Sulphur Dioxide CiTiceL® Specification

7SH Compact CiTiceL®

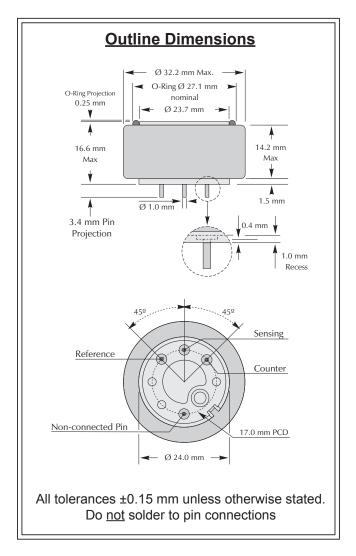
Performance Characteristics

Nominal Range 0-20 ppm **Maximum Overload** 100 ppm **Expected Operating Life** Two years in air **Output Signal** $1.25 \pm 0.25 \,\mu\text{A/ppm}$ Resolution 0.1 ppm -20°C to +50°C **Temperature Range Pressure Range** Atmospheric ± 10% **Pressure Coefficient** No data ≤15 seconds T_{on} Response Time **Relative Humidity Range** 15 to 90% non-condensing Typical Baseline Range -0.1 to 0.2 ppm equivalent (pure air) **Maximum Zero Shift** 0.1 ppm equivalent (+20°C to +40°C) **Long Term Output Drift** <2% signal loss/month **Recommended Load** 10Ω Resistor **Bias Voltage** Not required Repeatability 2% of signal **Output Linearity**

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

Physical Characteristics

Position Sensitivity
Storage Life
Recommended Storage
Temperature
Warranty Period
Variation 17 g
None
Six months in CTL container
0-20°C
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.

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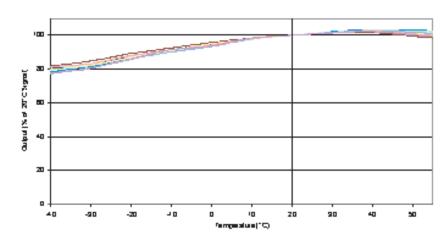
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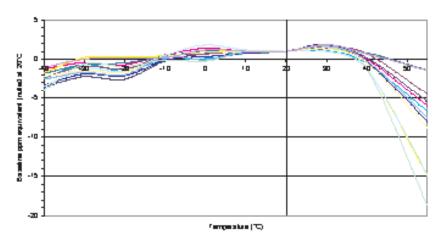


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78H Sulphur dioxide CiTiceL - Output vs Temperature



7SH Sulphur dioxide CiTiceL - Baseline vs Temperature



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Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7SH 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.	7SH	Gas	Conc.	7SH
Carbon monoxide:	300ppm	≤3ppm	Hydrogen:	100ppm	0ppm
Hydrogen sulphide:	15ppm	≈20ppm	Hydrogen cyanide:	10ppm	≈5ppm
Nitric oxide:	35ppm	-1 <x\$<0ppm< td=""><th>Hydrogen chloride:</th><td>5ppm</td><td>≈1ppm</td></x\$<0ppm<>	Hydrogen chloride:	5ppm	≈1ppm
Nitrogen dioxide:	5ppm	≈-6ppm	Ethylene:	100ppm	0ppm
Chlorine:	1ppm	-0.5 <x\$<0ppm< td=""><td colspan="3">**For details of other possible cross-interfering gases contact City Technology.**</td></x\$<0ppm<>	**For details of other possible cross-interfering gases contact City Technology.**		

SAFETY NOTE

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

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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.

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