

4HYT CiTiceL®

Performance Characteristics

Nominal Range | 0-1000ppm Maximum Overload | 2000ppm

Expected Operating Life Two years in air

Output Signal $0.015 \pm 0.01 \,\mu\text{A/ppm}$

Resolution | 2ppm

Temperature Range | -20°C to +50°C

Pressure Range | Atmospheric ± 10%

T₉₀ Response Time <90 seconds

Relative Humidity Range | 15 to 90% non-condensing

Typical Baseline Range 0 to -30ppm equivalent

(pure air)

Maximum Zero Shift

(+20°C to +40°C)

-20ppm equivalent

Long Term Output Drift <2% signal loss/month

Recommended Load

Resistor

Bias Voltage Not required

 10Ω

Repeatability 2% of signal

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

Physical Characteristics

Output Linearity | Linear

Weight | 5g (approx.)

Position Sensitivity None

Storage Life | Six months in CTL container

Recommended Storage Temperature

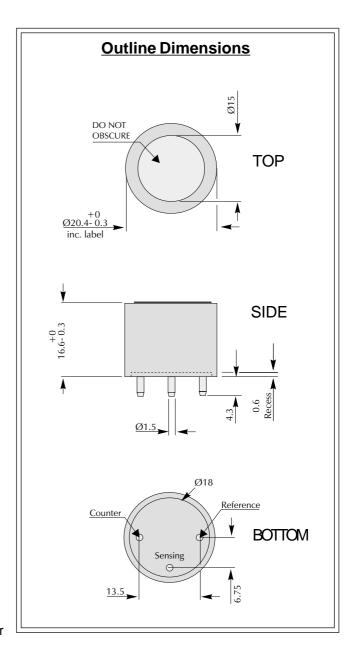
0-20°C

Warranty Period

12 months from date of

despatch

Doc. Ref.: 4hyt.p65 Issue 1.8 Mar 12, 2001

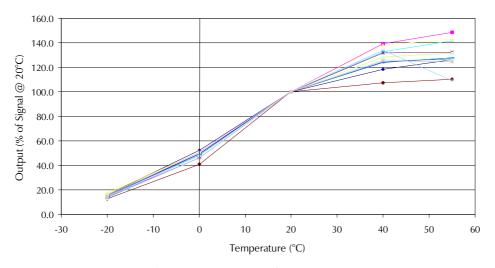


 $\mbox{All dimensions in mm} \\ \mbox{All tolerances } \pm 0.15 \mbox{mm unless othewise stated}$

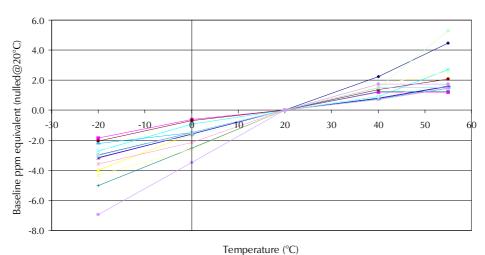
IMPORTANT NOTE: Connection should be made via PCB sockets only. Soldering to the pins will seriously damage your sensor.



4HYT Hydrogen CiTiceL - Output vs Temperature



4HYT Hydrogen CiTiceL - Baseline vs Temperature



remperature

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4HYT 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).

<u>Gas</u>	Conc.	4HYT	<u>Gas</u>	Conc.	<u>4HYT</u>
Carbon monoxide:	300ppm	≤60ppm	Chlorine:	1ppm	0ppm
Hydrogen sulphide:	15ppm	<3ppm	Hydrogen cyanide:	10ppm	≈3ppm
Sulphur dioxide:	5ppm	0ppm	Hydrogen chloride:	5ppm	0ppm
Nitric oxide:	35ppm	≈10ppm	Ethylene:	100ppm	≈80ppm
Nitrogen dioxide:	5ppm	0ppm	**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.

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