Hydrogen CiTiceL® Specification

7HYT CiTiceL®

Performance Characteristics

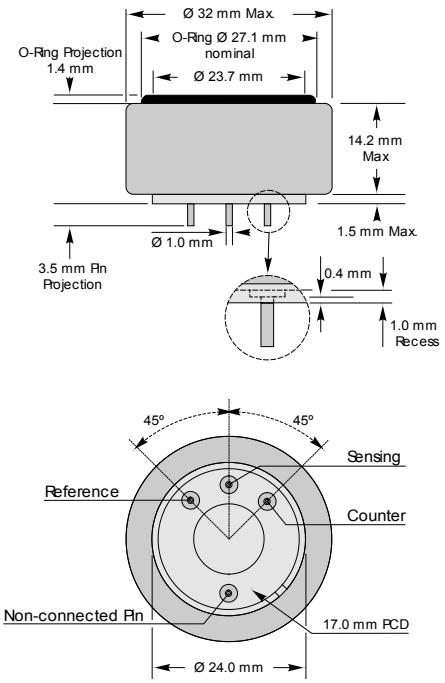
Nominal Range	0-1000ppm
Maximum Overload	2000ppm
Expected Operating Life	Two years in air
Output Signal	0.03 ± 0.01 µA/ppm
Resolution	2ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	0.009 ± 0.003 % signal/mBar
T_{90} Response Time	<50 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 to -25ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	-35ppm 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

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

Physical Characteristics

Weight	12g
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 tolerances ±0.15mm unless otherwise stated.
Do not solder to pin connections

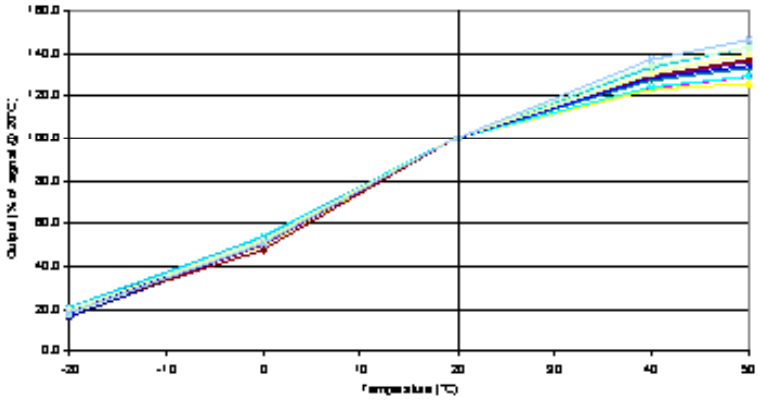
IMPORTANT NOTE: Connection should be made via PCB sockets only. Soldering to the pins will render your warranty void.

iSweek www.isweek.com
Add: 16/F, Bldg. #3, Zhongke Mansion, No.1 Hi-Tech S. Rd, Hi-Tech Park South, Shenzhen, Guangdong, 518067 P.R.China
Tel: + 86-755-83289069 Fax: + 86-755-83289052 E-mail: sales@isweek.com

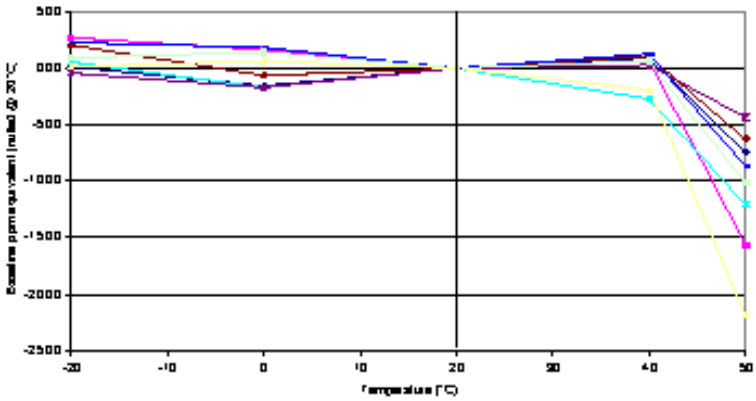
Hydrogen CiTiceL® Specification

The data below has been measured via changing the temperature of the sensor and gas in an environmental chamber. When the sensor is held at room temperature and only the gas temperature changed the effect may be different.

7HYT Hydrogen CiTiceLs - Output vs Temperature



7HYT Hydrogen CiTiceL - Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7HYT 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.	7HYT	Gas	Conc.	7HYT
Carbon monoxide:	300ppm	0<x$<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.

iSweek www.isweek.com
Add: 16/F, Bldg. #3, Zhongke Mansion, No.1 Hi-Tech S. Rd, Hi-Tech Park South, Shenzhen, Guangdong, 518067 P.R.China
Tel: + 86-755-83289069 Fax: + 86-755-83289052 E-mail: sales@isweek.com