Infared gas sensors: **Gascard Range**

SPECIAL GASCARD NG

For CO_2, CO & CH_4, N_2O & C_3H_8

EDINBURGH SENSORS
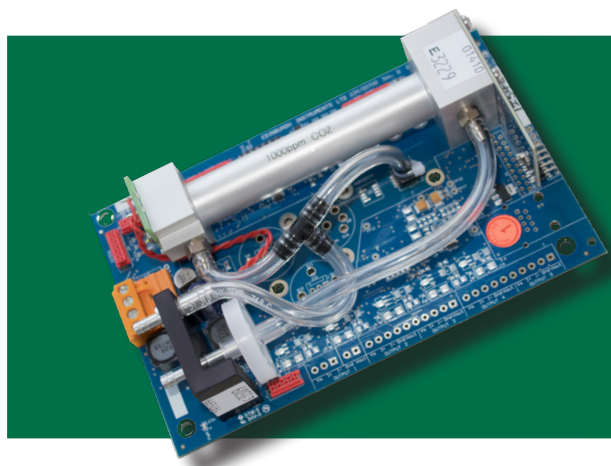
F A S T

A C C U R A T E

R E L I A B L E

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

- Expansion port supporting both simple 4.5 digit and 128 x 64 pixel Graphic Display Modules

- Optional on-board LAN support

- Low operating voltage (7V) and wide operating voltage range (7V-30V)

- True RS232 communications for control and data

- Extensive Temperature compensation

A NEW GENERATION OF GAS SENSORS

The OEM Gascard® NG infrared gas sensor has been designed for easy integration into a wide range of gas detection systems. High quality, long term stability, repeatability and reliable measurement of various gases mean that the Gascard NG is the product of choice in a wide range of applications.

The Gascard NG can be customised to cover a wide range of gases that include CO, CO_2, CH_4 and N_2O to name just a few. Detection level ranges between 0-500ppm and 0-3% are available (gas dependent). These features can be attributed to our proprietary dual wavelength fail-to-safe Infrared (NDIR) sensor technology. The Gascard NG 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 the 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 behavior including analogue output and electronic filter type. It has onboard true RS232 communications along with the option of a TCP/IP Ethernet connector.

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

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TECHNICAL SPECIFICATIONS
GAS MEASUREMENT RANGE

MODEL	CO_2	CH_4	CO	N_2O	C_3H_8
GasCard NG	0 - 500pm	0-1%	0 - 3%	0 - 3000 pm	0 - 3000 ppm
GasCard NG	0 - 1000ppm	-	-	-	-
Accuracy	± 3% of range ±10% of range (range dependent)*				
Zero stability	± 10% of range (over 12 months)				
Repeatability	At zero: generally < ±1% of range. At span: generally < ±3% of range depending on gas and range				
Response time	Bit-switch selectable T90 = variable (determined by bit-switch and firmware)				
Operating temperature	0 - 45 ° C				
Zero drift due to ambient temperature	<±3% range per °C				
Operating Pressure	800 - 1150mbar				
Power requirements	24V DC (7 - 30V)				
Warm-up time	Operation time: 1 minute - 5 mins (initial). Full specification 30 mins to 1 hour				
Humidity	May be sensitive to large changes in humidity depending on gas and range				
Output	Linear 4-20mA, 0-20mA (bit-switch selectable) or voltage output. Up to 500Ω maximum load. Optional 0-5 volts.				
Controls	Bit switch selection of various options, zero and span adjust buttons				

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..

*Not including gas calibration tolerance

PRODUCT APPLICATIONS

- TOC
- PERSONAL SAFETY
- IAQ

- RESEARCH
- LEAK DETECTION
- BOTTLE PLANT

- DENTISTRY
- AGRICULTURE
- DELIVERY ROOMS