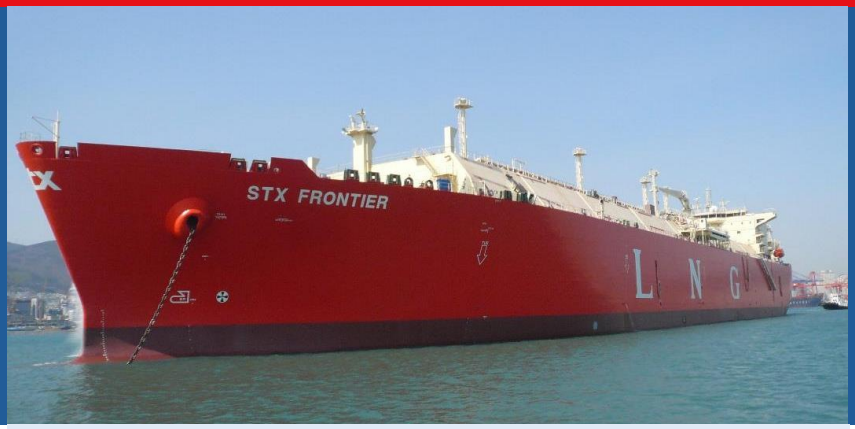
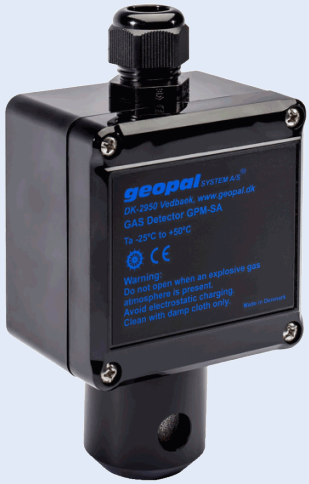


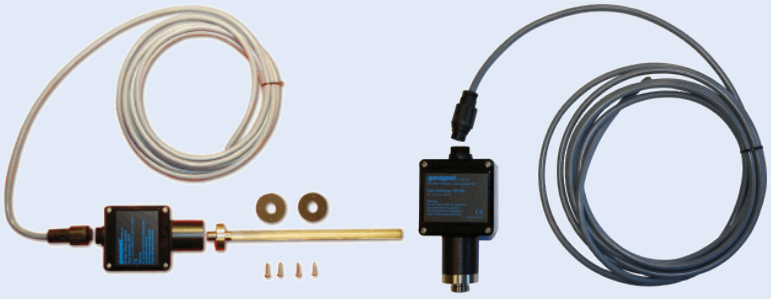

# Marine Gas Leak Detector

# Data sheet Geopal GPM-SA1




Geopal GPM-SA1
*Stand-alone detector*

*Detector GPM-SA1 is also available for duct and pipe mounting please see examples below.*



*Duct mounting* *Pipe mounting*

The Geopal GPM-SA1 stand-alone detector is designed for the marine market, CE compliant and in accordance with MED directive 961981.

GPM-SA1 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, in connection with e.g. refrigerants.

The signals of the Geopal GPM-SA1 detector are converted to a linear output signal of 4-20mA or 0-5/10V and 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.

## Easy to calibrate/service

The servicing of Geopal GPM-SA1 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.

## 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.

## Class Compliant

The GPM-SA1 detector complies with DNV Clean notification and the use of fixed leak detection systems for environmental protection e.g. Lloyds EP Notation.
ISGOTT 24.2 Central air conditioning and ventilation systems.

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EA 3516BE

DIC444QMS DBI reg.no. 233.301 SP14ATEX7159

**GPM-SA1**

| | |
|---|---|
| Supply voltage | 10 to 32 V DC |
| Power consumption | 6 W max |
| Available gases | Methane ($CH_4$), Propane ($C_3H_8$), Butane ($C_4H_{10}$), Hydrogen ($H_2$), Hexane ($C_6H_{14}$), Benzene ($C_6H_6$), Ethane ($C_2H_6$), Carbon Monoxide (CO), Pentane ($C_5H_{12}$), Ethylene ($C_2H_4$), Ammonia ($NH_3$), 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 |
| Electrical output | 4–20mA / (2mA fault), 1–5V / (0,5V fault),<br>2–10V / (1V fault), 0-5V, 0-10V |
| Relay outputs | 2 relay outputs for alarm 1 and alarm 2<br>1 relay output for fault<br>Signal contact 30V/1A |
| Material housing | Polycarbonate, black |
| IP rating | IP 65 DIN 60529 |
| Weight | 0,3 kg |
| Mechanical dimensions | (HWD) 150 x 80 x 60 mm |
| Max operating conditions | Temperature -30 °C to +55 °C<br>Humidity 0 %RH to 95 %RH<br>Pressure 1013 mbar ±10% |
| Storage | Temperature -25 °C to +55 °C<br>Humidity 0 %RH to 95 %RH |
| Approvals *(Directives and Standards)* | Electromagnetic Compatibility Directive (EMC) 2014/30/EU<br>Low Voltage Directive 2014/35/EC<br>EN 60 204-1; EN 61 010-1; EN 61 326-1 (2013);<br>EN 61 000-6-2 (2005); EN 61 000-6-3 (2012);<br>EN 50 270 (2015)<br>MED directive 961981<br>IACS E10: 2006<br>IEC 60 945:2002 and Corrigendum 1: 2008<br>IEC 60 092-504:2001-03<br>IEC 60 533:1999-11 |
| Quality | ISO 9001:2015 |

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