4HS/LM CiTiceL®

(Standard version)

Performance Characteristics

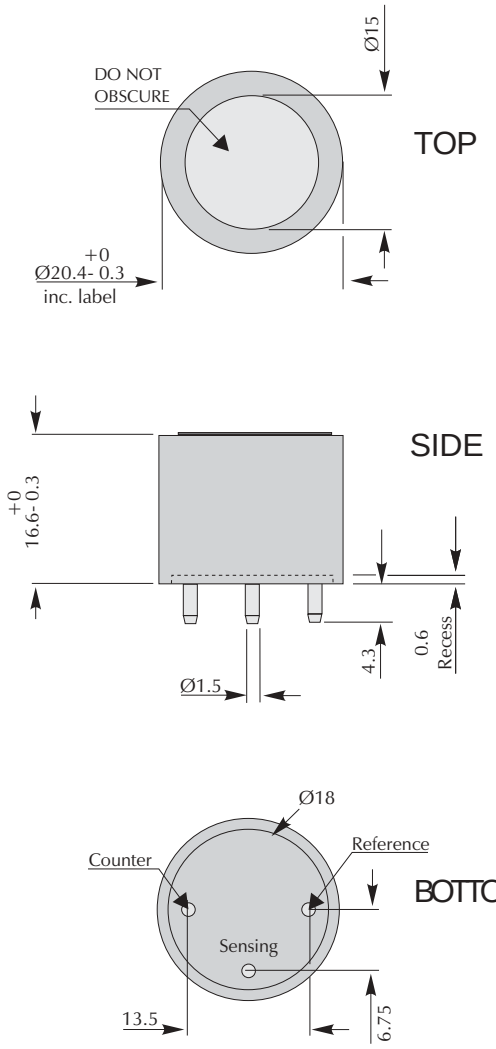
Nominal Range	0-100ppm
Maximum Overload	500ppm
Expected Operating Life	Two years in air
Output Signal	0.70 ± 0.15 µA/ppm
Resolution	0.1ppm
Temperature Range	-40°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T_{90} Response Time	≤30 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-0.1 to +0.4ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	<0.2ppm equivalent
Long Term Output Drift	<2% signal loss/month
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

Physical Characteristics

Weight	5g (approx.)
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

Outline Dimensions



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

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

Testing: 4HS/LM Hydrogen Sulphide CiTiceLs should be tested monthly to confirm sensitivity and response time are adequate.

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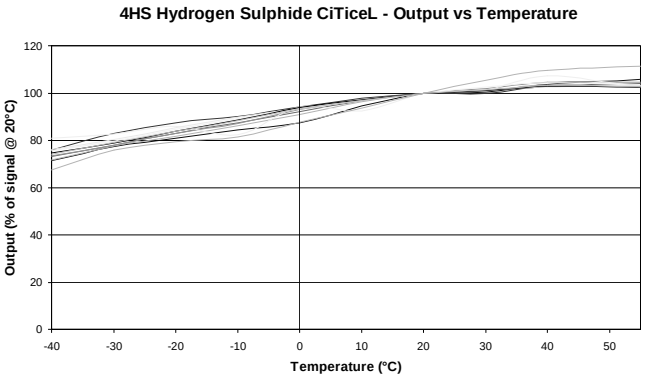

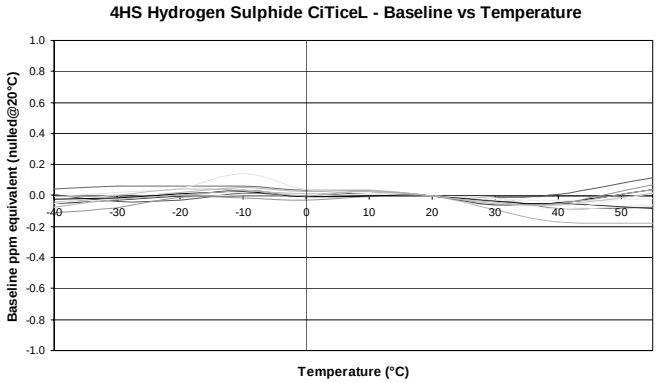

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4HS/LM 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.	4HS/LM	Gas	Conc.	4HS/LM
Carbon monoxide:	300ppm	≤2ppm	**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.

Methanol Sensitivity

The 4HS/LM CiTiceL is designed for use in applications where methanol might be present. Whilst cross sensitivity reactions on CiTiceLs are normally readily defined, the behavior of the 4HS/LM when exposed to methanol is significantly more complex, and can not be specified as above for carbon monoxide. The 4HS/LM CiTiceL is the result of an extensive development project, which has achieved, for this application, a significant performance advantage over standard 4HS CiTiceLs.

For more detailed information about the response to methanol please contact Technical Support at City Technology.

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