Infrared gas sensors: GASCARD RANGE

GASCARD NG

FOR CO₂ CO and CH₄





KEY FEATURES

- Modern electronics platform with the increased power and versatility of fast microprocessors
- On-board Barometric Pressure Correction in the range 800 mbar – 1150 mbar
- Extensive Temperature compensation

- Wide operating voltage range (7 V 30 V)
- True RS232 communications for control and data
- Field Replaceable IR Source
- Expansion port supporting both simple 4.5 digit and
 128 x 64 pixel Graphic Display Modules

A NEW GENERATION OF GAS SENSORS | FAST, ACCURATE AND RELIABLE

The OEM Gascard NG infrared gas sensor has been designed for easy integration into a wide range of gas detection systems where high quality, long term stability, excellent repeatability and reliable measurement of Carbon Dioxide, Carbon Monoxide or Methane gas concentrations are required.

These features can be attributed to our proprietary dual wavelength fail to safe Infra-Red (NDIR) sensor technology. The Gascard series provides solutions for measuring and analysing both industrial and environmental gases.

Onboard temperature and pressure sensors enable real-time environmental condition measurements thus providing true concentration readings and reliable

measurement of the target gases in a wide range of locations.

The Gascard NG sensor head and electronics are mounted on a Eurocard PCB with a number of bit switches which enable the user to control various aspects of the sensors behaviour including analogue output and filter type selection. It has onboard true RS232 communications along with the option of TCP/IP communications over standard networks (ethernet).

When you purchase the Gascard NG, you automatically access our one to one customer service and technical support right from product purchase through to system integration.

TECHNICAL SPECIFICATIONS

GAS MEASUREMENT RANGE

MODEL	CO ₂	CH ₄	со
GasCard NG	-	0-5%	0-10%
GasCard NG	-	0-10%	0-30%
GasCard NG	0-2000 ppm	0-30%	0-100%
GasCard NG	0-3000 ppm	0-100%	-
GasCard NG	0-5000 ppm	-	-
GasCard NG	0-1%	-	-
GasCard NG	0-3%	-	-
GasCard NG	0-5%	-	-
GasCard NG	0-10%	-	-
Gascard NG	0-30%	-	-
GasCard NG	0-100%	-	-
Biogas	100%	100%	-
Accuracy	±2% of range ±<0.015% of range per mbar*		
Zero stability	±2% of range (over 12 months)		
Response time	$T_{90} = 10$ seconds or programmable RC		
Operating temperature	0-45°C		
Operating pressure	800-1150mbar		
Power requirements	24 V DC (7V-30V)		
Warm-up time	1 minute (initial) 30 minutes (full specification)		
Humidity	Measurements are unaffected by 0-95% relative humidity, non condensing		
Output	Linear 4-20 mA, 0-20 mA (bit switch selectable) maximum load dependant on supply voltage		

The Gascard NG can also be supplied with an Ethernet option and additional accessories which include a digital display kit and a 24 V pump.

GASCARD NG PRODUCT APPLICATIONS:

- LANDFILL
- HORTICULTURE
- BIOGAS
- BREWING
- PERSONAL SAFETY
- TOC
- PROCESS CONTROL
- And many more

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For more information, contact:

Edinburgh Sensors Ltd

4 Bain Square,

Kirkton Campus, Livingston, EH54 7DQ

United Kingdom

T: +44 (0)1506 425 300 F: +44 (0)1506 425 320

E: sales@edinst.com

W: www.edinburghsensors.com

All specifications are believed to be correct at the time of publication, Edinburgh Sensors does not accept liability for any errors or omissions. Due to our continuous product development all specifications are subject to change without prior notice.

^{*} Not including calibration gas tolerance