

SureCell - CO (M)

Innovation, Quality and Expertise for Gas Detection.

Operating Performance

Operating Principle	3-electrode electrochemical
Gas Detected	Carbon Monoxide
Measurement Range	0-1000 ppm
Maximum Overload ²	2000 ppm
Expected Operating Life	2 years in air
Output Signal	0.07 ±0.015µA per ppm
Temperature Range	Continuous: -20°C to +40°C Intermittent: -40°C to +55°C
Pressure Range	1 atm ±10%
Humidity Range (non-condensing)	Continuous: 15 - 90% Intermittent: 0 - 99%
Response Time (T ⁵ ₉₀)	<30 seconds
Baseline Offset (clean air)	<+5.0ppm equivalent
Zero Shift (-40 to +55°C)	<+3.0ppm equivalent
Long Term Output Drift	<5% per annum
Repeatability	<+3%
Linearity	Linear ±<5%
Recommended Load Resistor	5Ω
Bias Voltage	Not required

Intrinsic Safety Data

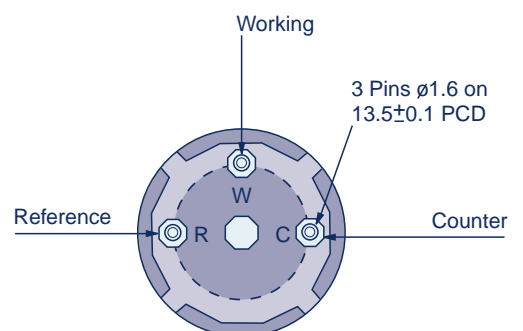
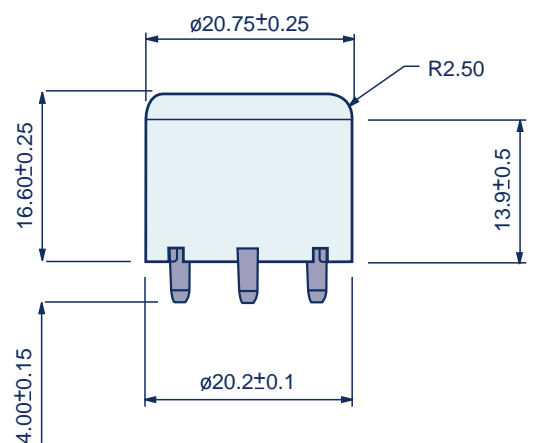
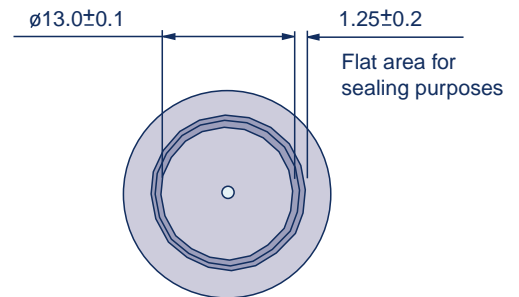
Maximum at 2000ppm	0.2mA
Maximum o/c Voltage	1.3V
Maximum s/c Current	<1.0A

Physical Specification

Weight	5g (approx)
Housing Material	Noryl 110
Storage Life	6 months in sealed container
Storage Conditions	+10°C to +30°C
Orientation	Any
Warranty Period	18 months from date of despatch

Ordering Details

Part Number	2112B2003
Order From	Sixth Sense Hatch Pond House, 4 Stinsford Road Poole, Dorset, England BH17 0RZ T: +44 (0) 1202 645770 F: +44 (0) 1202 665331 e.mail: sensors@sixth-sense.com www.sixth-sense.com
Code date:	08/00

