



## Geopal GP-SA

The Geopal GP-SA stand-alone detector represents one of the lines in a new generation of gas detectors featuring an integrated microprocessor.

The detector continuously monitors the gas concentration, whether it is in the 0-100% LEL range (lower explosion level) or the 0-40,000 ppm range, in connection with e.g. refrigerants.

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

### 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. The detector is also available with a six-pole DIN plug, an option which is usually preferred if you wish to be able to quickly replace the detector. For that purpose we can also offer a mounting device that enables you to replace the detector in matter of few minutes.

### 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.

### Long-life sensor

The semiconductor sensor will typically last much longer than an electrochemical or a catalytic sensor. Another advantage is that it costs less to replace.



### Geopal GP-SA

*Gas detectors with integrated microprocessor*



03 ATEX Q133996



DBI reg. Nr. 233.301

A12060  
REGISTERED FIRM  
ISO9001:2000

# Technical Data

## Description

## Specifications:

### Model: GP-SA

Detection range:	0-40,000 ppm, 0-100% LEL
Available gases:	Methane, Propane, Butane, Hydrogen, Hexane, Benzene, Ethane, Pentane, Ethylene, R404A, 407C, R22, R134A, NH3 Ammonia, etc.
Long-term stability:	< 5% over 12 months
Repeat accuracy:	< 0.5%
Response time, to gases:	< 3 seconds
Start-up time, warm-up:	30 minutes
Self-diagnostics:	Continuous
Calibration:	Calibrated to specified type of gas / refrigerant
Supply voltage:	10 to 32 Volt AC/DC
Power consumption:	Maximum 200 mA
Cabling:	Min. 3-wire, or according to required relay functions Option: via 6-pole DIN plug
Output signal: analogue	4-20 mA, 0 mA = fault 0-5 Volt, or 0-10 Volt, maximum load RL = 600 V
Alarm relays:	2 relay outputs for alarm 1 and alarm 2 1 relay output for fault Signal contact 30V/2A-230V/0.1A
Manual operation, setup:	None
Operating temperature:	-25 to +50 degrees Celsius
Humidity:	0-100% relative humidity, non-condensing
Certification:	EMC Emission: EN 50081-1: Generic Emission Standard Part 1 EMC Immunity: EN 50082-2: Generic Immunity Standard Part 2 CE marked in compliance with EMC directive
Safety:	EN 61010-1 and IEC 1010-1: Safety requirements for electrical equipment for measurement, control and laboratory use.
General:	Dimensions: approx. 80 x 80 x 50 mm Weight: approx. 0.3 kg IP rating: IP56 DIN 40050