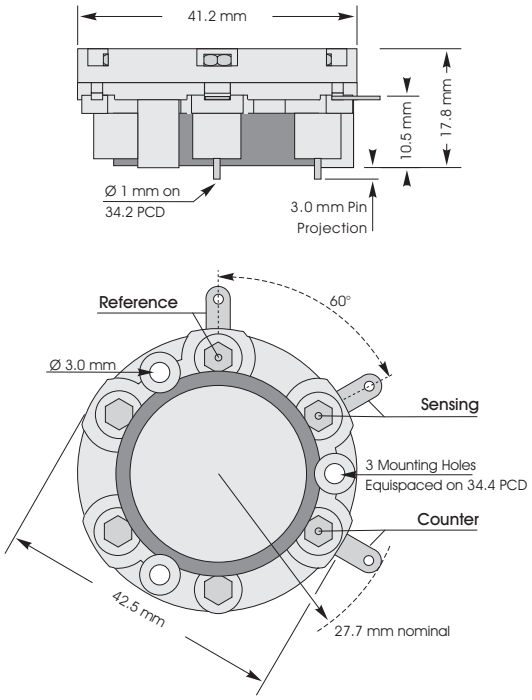
3HH/LM CiTiceL®

High output, ambient monitoring H_2S sensor with reduced methanol sensitivity

Performance Characteristics

Nominal Range	0-50ppm
Maximum Overload	500ppm
Expected Operating Life	Two years in air
Output Signal	1.70 ± 0.30 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)	-0.2 to +0.4ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	0.1ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Repeatability	1% of signal
Output Linearity	Linear

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



All tolerances ±0.15mm unless otherwise stated.

Sensor shown with side tags and gold pins.

Do not solder to pin connections

Physical Characteristics

Weight	22g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

Testing

3HH/LM Hydrogen Sulphide CiTiceLs should be tested monthly to confirm sensitivity and response time are adequate.

Ordering Information

The 3HH/LM Hydrogen Sulphide CiTiceL is available with both PCB pins and side tags. To ensure the appropriate option is supplied care must be taken to provide the correct code when ordering.

With side tag and PCB pin connections - **3HH/LM**

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Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 3HH 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.	3HH
Carbon monoxide:	300ppm	≤6ppm

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

Methanol Sensitivity

The 3HH/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 3HH/LM when exposed to methanol is significantly more complex, and can not be specified as above for carbon monoxide. The 3HH/LM CiTiceL is the result of an extensive development project, which has achieved, for this application, a significant performance advantage over standard 3HH CiTiceLs.

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

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