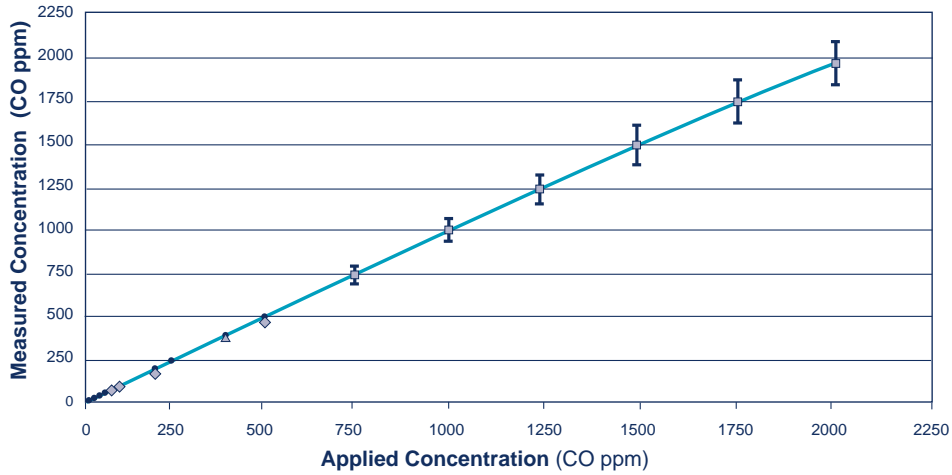




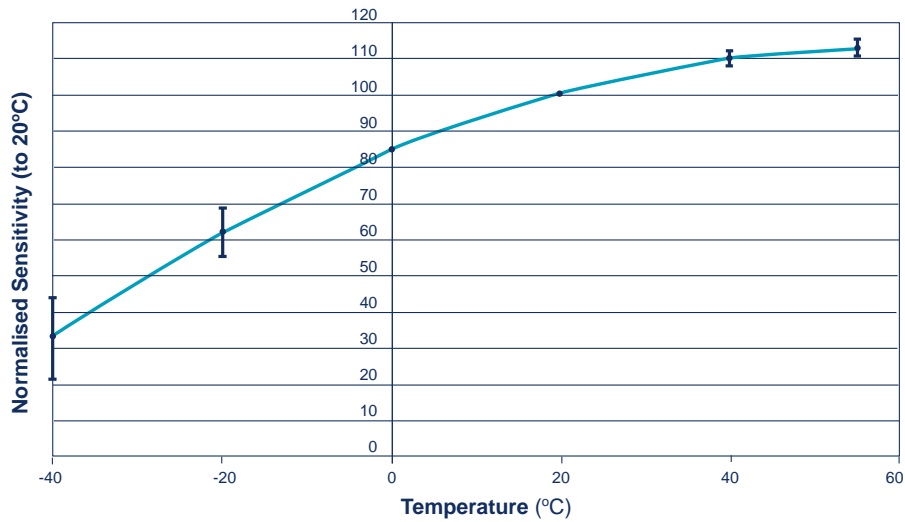
Additional Information

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Linearity of CO SureCells (0 to 2000 ppm)



Temperature Coefficients of CO SureCells



Cross Sensitivity Table

Gas Type	Concentration (ppm)	Exposure (mins)	Reading (ppm CO)
Acetone	1000	5	0
Acetylene	40	5	80
Ammonia	100	5	0
Carbon monoxide	100	5	100
Chlorine	2	5	0
Ethanol	2000	30	3
Ethylene	100	5	85
Hydrogen	100	5	20
Hydrogen sulphide	25	5	0
Iso-Propanol	200	120	0
Nitric Oxide	50	5	8
Nitrogen dioxide	800	30	20
Sulfur dioxide	50	600	0.5

In the interest of product improvement, Sixth Sense reserves the right to alter design features and specifications without notice. Unless otherwise stated, all product specifications are quoted at standard temperature and pressure.

***Note:** The figures in this table are typical values and should not be used as a basis for cross calibration. Cross sensitivities may not be linear and should not be scaled. All data based on a 5 minute gassing. For some cross interferences break through will occur if gas is applied for a longer time period.