Sixth Sense SureCell® H₂S(M)

Operating Performance

Operating Principle
Gas Detected
Measurement Range
Maximum Overload
Expected Operating Life

output Signal
Temperature Range

Pressure Range Humidity Range (non-condensing) Response Time (T⁵90) Baseline Offset (clean air) Zero Shift (-40°C to +50°C) Long Term Output Drift Repeatability

Linearity Recommended Load Resistor

Bias Voltage

3-electrode electrochemical

Hydrogen Sulphide

0-100 ppm 150 ppm 2 years in air

 $0.07\,\pm0.02\mu\text{A}\,\text{per}\,\text{ppm}$

Continuous: -20°C to +40°C

Intermittent: -40°C to +55°C

1 atm ±10%

Continuous: 15 - 90% RM Intermittent: 0 - 99% RM

<20 seconds

<±0.5ppm equivalent <±0.4ppm equivalent

<2% per month

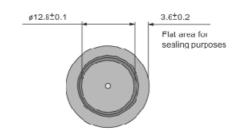
<±5%

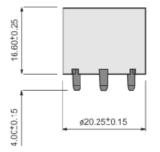
Linear <±5%

 5Ω

Not required

Outline Dimensions





Intrinsic Safety Data

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

Physical Specification

Weight Housing Material

Storage Conditions

Orientation Warranty Period

5g (approx) Noryl 110

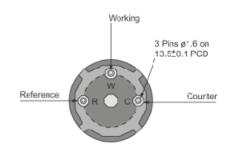
6 months in sealed container

+10°C to +30°C

Any

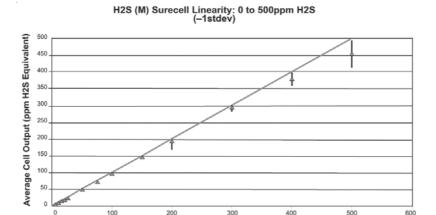
18 months from date of

despatch



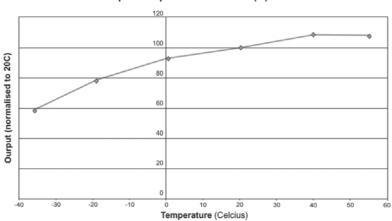
All dimensions in mm
All tolerances ±0.15mm unless othewise stated





Temperature performance of H2S (M) Surecells

Concentration of Applied Gas



Cross Sensitivity Table

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

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 interferents break through will occur if gas is applied for a longer time period.

The data contained in this document is intended for guidance only and it is the Clients' responsibility to perform any necessary tests to ensure correct performance of this product in specific application for which it is intended. In the interest of product improvement, Sixth Sense reserve the right to alter and amend the product and its performance without notice. As this product may be used by the Client in circumstances outside the control of Sixth Sense, we cannot give any warranty as to the accuracy of these details in any specific application.

