



Innovation, Quality and Expertise for Gas Detection.

SureCell™ - H₂S (M)

Operating Performance

Operating Principle	3-electrode electrochemical
Gas Detected	Hydrogen Sulphide
Measurement Range	0-100 ppm
Maximum Overload ²	150 ppm
Expected Operating Life	2 years in air
Output Signal	0.75 ±0.2µA 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% RM Intermittent: 0 - 99% RM
Response Time (T ⁵ ₉₀)	<20 seconds
Baseline Offset (clean air)	<0.5ppm equivalent
Zero Shift (-40 to +55°C)	<0.4ppm equivalent
Long Term Output Drift	<2% per month
Repeatability	<±5%
Linearity	Linear ±<5%
Recommended Load Resistor	5Ω
Bias Voltage	Not required

Intrinsic Safety Data

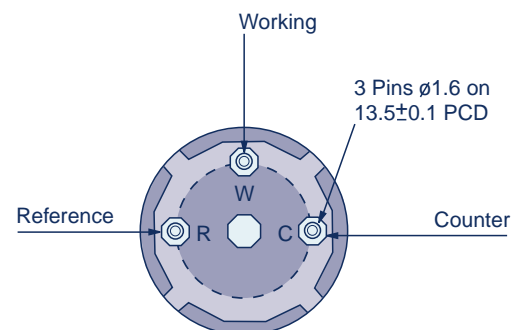
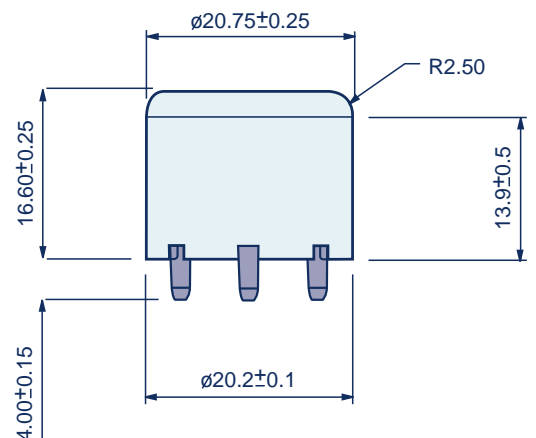
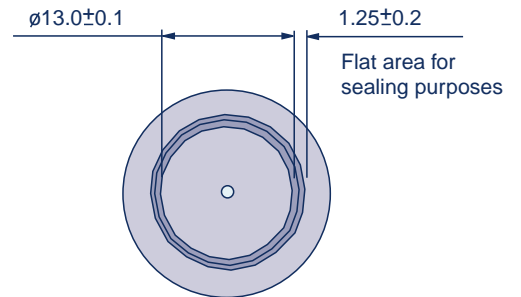
Maximum at 150 ppm	0.15mA
Maximum o/c Voltage	0.8V
Maximum s/c Current	<1.0A

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	2112B2022
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: 06/01	

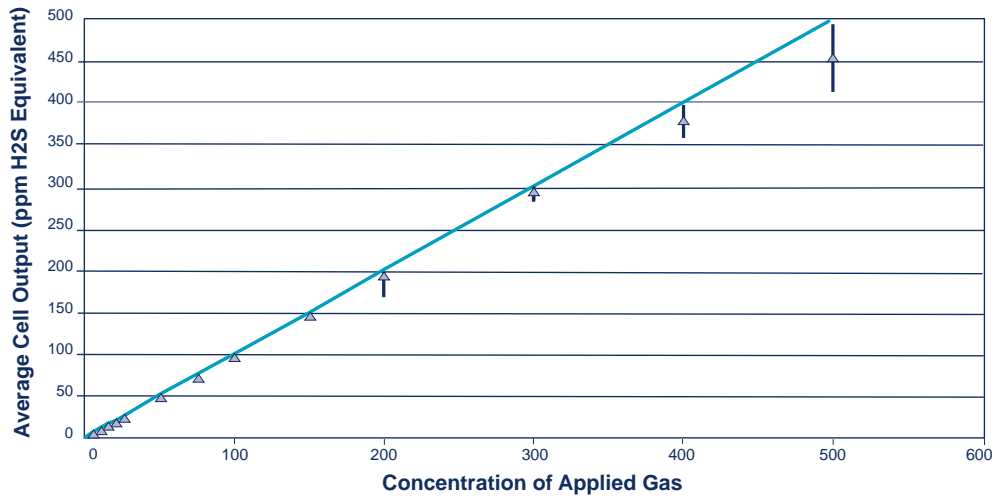




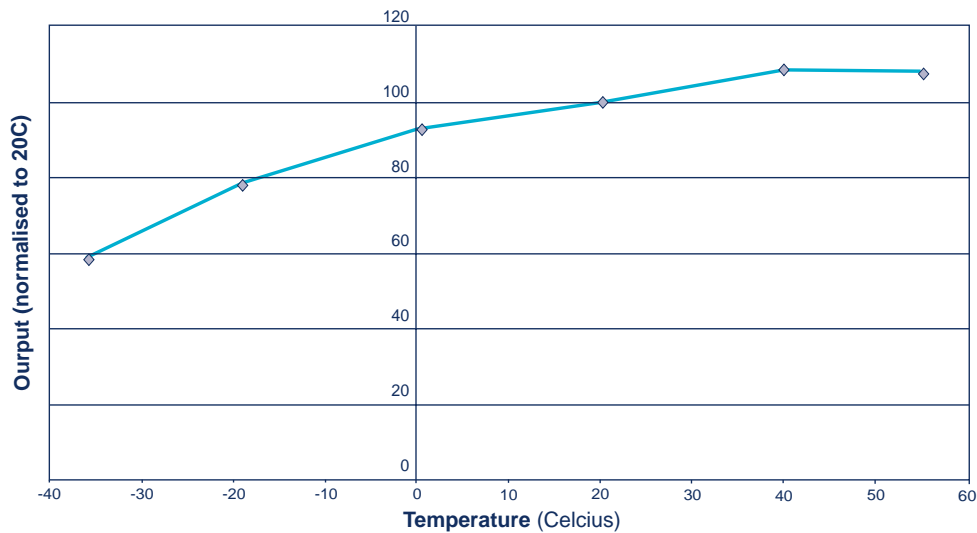
Additional Information

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H2S (M) Surecell Linearity: 0 to 500ppm H2S (-1stdev)



Temperature performance of H2S (M) Surecells



Cross Sensitivity Table

Gas	Concentration Used (ppm)	Reading (ppm CO)	Gas	Concentration Used (ppm)	Reading (ppm CO)
Carbon Monoxide	50	0	Ethanol		TBA
Hydrogen Sulphide	10	10	Propanol		TBA
Sulfur Dioxide	2	0	Acetone		TBA
Nitrogen Dioxide	3	0	Ozone		TBA
Nitric Oxide	25	0	Arsine		TBA
Chlorine	0.5	0	Diborane		TBA
Hydrogen	100	0	Phosphine		TBA
Ethylene	100	0	Silane		TBA
Carbon Dioxide	5000	0	Germane		TBA
Ammonia	50	0	Hydrogen Chloride		TBA
Methane		TBA			

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.