

Sulphur Dioxide CiTiceL[®] Specification



5SF CiTiceL[®]

Performance Characteristics

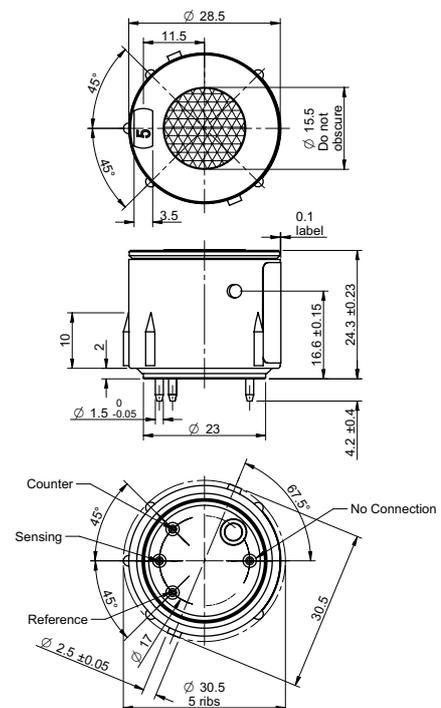
Nominal Range	0-2000ppm
Maximum Overload	5000ppm
Expected Operating Life	Two years in air
Output Signal	0.10 ± 0.02µA/ppm
Resolution	1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	0.004 % signal/mBar
T₉₀ Response Time	<30 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 ± 2ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	5ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10 Ω
Bias Voltage	Not required
Repeatability	1% of signal
Output Linearity	Linear
Colour Coding	Green

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

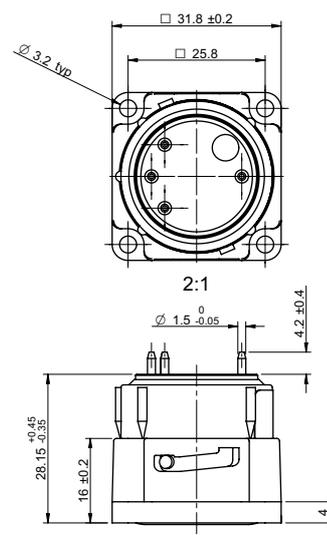
Physical Characteristics

Weight	10g
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 Sensor Dimensions



With Bayonet Fitting

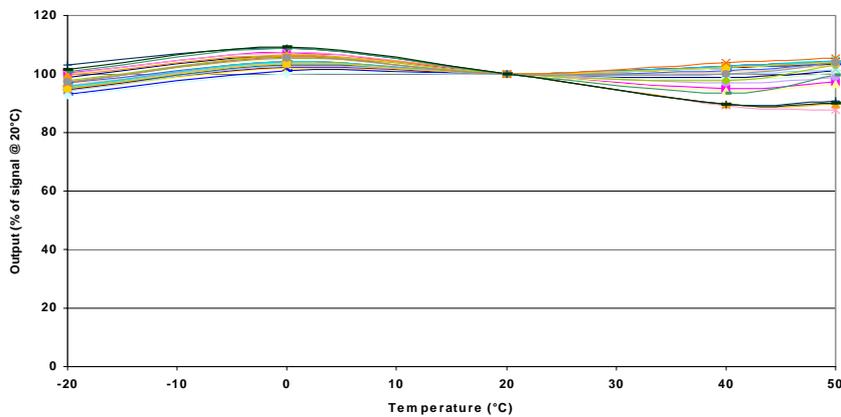


All tolerances ±0.15mm unless otherwise stated

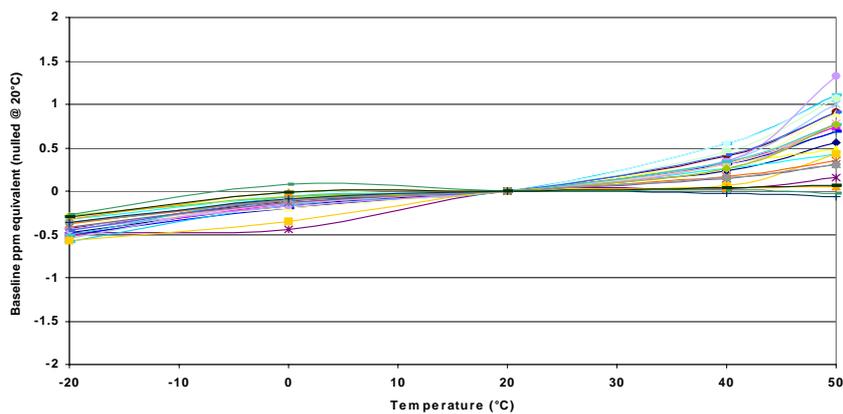
Sulphur Dioxide CiTiceL[®] Specification



5SF Sulphur Dioxide CiTiceL - Typical Output vs Temperature



5SF Sulphur Dioxide CiTiceL - Typical Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. The table below shows the typical response of 5SF sensors to a number of common cross-interfering gases. The figures are expressed as a percentage of the primary sensitivity (i.e. sulphur dioxide = 100%).

<u>Gas</u>	<u>Response</u>	<u>Gas</u>	<u>Response</u>
Carbon monoxide:	<3	Hydrogen:	<3
Hydrogen sulphide:	≈200	Hydrogen chloride:	≈15
Nitric oxide:	0	Ethylene:	<50
Nitrogen dioxide:	≈125	** 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.