

Infrared gas sensors: **Guardian Range**

# GUARDIAN® NG DC

For CO<sub>2</sub>, CH<sub>4</sub>, & CO



FAST  
ACCURATE  
RELIABLE

## KEY FEATURES

- Low Voltage DC Supply
- Concentration readings of a wide range of pressures (pressure compensated)
- Improved screen display provides more information
- Easier to set up using on-screen menus
- Digital Alarm set points
- Easier transfer of data via on board RS232 interface
- Password protection to prevent accidental or deliberate change of settings
- Graphical display of historic readings
- Optional Ethernet interface
- Relay outputs for control of external devices

## A NEW GENERATION OF GAS SENSORS

The Guardian® NG DC infrared gas monitor offers near-analyser quality continuous sampling, measurement and display of CO<sub>2</sub> concentrations between 0 – 3000ppm to 0-100% by volume from low voltage DC supplies in the range of 18-30V.

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

Suitable for a wide variety of applications, these wall-mounted monitors can detect CO<sub>2</sub> from sampling points up to 30 metres away, using the integral sampling system.

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

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## TECHNICAL SPECIFICATIONS

### GAS MEASUREMENT RANGE

MODEL	CO <sub>2</sub>	CH <sub>4</sub> *	CO*
Guardian NG DC	0–3000 ppm	-	-
Guardian NG DC	0-1%	-	-
Guardian NG DC	0-3%	-	-
Guardian NG DC	0-5%	0-5%	-
Guardian NG DC	0-10%	0-10%	0-10%
Guardian NG DC	0-30%	0-30%	0-30%
Guardian NG DC	0-100%	0-100%	0-100%
Guardian NG DC	0-100% Biogas	0-100% Biogas	-
<b>Accuracy</b>	±2% of full scale**		
<b>Operating Temperature</b>	0-40°C		
<b>Humidity</b>	Measurements are unaffected by 0-95% relative humidity, non-condensing		
<b>Power Requirements</b>	24V DC (18-36 V DC)		
<b>Power Consumption</b>	15W typical (25W Max)		
<b>Response Time</b>	T90 <30 seconds from sample inlet		
<b>Outputs</b>	4-20mA / 0-20mA analogue output 11V guaranteed drive capability Alarm 1 relay, Alarm 2 relay and Fault relay SPCO (single pole change-over)		
<b>Voltage free contacts rating</b>	8A at 250V AC (resistive load) 8A at 24V DC (resistive load)		
<b>Enclosure rating</b>	IP54		

The Guardian NG can also be supplied with an Ethernet option and additional accessories including CO<sub>2</sub> zero calibration kit and filters.

\* Guardian NG DC instruments are not certified 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 enclosure. Additional measures must be taken by the user to prevent this hazard occurring.

\*\* Not including calibration gas tolerance.

## PRODUCT APPLICATIONS

- BIOGAS
- PERSONAL SAFETY
- PROCESS CONTROL
- LEAK DETECTION
- HORTICULTURE
- AGRICULTURE

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.

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