °C to +55 °C Humidity 0 %RH to 95 %RH
Approvals (Directives and Standards)	Electromagnetic Compatibility Directive (EMC) 2014/30/EU Low Voltage Directive 2014/35/EC EN 60 204-1; EN 61 010-1; EN 61 326-1 (2013); EN 61 000-6-2 (2005); EN 61 000-6-3 (2012); EN 50 270 (2015)
Quality	ISO 9001:2015

Note:
We recommend that onsite calibration is done at operating temperature and humidity. Factory calibration is carried out at 20 °C/65%RH. d is based on factory calibration conditions.

geopal®
Bygmarken 19 • DK-3520 Farum
+45 4567 0600 • info@geopal.dk • www.geopal.dk

PENDING ITS-I 23ATEXQ36745 DBI reg. no 233.301 DIC444QMS

GP-SA

Infrared	
Supply voltage	10 to 32 V DC
Power consumption	4 W max.
Available gases	R404a, R134A, R410A, R1234ze, Methane, LPG, SF6 etc.
Detection range	0-1000 ppm, 0-2000 ppm, 0-100% LEL
Response time T90	< 30 seconds
Repeatability	+/- 1 % FS
Long-term stability	+/- 2% FS / 12 months
Accuracy	±1% of FS range for readings below 25% of range ±2% of FS range for readings below 50% of range ±5% of FS range above 50% of range
Resolution	0,2% of FS
Self-diagnostics	Continuous
Electrical output	4–20mA / (2mA fault), 1–5V / (0,5V fault), 2–10V / (1V fault), 0-5V, 0-10V
Relay outputs	2 relay outputs for alarm 1 and alarm 2 1 relay output for fault Signal contact 30V/1A
Material housing	Polycarbonate, black
IP rating	IP 65 DIN 60529
Weight	0,3 kg
Mechanical dimensions	150x80x60 mm
Max operating conditions	Temperature -20 °C to +55 °C Humidity 0 %RH to 95 %RH not condensing Pressure 800-1200 mbar
Storage	Temperature -40 °C to +85 °C Humidity 0 %RH to 95 %RH
Approvals (Directives and Standards)	Electromagnetic Compatibility Directive (EMC) 2014/30/EU Low Voltage Directive 2014/35/EC EN 60 204-1; EN 61 010-1; EN 61 326-1 (2013); EN 61 000-6-2 (2005); EN 61 000-6-3 (2012); EN 50 270 (2015)
Quality	ISO 9001:2015

geopal®
Bygmarken 19 • DK-3520 Farum
+45 4567 0600 • info@geopal.dk • www.geopal.dk

PENDING ITS-I 23ATEXQ36745 DBI reg. no 233.301 DIC444QMS