



4H - Hydrogen Sulphide

(High sensitivity version)

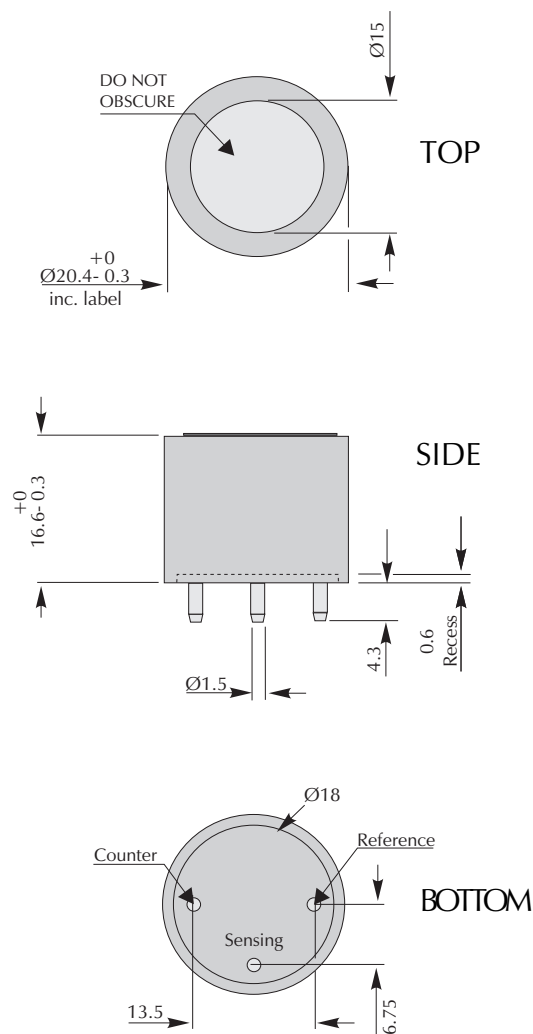
Performance Characteristics

Nominal Range	0-100ppm
Maximum Overload	500ppm
Expected Operating Life	Two years in air
Output Signal	$1.20 \pm 0.25 \mu\text{A/ppm}$
Resolution	0.1ppm
Temperature Range	-40°C to +50°C
Pressure Range	Atmospheric $\pm 10\%$
T ₉₀ Response Time	≤ 30 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 to +0.2ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	<0.1ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10 Ω
Bias Voltage	Not required
Repeatability	<2% of signal
Output Linearity	Linear

Physical Characteristics

Weight	5g (approx.)
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	24 months from date of despatch (This amounts to a variation of condition 6 of our standard terms and conditions which otherwise apply)

Outline Dimensions



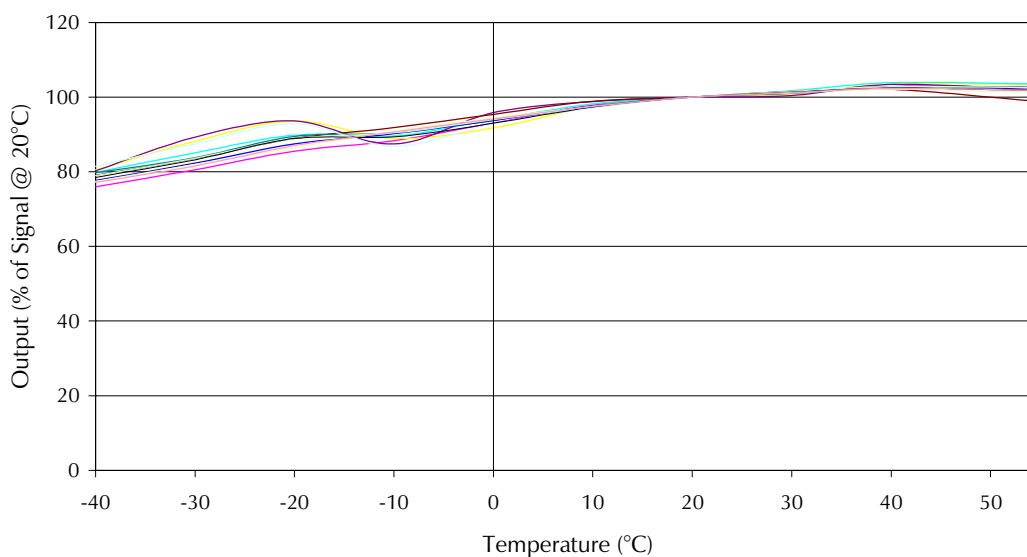
All dimensions in mm

All tolerances $\pm 0.15\text{mm}$ unless otherwise stated

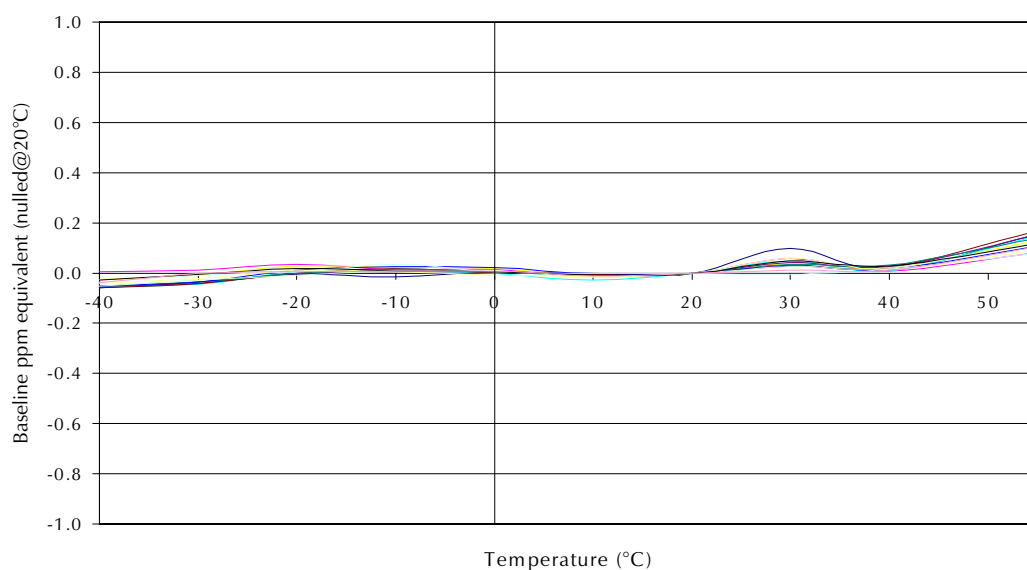
IMPORTANT NOTE: Connection should be made via PCB sockets only. Soldering to the pins will seriously damage your sensor.



4H Hydrogen Sulphide CiTiceL - Output vs Temperature



4H Hydrogen Sulphide CiTiceL - Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4H CiTiceLs 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.	4H	Gas	Conc.	4H
Carbon monoxide:	300ppm	≤6ppm	Hydrogen:	10000ppm	≤5ppm
Sulphur dioxide:	5ppm	≈0.5ppm	Nitrogen dioxide:	5ppm	-1ppm
Nitric oxide:	35ppm	<0.4ppm			

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

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement City Technology Limited reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of City Technology Limited, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application.