



# Geopal GP-CU

## Geopal GP-CU Stand-alone detektor



The Geopal GP-CU stand-alone detector is developed for use together with detector GP-BUS.

Despite this, the detector can be used together with other systems and monitors and like detector GP-SA it is designed for industry and marine.

The detector is 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-CU detector are converted to a linear output signal of 4-20mA or 0-5/10V.

### Easy to calibrate

The servicing of Geopal GP-CU 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 all you need.

### 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 sensor life time

The semiconductor sensor has the advantages of longer lifetime compared to both the catalytic and electrochemical sensor. Also, the replacement cost is lower.

**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 3556CE



DIC444QMS



DBI reg.no. 233.301



SP14ATEX7159

# Technical Data

## GP-CU

Supply voltage	12 V DC
Power consumption	4 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
Material housing	Polycarbonate, POM, black
IP rating	IP 65 DIN 60529
Weight	0,3 kg
Mechanical dimensions	150 x 80 x 60 mm
Max operating conditions	Temperature -25 °C to +55 °C Humidity 0 %RH to 100 %RH Pressure 1013 mbar ±10
Storage	Temperature -25 °C to +55 °C Humidity 0 %RH to 95 %RH
Approvals ( <i>Directives and Standards</i> )	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