



4ND CiTiceL[®]

Performance Characteristics

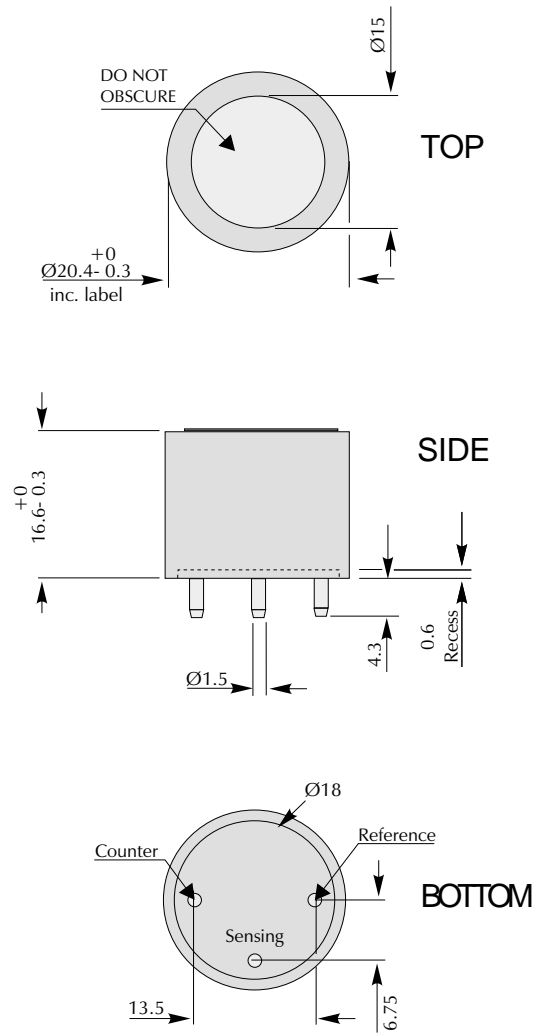
Nominal Range	0-20ppm
Maximum Overload	150ppm
Expected Operating Life	Two years in air
Output Signal	0.6 ± 0.15 µA/ppm
Resolution	0.1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
T₉₀ Response Time	<25 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-0.2 to +0.2ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	0.2ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	33Ω
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



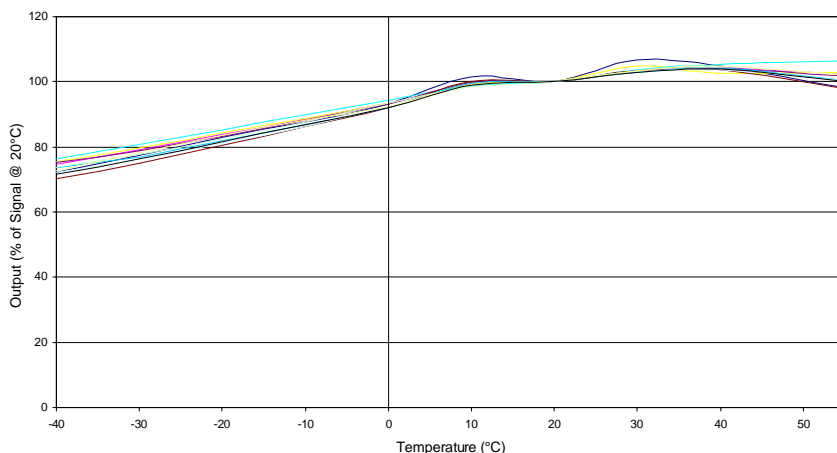
All dimensions in mm
All tolerances ±0.15mm unless otherwise stated

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

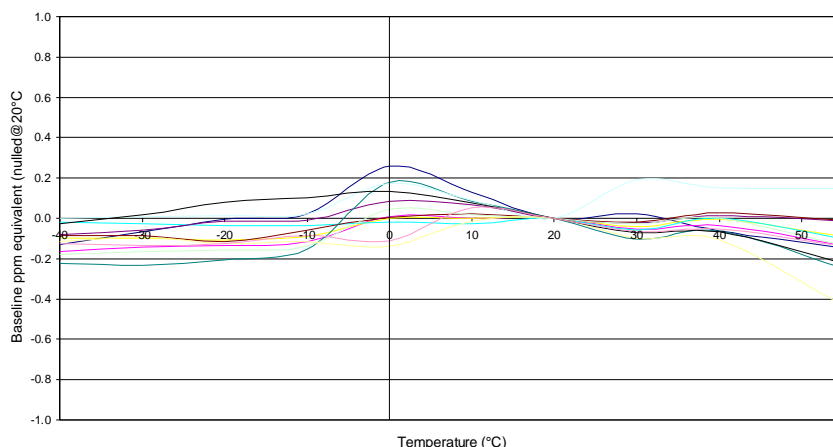
Nitrogen Dioxide CiTiceL® Specification



4ND Nitrogen Dioxide CiTiceL - Output vs Temperature



4ND Nitrogen 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. 4ND 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>4ND</u>	<u>Gas</u>	<u>Conc.</u>	<u>4ND</u>
Carbon monoxide:	300ppm	0ppm	Nitric oxide:	35ppm	0ppm
Hydrogen sulphide	15ppm	~-1.2ppm	Chlorine:	1ppm	~1ppm
Sulphur dioxide:	5ppm	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.