



4S CiTiceL[®]

(Inboard filter to remove H₂S)

Performance Characteristics

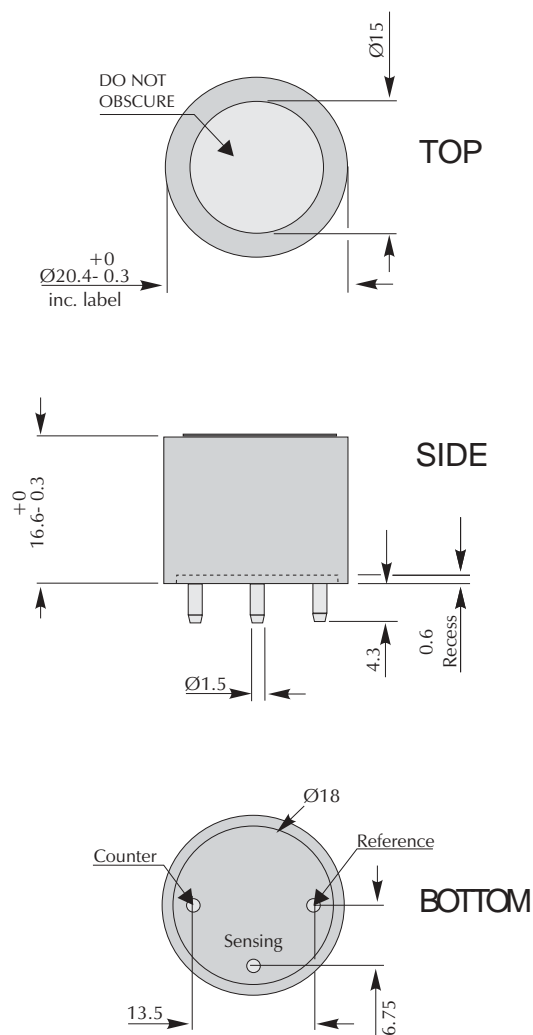
Nominal Range	0-20ppm
Maximum Overload	150ppm
Expected Operating Life	Two years in air
Output Signal	0.5 ± 0.1 µA/ppm
Resolution	0.1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
T₉₀ Response Time	<75 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-0.2 to +0.5ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	0.1 ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10Ω
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	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

Outline Dimensions



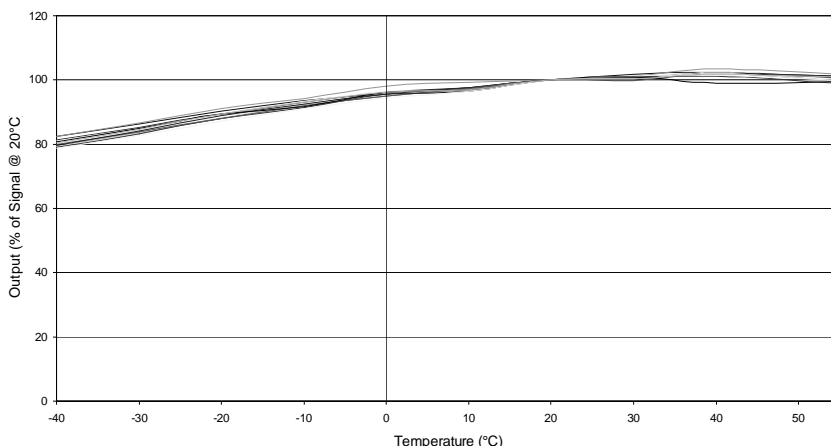
All dimensions in mm
All tolerances ±0.15mm unless otherwise stated

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

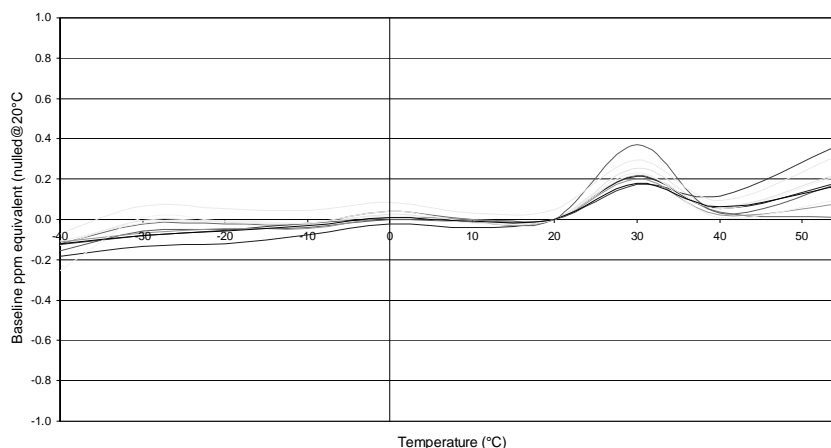
Sulphur Dioxide CiTiceL[®] Specification



4S Sulphur Dioxide CiTiceL - Output vs Temperature



4S Sulphur Dioxide CiTiceL - Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4S 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.	4S	Gas	Conc.	4S
Carbon monoxide:	300ppm	<3ppm	Nitric oxide	35ppm	0ppm
Hydrogen sulphide:	15ppm	0ppm	Nitrogen dioxide	5ppm	~5ppm

For details of other possible cross-interfering gases contact City Technology.

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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. The 4 series range of sensors have been specifically designed for safety applications. They are not suitable or warranted for use in flue gas emissions applications. City has a unique range of emissions sensors designed specifically to address this market. For further information please contact City Sales.