



# 4CO CiTiceL<sup>®</sup>

(unfiltered version)

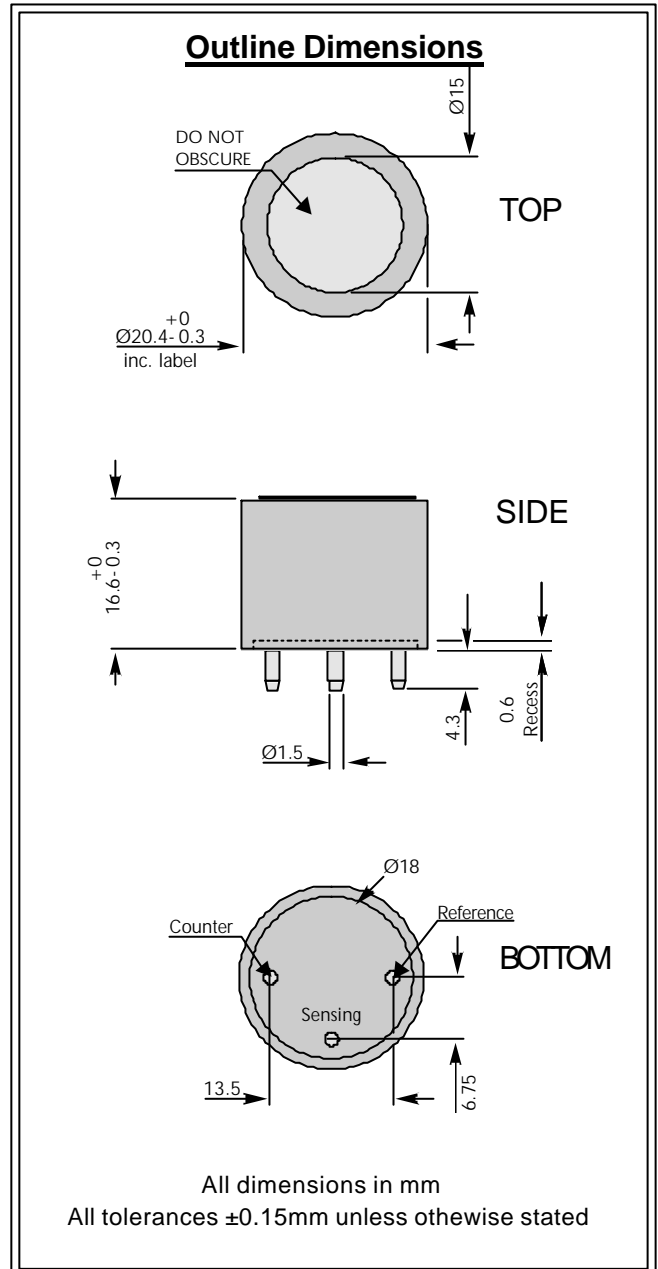
## Performance Characteristics

<b>Nominal Range</b>	0-500ppm
<b>Maximum Overload</b>	1500ppm
<b>Expected Operating Life</b>	Two years in air
<b>Output Signal</b>	0.07 ± 0.015 µA/ppm
<b>Resolution</b>	1ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>T<sub>90</sub> Response Time</b>	<25 seconds (Typically 14-16 seconds)
<b>T<sub>50</sub> Response Time</b>	Typically 6-7 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	-2 to +3ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	9ppm equivalent
<b>Long Term Output Drift</b>	<5% signal loss/year
<b>Recommended Load Resistor</b>	10Ω
<b>Bias Voltage</b>	Not required
<b>Repeatability</b>	<2% of signal
<b>Output Linearity</b>	Linear

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

## Physical Characteristics

<b>Weight</b>	5g (approx.)
<b>Position Sensitivity</b>	None
<b>Storage Life</b>	Six months in CTL container
<b>Recommended Storage Temperature</b>	0-20°C
<b>Warranty Period</b>	24 months from date of despatch (This amounts to a variation of condition 6 of our standard terms and conditions which otherwise apply)

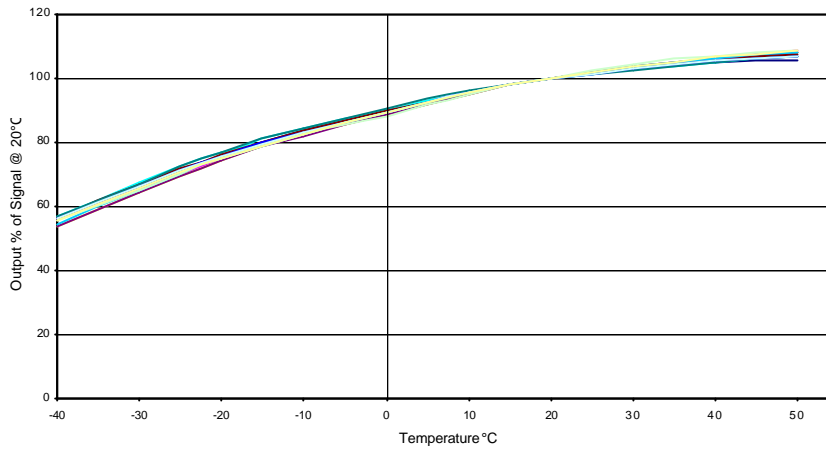


**IMPORTANT NOTE:** Connection should be made via PCB sockets only. Soldering to the pins will seriously damage your sensor.

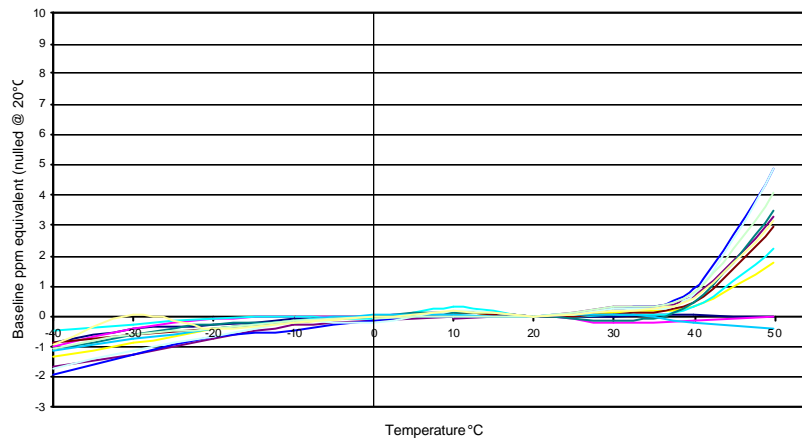
# Carbon Monoxide CiTiceL<sup>®</sup> Specification



**4CO Carbon Monoxide CiTiceL - Output vs Temperature**



**4CO Carbon Monoxide CiTiceL - Baseline vs Temperature**



## Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4CO 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>4CO</u>	<u>Gas</u>	<u>Conc.</u>	<u>4CO</u>
<b>Hydrogen sulphide:</b>	15ppm	≈45ppm	<b>Chlorine:</b>	1ppm	-1ppm ≤ x ≤ 0ppm
<b>Sulphur dioxide:</b>	5ppm	≈2.5ppm	<b>Hydrogen :</b>	100ppm	<40ppm
<b>Nitric oxide:</b>	35ppm	≈10ppm	<b>Nitrogen dioxide:</b>	5ppm	≈-3ppm

\*\*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.