



# Geopal GP-SA

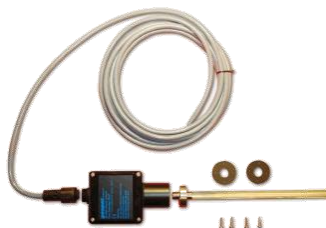
## Geopal GP-SA Stand-alone detector



Pipe mounted



Duct mounted



### 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.

The Geopal GP-SA stand-alone detector is designed for industry and marine.

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.

**geopal** SYSTEM A/S®

Skelstedet 10B - DK-2950 Vedbæk, Danmark  
Tel. +45 45 67 06 00  
www.geopal.dk · [info@geopal.dk](mailto:info@geopal.dk)  
EA 3506EE



DIC444QMS



DBI reg.no. 233.301



SP14ATEX7159

# Technical Data

## GP-SA

Supply voltage	10 to 32 V DC
Power consumption	6 W max
Available gases	Methane (CH <sub>4</sub> ), Propane (C <sub>3</sub> H <sub>8</sub> ), Butane (C <sub>4</sub> H <sub>10</sub> ), Hydrogen (H <sub>2</sub> ), Hexane (C <sub>6</sub> H <sub>14</sub> ), Benzene (C <sub>6</sub> H <sub>6</sub> ), Ethane (C <sub>2</sub> H <sub>6</sub> ), Carbon Monoxide (CO), Pentane (C <sub>5</sub> H <sub>12</sub> ), Ethylene (C <sub>2</sub> H <sub>4</sub> ), Ammonia (NH <sub>3</sub> ), 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	Temperature -30 °C to +55 °C Humidity 0 %RH to 100 %RH not condensing Pressure 1013 mbar ±10%
Detector with build in heater (option)	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 9001:20015

### Note:

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

**geopal** SYSTEM A/S®

Skelstedet 10B - DK-2950 Vedbæk, Danmark  
Tel. +45 45 67 06 00  
www.geopal.dk · [info@geopal.dk](mailto:info@geopal.dk)  
EA 3506EE



DIC444QMS



DBI reg.no. 233.301



SP14ATEX7159