

Hydrogen Sulphide Sensor Specification

MICROcel™ HS Miniature Hydrogen Sulphide Sensor

Performance Characteristics

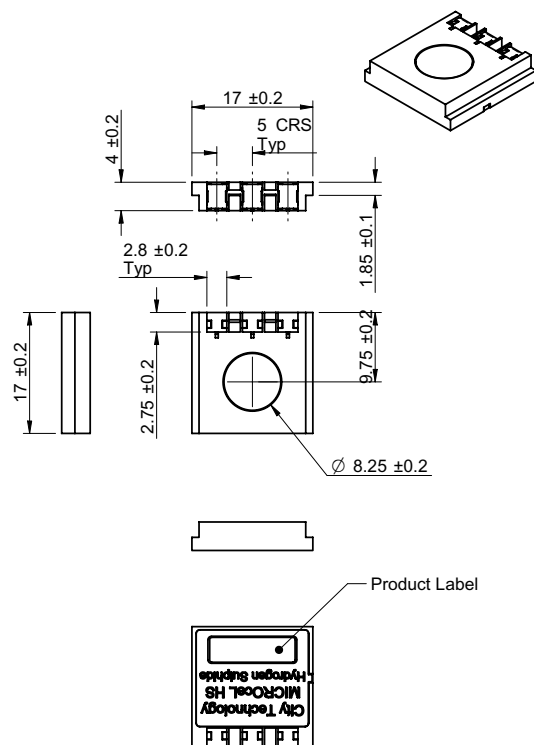
Nominal Range	0-100ppm
Maximum Overload	1000ppm
Expected Operating Life	Two years in Air
Output Signal	0.105 ± 0.025 µA/ppm
Resolution	0.2ppm
Temperature Range	-40°C to +50°C
Pressure Range	Atmospheric ± 10%
T50 Response Time	<10 seconds
T90 Response Time	25 to 40 seconds typically
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-2 to +1ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	<0.2ppm equivalent
Long Term Output Drift	<5% signal loss/year
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Repeatability	<2% of signal
Output Linearity	Linear

N.B. All performance data is based on conditions at 20°C, 50%RH, and 1013mBar unless otherwise noted.

Physical Characteristics

Weight	1.2g (approx.)
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0°C to 20°C
Warranty Period	12 months from date of despatch

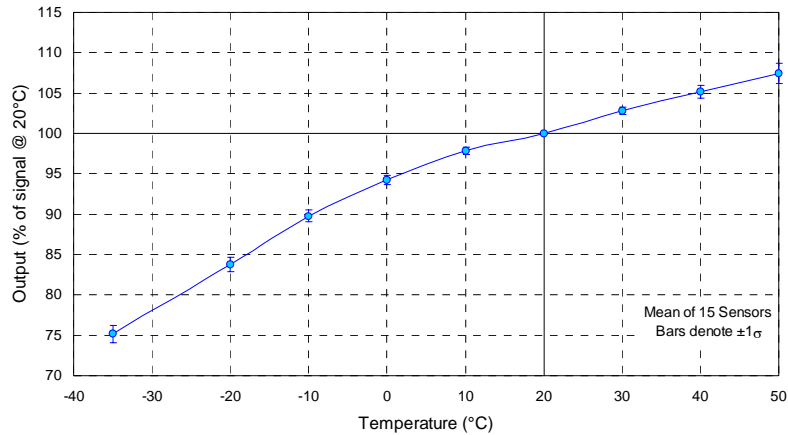
Outline Dimensions



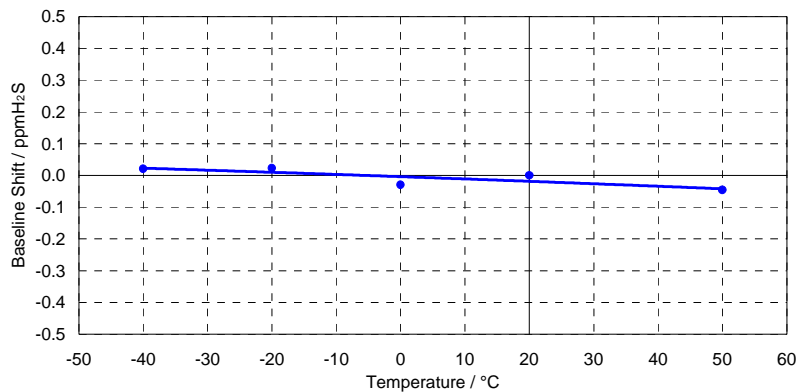
All dimensions in mm
All tolerances ±0.15mm unless otherwise stated

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MICROcelL™ H2S Sensor - Output vs Temperature



Effect of Temperature on the Shift in Mean Air Baseline Signals of Microcel HS Sensors



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. MICROcelL™H2Ss have been tested with a number of commonly cross-interfering gases and the results are given below. The table shows the typical response to be expected from a sensor when exposed to a given test gas concentration (relevant to safety, e.g. TLV levels).

Gas	Conc.	MICROcelL™H2S	Gas	Conc.	MICROcelL™H2S
Carbon Monoxide:	15ppm	0.1ppm	Hydrogen:	10000ppm	<10ppm
Sulphur dioxide:	5ppm	~1ppm	Nitrogen Dioxide:	5ppm	~ -1ppm
Nitric oxide:	35ppm	~0.7ppm			

For details of other possible cross-interfering gases contact City Technology.

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