

Infrared Gas Monitors: Guardian Range

# The **NEW** Guardian<sup>®</sup> NG

For CO<sub>2</sub> or CH<sub>4</sub>

Fast, accurate and reliable



**EDINBURGH  
SENSORS**

A Division of  
Edinburgh Instruments



The NEW Guardian range of infrared gas monitors supplied by Edinburgh Sensors offers near-analyser quality, continuous sampling, measurement and display of target gas concentrations. The 'Guardian NG' range provides high accuracy detection and measurement of either CO<sub>2</sub> or CH<sub>4</sub> gases, where detection level ranges of between 0 – 3000ppm and 0 – 100% by volume are required.

With tens of thousands of our monitors supporting critical processes in industries throughout the world we have an enviable reputation for reliability, accuracy, long-term stability plus low maintenance requirements. This can be attributed to our proprietary infrared sensor technology and over thirty years of sensor design and manufacturing experience.

Suitable for a wide variety of applications, these wall-mounted monitors can detect gases from sampling points up to 30 metres away using the integral sampling system.

Our Guardian instruments are easy to install, stand-alone products that require minimum set up. The Guardian is supplied with LCD and digital alarm set-point controls, housed in a robust plastic IP54 rated enclosure to prevent the ingress of particulates and water.

The new monitor delivers:

- **True volume % readout over a wide range of pressures (pressure compensated)**
- **Improved screen display provides more information**
- **Easier set up using on-screen menus**
- **Digital Alarm set points**

- **Password protection to prevent accidental or deliberate change of settings**
- **Graphical display of historic readings possible over a user-defined period**
- **Easier transfer of data via on board RS232 I/F**
- **Optional Ethernet I/F**
- **Relay outputs for control of external devices**

## **Guardian NG Product Applications:**

- **Landfill gas measurement –**  
Supporting you to capitalise on your waste to energy revenue.
- **Biogas –**  
Critical process control for your AD system.
- **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.

## Technical Specifications

Model*	Gas measurement range	
	CO <sub>2</sub>	CH <sub>4</sub>
Guardian NG	0 – 3000ppm	–
Guardian NG	0 – 1%	–
Guardian NG	0 – 3%	–
Guardian NG	0 – 5%	0 – 5%
Guardian NG	0 – 10%	0 – 10%
Guardian NG	0 – 30%	0 – 30%
Guardian NG	0 – 100%	0 – 100%
Accuracy	±2% of full scale**	
Response time	T <sub>90</sub> = <30 seconds from sample inlet	
Operating temperature	0 – 40°C	
Warm-up time	1 minute (operational) 30 minutes (full specification)	
Humidity	Measurements are unaffected by 0 – 95% relative humidity, non condensing	
Power requirements	90 to 260 VAC 50 to 60 Hz	
Power consumption	13W	
Outputs	4 – 20mA / 0 – 20mA analogue output 11V guaranteed drive capability Alarm 1 relay, Alarm 2 relay and Fault relay SPCO (single pole change-over) Alarm ranges: zero to full scale	
Voltage free contacts rating	8A at 250V AC (resistive load) 8A at 24V DC (resistive load)	
Enclosure rating	IP54	

\* Guardian NG instruments are not certifiable for use where risk of fire or explosion exists. During operation, prolonged exposure to high levels of flammable gases may lead to the creation of an explosive mixture within the Guardian plus enclosure. Additional measures must be taken by the user to prevent this hazard occurring.  
\*\* Not including calibration gas tolerance.

## Accessories available:

Particle Filter	Integral Seal Included
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Customer support is available worldwide, from the moment you enquire and through the product's life.

For more information contact us at [sales@edinst.com](mailto:sales@edinst.com) or visit [www.edinburghsensors.com](http://www.edinburghsensors.com)

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