

Infrared Gas Sensors: Gascard Range

Gascard® NG

For CO₂, CO and CH₄

A new generation of OEM gas sensors.

Fast, accurate and reliable.



**EDINBURGH
SENSORS**

A Division of
Edinburgh Instruments



The OEM Gascard® NG infrared gas sensor, supplied by Edinburgh Sensors 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 and Methane gas concentrations are required.

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

Automatic Temperature and Pressure corrections are included and enable real-time environmental condition measurements thus providing true concentration readings and reliable measurement of target gases.

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 is backward compatible with outputs from existing Gascard generations and has onboard true RS232 communications along with the option of TCP/IP communications protocol.

The Gascard NG has built-in features for multigas and multi-sensor operation together with the addition of on-board data logging and has the flexibility to incorporate additional gas detection technologies.

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.

Gascard NG Product Features:

- New electronics platform with increased power and versatility of modern microprocessors.
- Backward compatible with the older generation of Gascard detectors.
- On-board Barometric Pressure Correction in the range 800mbar – 1150mbar.
- Extensive Temperature compensation.
- Lower operating voltage (7V) and wider operating voltage range (7V – 30V).
- True RS232 communications for control and data logging.
- Optional on-board LAN support.
- Field Replaceable IR source.
- Flexibility to incorporate additional gas detection technologies.

Technical Specifications

Model*	Gas measurement range		
	CO ₂	CH ₄	CO
Gascard NG	0 – 500ppm**	0 – 5%	0 – 3%
Gascard NG	0 – 1000ppm**	0 – 10%	0 – 10%
Gascard NG	0 – 2000ppm	0 – 30%	0 – 30%
Gascard NG	0 – 3000ppm	0 – 100%	0 – 100%
Gascard NG	0 – 5000ppm	–	–
Gascard NG	0 – 1%	–	–
Gascard NG	0 – 3%	–	–
Gascard NG	0 – 5%	–	–
Gascard NG	0 – 10%	–	–
Gascard NG	0 – 30%	–	–
Gascard NG	0 – 100%	–	–
Accuracy	± 2% of range ±<0.015% of range per mbar*		
Zero stability	± 2% of range (over 12 months)*		
Response time	Bitswitch selectable T ₉₀ = 10 seconds or programmable RC		
Operating temperature	0 – 45°C		
Operating pressure	800 – 1150mbar		
Power requirements	24V DC (7 – 30V)		
Warm-up time	1 minutes (initial) 30 minutes (full specification)		
Humidity	Measurements are unaffected by 0 – 95% relative humidity, non condensing		
Output	Linear 4 – 20mA, 0 – 20mA (bit switch selectable) maximum load dependant on supply voltage		

* Not including calibration gas tolerance.

** Stability specification does not apply

Gascard NG Product Applications:

• Landfill gas measurement –

Supporting you to capitalize on your waste to energy revenue.

• Biogas –

Critical process control for your AD system – delivering you income.

• Personal safety –

Key part of your H&S regime.

• Process control –

Continuous fixed gas monitoring for cost saving and safety.

• IAQ –

Healthy buildings make for productive output

• Horticulture –

Enabling vigorous growth

• Brewing –

Providing safety and efficiency

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

Customer support is available worldwide, from the moment you enquire through to our post sales installation support.



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