

# EcoSense CO 2E ECO (H) CARBON MONOXIDE SENSOR

## FEATURES

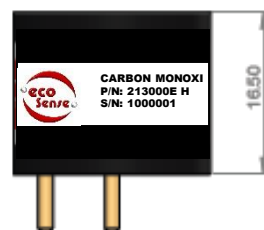


- **Low Hydrogen cross-sensitivity**
- **Ideal for portable and fixed gas detection equipment**
- **Popular for breath analysis, air quality and light industrial**
- **Proven stability and reliability with 2 year warranty**
- **Fast response and recovery time**
- **Lower cost**
- **Standard 4 series industry size**

## SPECIFICATIONS

The EcoSense™ CO 2E ECO (H) is a high quality, 2-electrode lowest cost electromechanical cell designed for the detection of Carbon Monoxide CO in a range of applications and particularly where there may be Hydrogen present as a cross-interferent. The primary application for this cell is for the measurement of Carbon Monoxide in breath, in addition to air quality and industrial applications where Hydrogen is present. This sensor has also proven popular for CO monitoring to prevent smoking in public places, such as toilets and cloakrooms, and without false alarms where spray perfumes and aftershaves are used.

<b>Gas Detected:</b>	Carbon Monoxide CO
<b>Operating Principle:</b>	Electrochemical
<b>Measurement Range:</b>	0 – 1000ppm CO
<b>Maximum Overload:</b>	2000ppm CO
<b>Hydrogen cross-sensitivity:</b>	< 15% (typically 10%)
<b>Expected Operating Life:</b>	> 3 years in normal use
<b>Response Time (T90):</b>	< 30 seconds
<b>Output Signal:</b>	50 ± 20 nA / ppm
<b>Typical Baseline Range (pure air):</b>	+/-2ppm CO equivalent
<b>Linearity:</b>	Within +/- 5%
<b>Repeatability:</b>	< +/-5% CO equivalent
<b>Recommended Load Resistor:</b>	10 Ω
<b>Resolution:</b>	< 1ppm typical
<b>Long Term Output Drift:</b>	< 5% per annum



All dimensions are in millimetres mm.

All tolerances are +/- 0.15mm.

Note: PCB sockets are recommended for the sensor pin connection. Soldering or using glue with the sensor should be avoided and will invalidate warranty.

All performance specifications are based upon the following environment conditions: +20°C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure). Sensor performance is temperature dependent. Please contact us for temperature performance other than at +20°C.



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## SPECIFICATIONS

Temperature Range:	-20°C to +50°C (continuous)
Operating Humidity:	15 to 90% RH (continuous) 0 to 99% RH (intermittent)
Pressure Range:	800 to 1200 mbar
Recommended Storage Temperature:	0°C to +20°C

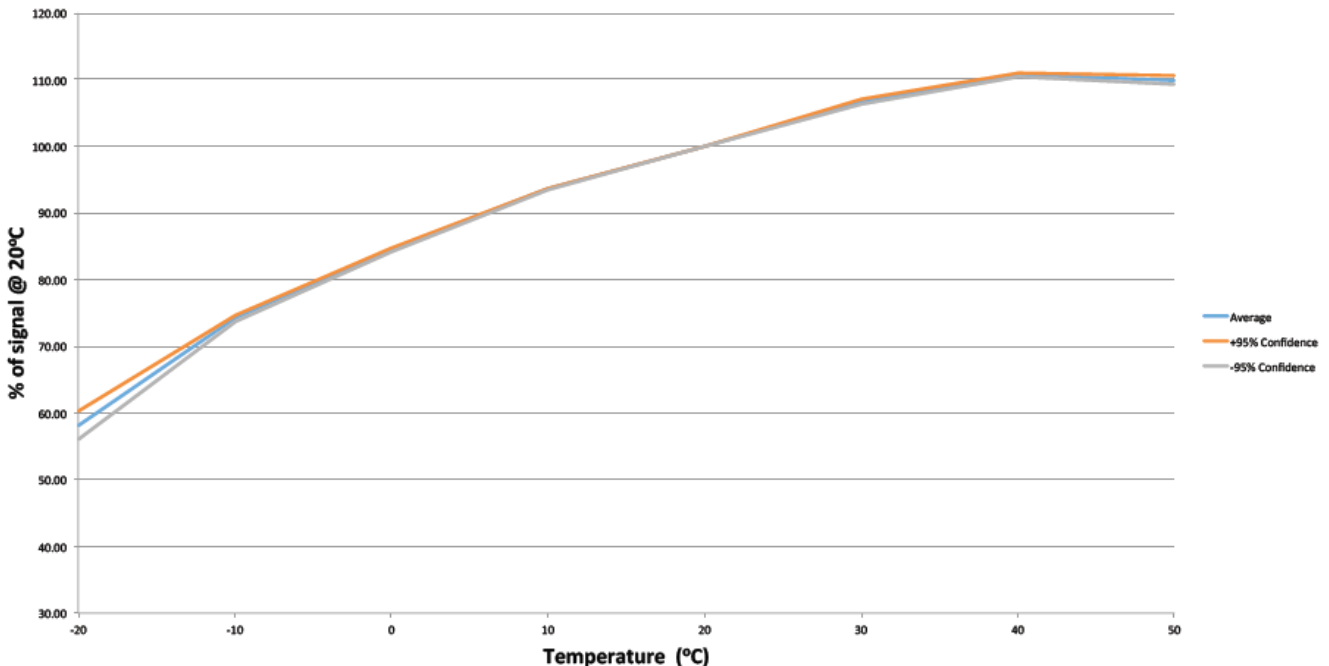
### Physical Specification

Orientation Sensitivity:	Any
Weight:	5g (approx)
Part Number:	213000E H
Warranty period:	24 months from date of despatch

### Intrinsic Safety Data

Maximum s/c current:	< 1.0 A
Maximum s/c Voltage:	1.3 V
Maximum at 2000ppm:	0.3 mA

## TEMPERATURE CO-EFFICIENT



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**Notes:** Sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important to avoid exposure to high concentrations of solvent during storage, fitting into instrumentation and operation. When using sensors on PCBs, degreasing agents should be used prior to the sensor being fitted.

The data contained in this document is believed to be accurate and reliable. The data given is for guidance only. Euro-Gas Management Services Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this datasheet or the information contained in it. Customers should test the sensors under their own conditions to ensure that the sensors are suitable for their own requirements and in accordance with the plans and circumstances of the specific project and any standards/regulations pertaining to the country in which the sensors will be utilised. By the nature of the technology used, any electrochemical sensor can potentially fail to meet specification without warning. Although Euro-Gas makes every effort to ensure the reliability of our products of this type, where life safety is a performance requirement of the product, we recommend that all sensors and instruments are checked for response to gas and appropriate gas levels before use. This datasheet is not intended to form the basis of a contract and in the interest of product improvement, Euro-Gas reserves the right to alter design features and specifications without notice. 05/15

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