

4CF CiTiceL[®]

(filter to remove H₂S and SO₂)

Performance Characteristics

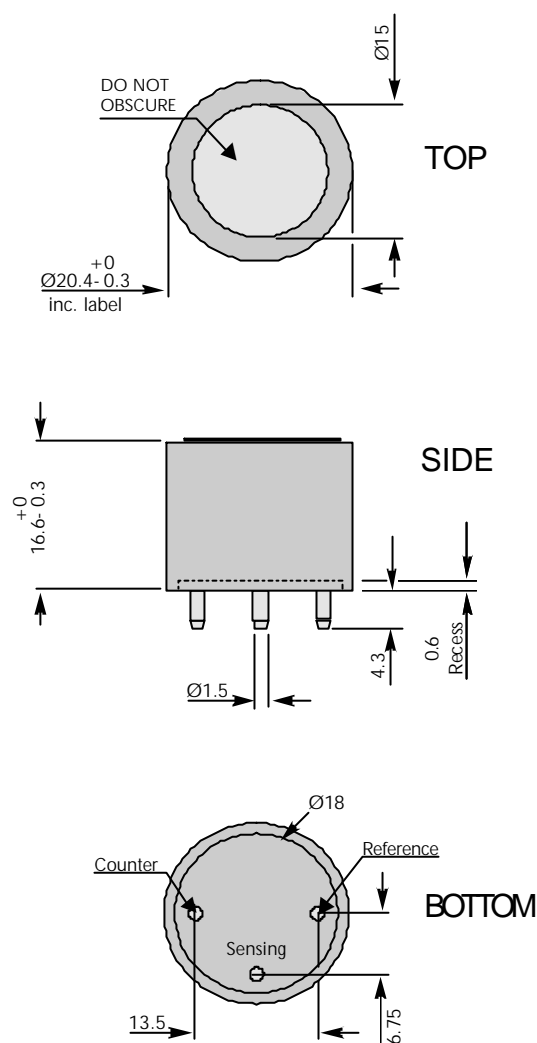
Nominal Range	0-500ppm
Maximum Overload	1500ppm
Expected Operating Life	Two years in air
Output Signal	0.07 ± 0.015 µA/ppm
Inboard Filter	To remove TLV levels of interfering gases
Resolution	1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
T₉₀ Response Time	<30 seconds (Typically 20-25 seconds)
T₅₀ Response Time	Typically 7-8 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-2 to +3ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	9ppm equivalent
Long Term Output Drift	<5% signal loss/year
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	24 months from date of despatch (This amounts to a variation of condition 6 of our standard terms and conditions which otherwise apply)

Outline Dimensions



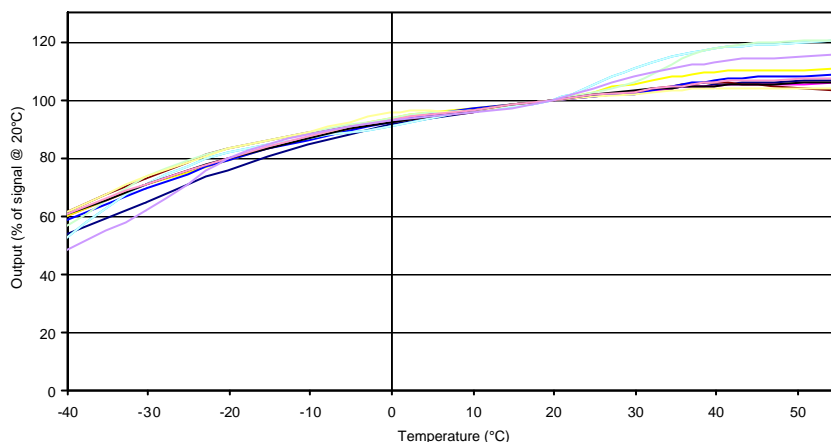
All dimensions in mm
All tolerances ±0.15mm unless otherwise stated

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

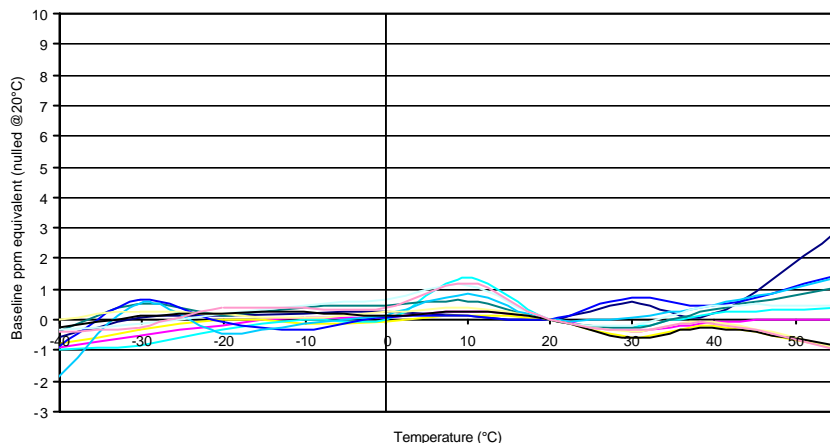
Carbon Monoxide CiTiceL[®] Specification



4CF Carbon Monoxide CiTiceL - Output vs Temperature



4CF Carbon Monoxide 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. 4CF 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>	<u>Conc.</u>	<u>4CF</u>	<u>Gas</u>	<u>Conc.</u>	<u>4CF</u>
Hydrogen sulphide:	15ppm	<0.5ppm	Chlorine:	1ppm	0ppm
Sulphur dioxide:	5ppm	0ppm	Hydrogen :	100ppm	<40ppm
Nitric oxide:	35ppm	<3ppm	Ethylene:	100ppm	<50ppm
Nitrogen dioxide:	20ppm	-1≤x≤+1ppm	Ethanol:	200ppm	0ppm

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.