Infrared gas sensors: **Gascard Range**

**GASCARD NG**
For CO₂, CO & 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
- Expansion port supporting both simple 4.5 digit and 128 x 64 pixel Graphic Display Modules
- Wide operating voltage range (7 V – 30 V)
- True RS232 communications for control and data
- Field Replaceable IR Source
- 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 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, infrared (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**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CO&lt;sub&gt;2&lt;/sub&gt;</th>
<th>CH&lt;sub&gt;4&lt;/sub&gt;</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gascard NG</td>
<td>-</td>
<td>0-5%</td>
<td>0-10%</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>-</td>
<td>0-10%</td>
<td>0-30%</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-2000 ppm</td>
<td>0-30%</td>
<td>0-100%</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-3000 ppm</td>
<td>0-100%</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-5000 ppm</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-3%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-10%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-30%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gascard NG</td>
<td>0-100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Biogas (Special Calibration)</td>
<td>0-100%</td>
<td>0-100%</td>
<td>-</td>
</tr>
</tbody>
</table>

- **Accuracy**: ±2% of range ±<0.015% of range per mbar*
- **Zero Stability**: ±2% of range (over 12 months)
- **Response Time**: T90 = 10 seconds or programmable RC
- **Operating Temperature**: 0-45ºC
- **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 dependent on supply voltage

*Not including gas calibration tolerance

---

**PRODUCT APPLICATIONS**

- **PERSONAL SAFETY**
- **TOC**
- **LEAK DETECTION**
- **PROCESS CONTROL**
- **AGRICULTURE**
- **MANY MORE...**