

Infrared gas sensors: **Guardian Range**

# GUARDIAN® NG

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



**FAST  
ACCURATE  
RELIABLE**

## KEY FEATURES

- True volume % readout over a wide range of pressures (pressure compensated)
- Graphic screen display provides more information
- Easy 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 over a user-defined period
- Easier transfer of data via on board RS232 Interface
- Optional Ethernet Interface
- Relay outputs for control of external devices

## A NEW GENERATION OF GAS SENSORS

The Guardian® NG range of infrared gas monitors 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, 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 a 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 built in sampling system. Our Guardian NG instruments are easy to install stand-alone products that require minimum set up.

The Guardian NG has an integral LCD display and digital alarm set-point controls, housed in a robust plastic IP54 rated enclosure to prevent the ingress of particulates and water.

When you purchase one of the Guardian NG range, 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

MODEL	CO <sub>2</sub>	CH <sub>4</sub> *	CO*
Guardian NG	0-3000 ppm	-	-
Guardian NG	0-1%	-	-
Guardian NG	0-3%	-	-
Guardian NG	0-5%	0-5%	-
Guardian NG	0-10%	0-10%	0-10%
Guardian NG	0-30%	0-30%	0-30%
Guardian NG	0-100%	0-100%	0-100%
Guardian NG	0-100% Biogas	0-100% Biogas	-
<b>Accuracy**</b>	±2% of full scale		
<b>Response time</b>	T <sub>90</sub> = <30 seconds from sample inlet		
<b>Power requirements</b>	90 to 260 VAC 50 to 60 Hz		
<b>Power consumption</b>	15 W typical		
<b>Warm-up time</b>	1 minute (initial) 30 minutes (full specification)		
<b>Humidity</b>	Measurements are unaffected by 0 – 95% relative humidity, non condensing		
<b>Outputs</b>	4 - 20 mA / 0-20 mA analogue output 11V guaranteed drive capability Alarm ranges: zero to full scale. 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.

\* Guardian NG 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
- LEAK DETECTION
- AGRICULTURE
- HORTICULTURE
- PROCESS CONTROL
- IAQ
- AND MANY MORE...

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.

Edinburgh Sensors  
4 Bain Square,  
Kirkton Campus,  
Livingston, EH54 7DQ  
United Kingdom

T: +44 (0)1506 425 300  
F: +44 (0)1506 425 320

E: sales@edinst.com  
W: www.edinburghsensors.com