

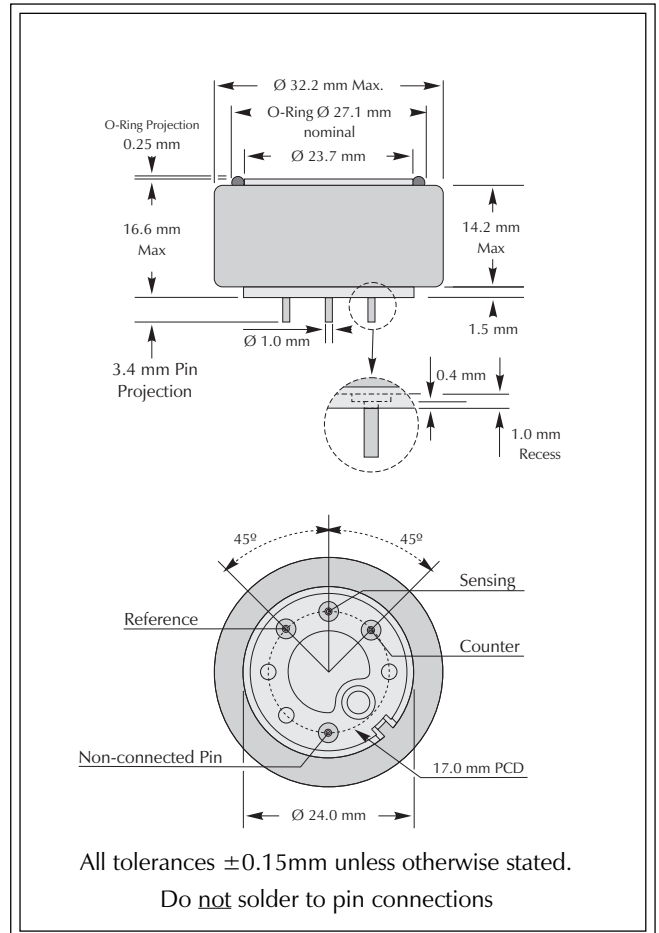


## Nitric oxide CiTiceL<sup>®</sup> Specification

# 7NT Compact CiTiceL<sup>®</sup>

### Performance Characteristics

<b>Nominal Range</b>	0-100ppm
<b>Maximum Overload</b>	1500ppm
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	0.55 ± 0.11 μA/ppm
<b>Resolution</b>	0.5ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	0.016% signal/mBar
<b>T<sub>90</sub> Response Time</b>	≤15 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	0 to +3ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	9ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10 Ω
<b>Bias Voltage</b>	+300mV
<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

**IMPORTANT NOTE:** Connection should be made via PCB sockets only. Soldering to the pins will render your warranty void.

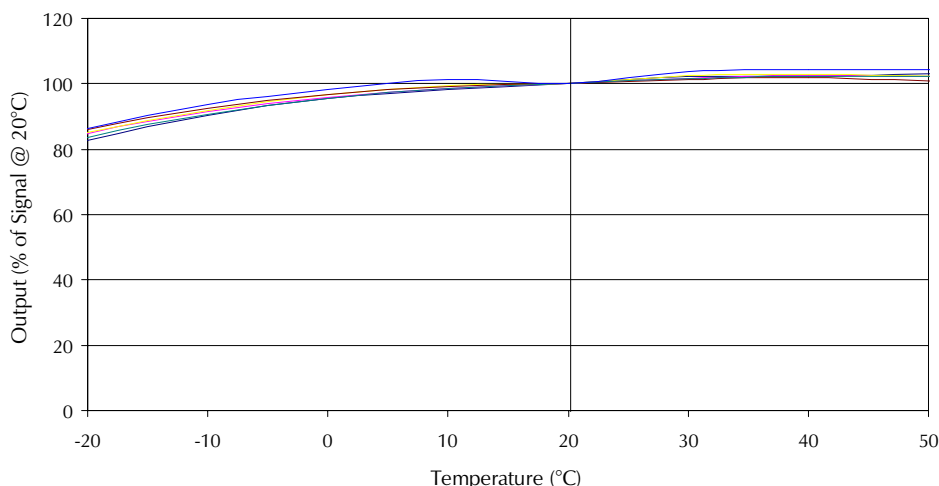
### Physical Characteristics

<b>Weight</b>	17g.
<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>	12 months from date of despatch

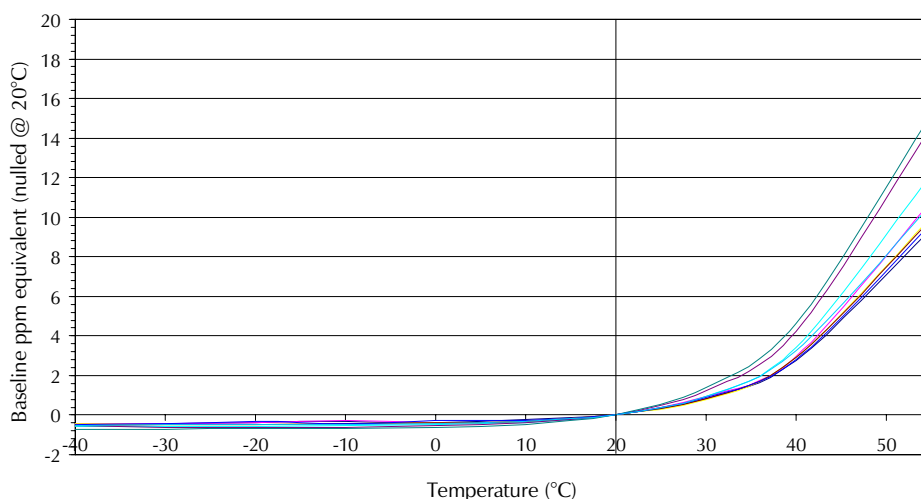
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7NT Nitric oxide CiTiceL - Output vs Temperature



7NT Nitric oxide CiTiceL - Baseline vs Temperature



## Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 7NT 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.	7NT	Gas	Conc.	7NT
<b>Carbon monoxide:</b>	300ppm	0ppm	<b>Chlorine:</b>	1ppm	0ppm
<b>Hydrogen sulphide:</b>	15ppm	≈5ppm	<b>Hydrogen:</b>	100ppm	0ppm
<b>Sulphur dioxide:</b>	5ppm	0ppm	<b>Hydrogen cyanide:</b>	10ppm	0ppm
<b>Nitrogen dioxide:</b>	5ppm	<1.5ppm	<b>Hydrogen chloride:</b>	5ppm	<1ppm
<b>Nitrous oxide:</b>	100ppm	0ppm	<b>Ethylene:</b>	100ppm	0ppm

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

**Ordering Information:**  
**Also available with bias board - 7BNT**

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