

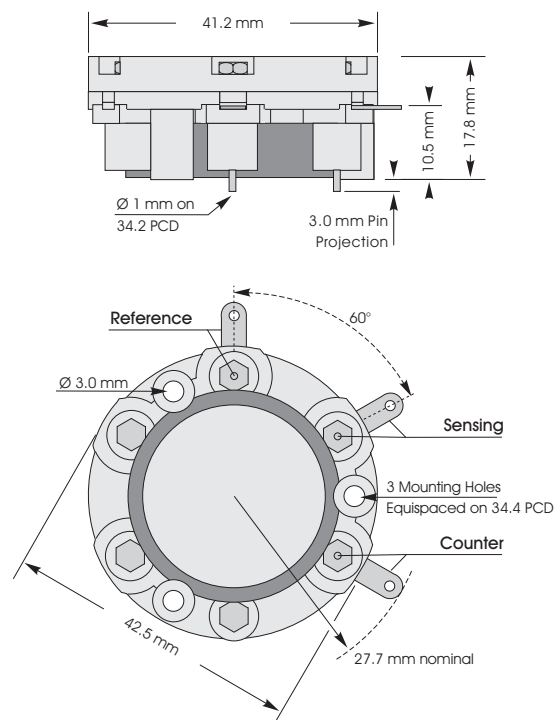
Hydrogen MediceL<sup>®</sup> SpecificationMHYT-1 MediceL<sup>®</sup>

With filter to remove trace alcohol levels

Performance Characteristics

<b>Nominal Range</b>	0-1000ppm
<b>Maximum Overload</b>	2000ppm
<b>Expected Operating Life</b>	Two years in air
<b>Output Signal</b>	0.03 ± 0.01 μA/ppm
<b>Resolution</b>	2ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	0.009 ± 0.003 % signal/mBar
<b>T<sub>90</sub> Response Time</b>	<50 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	0 to -15ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	-35ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10Ω
<b>Bias Voltage</b>	Not required
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear
<b>Filter Life</b>	400ppm/hrs Ethanol

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

Outline Dimensions

All tolerances ±0.15mm unless otherwise stated.  
Sensor shown with side tags and gold pins.  
Do not solder to pin connections

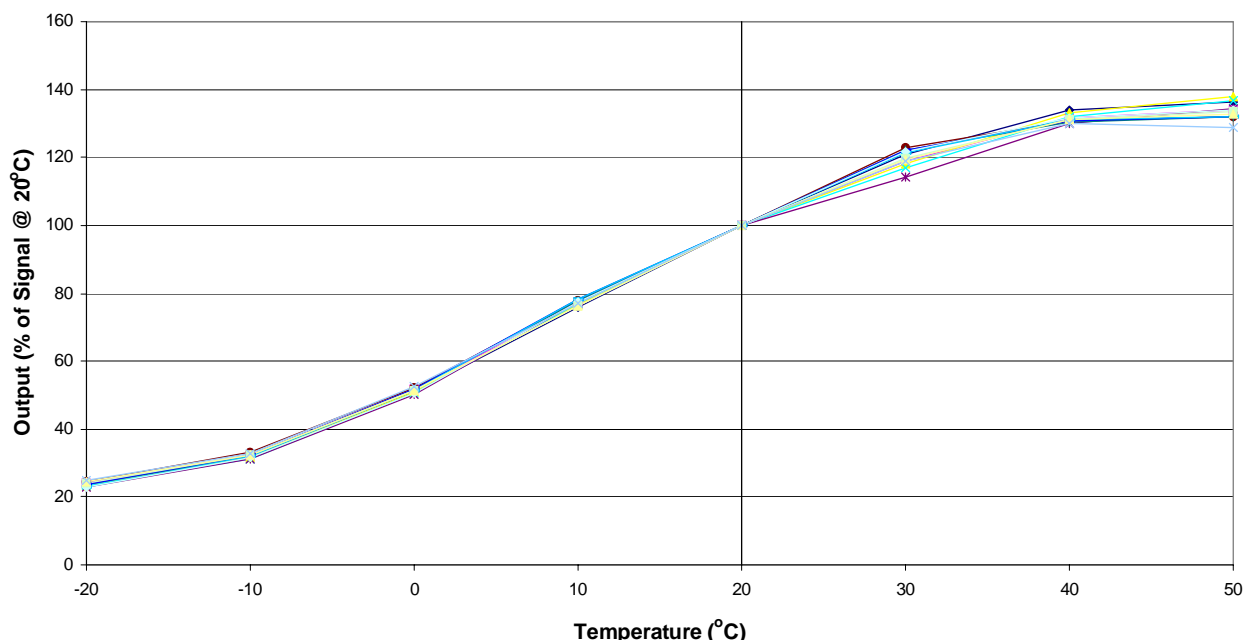
Physical Characteristics

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

## Hydrogen MediceL<sup>®</sup> Specification



### MHYT-1 Hydrogen MediceL - Output vs Temperature



### Cross-sensitivity Data

MediceLs may exhibit a response to certain gases in a sample other than the target gas. MHYT-1 MediceLs 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).

<u>Gas</u>	<u>Conc.</u>	<u>MHYT-1</u>	<u>Gas</u>	<u>Conc.</u>	<u>MHYT-1</u>
<b>Carbon monoxide:</b>	200ppm	<40ppm	<b>Ethanol:</b>	200ppm	0ppm
<b>Hydrogen sulphide:</b>	20ppm	<10ppm	<b>Methanol:</b>	200ppm	TBD

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

### Ordering Information

The MHYT Hydrogen MediceL is available with gold-plated PCB pins.

**Type MHYT-1: With gold-plated PCB pin connection - MHYT-1(G)**

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Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.