## Ozone CiTiceL® Specification



# 703 CiTiceL®

#### **Performance Characteristics**

**Nominal Range** 0-2ppm **Maximum Overload** 5ppm **Expected Operating Life** Two years in air **Output Signal** 6.0±2.0µA/ppm Resolution 20ppb -20°C to +50°C **Temperature Range Pressure Range** Atmospheric ± 10% **Pressure Coefficient** No data T<sub>oo</sub> Response Time ≤150 seconds **Relative Humidity Range** 15 to 90% non-condensing **Typical Baseline Range** 0 to +250ppb equivalent (pure air) **Maximum Baseline Shift** +100ppb equivalent (+20°C to +40°C) **Long Term Output Drift** No Data **Recommended Load**  $33\Omega$ Resistor **Bias Voltage Not required** Repeatability No Data **Output Linearity** Linear

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

# Ø 32.2 mm Max. O-Ring Ø 27.1 mm O-Ring Projection nominal 0.25 mm Ø 23.7 mm 14.2 mm 16.6 mm Max **▲** 1.5 mm Ø 1.0 mm 3.4 mm Pin 0.4 mm Projection 1.0 mm Sensing Reference Counter Non-connected Pin 17.0 mm PCD Ø 24.0 mm All tolerances ±0.15mm unless otherwise stated. Do not solder to pin connections

#### **Physical Characteristics**

Weight 17g
Position Sensitivity None
Storage Life Six months in CTL container

Recommended Storage Temperature
Warranty Period 12 months from date of despatch

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

Doc. Ref.: 7o3 Issue 4.6 Page 1 of 2 17th June 2004

## Ozone CiTiceL® Specification



#### **Temperature Dependence**

The output of a CiTiceL can vary with temperature. A programme of data acquisition is currently underway at City Technology to establish a statistically based relationship for 7O3 sensors.

#### **Cross-sensitivity Data**

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 703 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.	<u>703</u>	<u>Gas</u>	Conc.	<u>703</u>
Carbon monoxide:	300ppm	≈0.2ppm	Chlorine:	1ppm	≈0.6ppm
Hydrogen sulphide:	15ppm	≈-10ppm	Hydrogen:	No Data	No Data
Sulphur dioxide:	5ppm	≈-2.5ppm	Hydrogen cyanide:	No Data	No Data
Nitric oxide:	No Data	No Data	Hydrogen chloride:	No Data	No Data
Nitrogen dioxide:	5ppm	≈4ppm	Ethylene:	No Data	No Data
**For information on other possible cross-interferents please 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.

Doc. Ref.: 7o3 Issue 4.6 Page 2 of 2 17th June 2004