

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



# NX1 CiTiceL<sup>®</sup> (Rev 4)

For BAR 97 grade markets

### Performance Characteristics

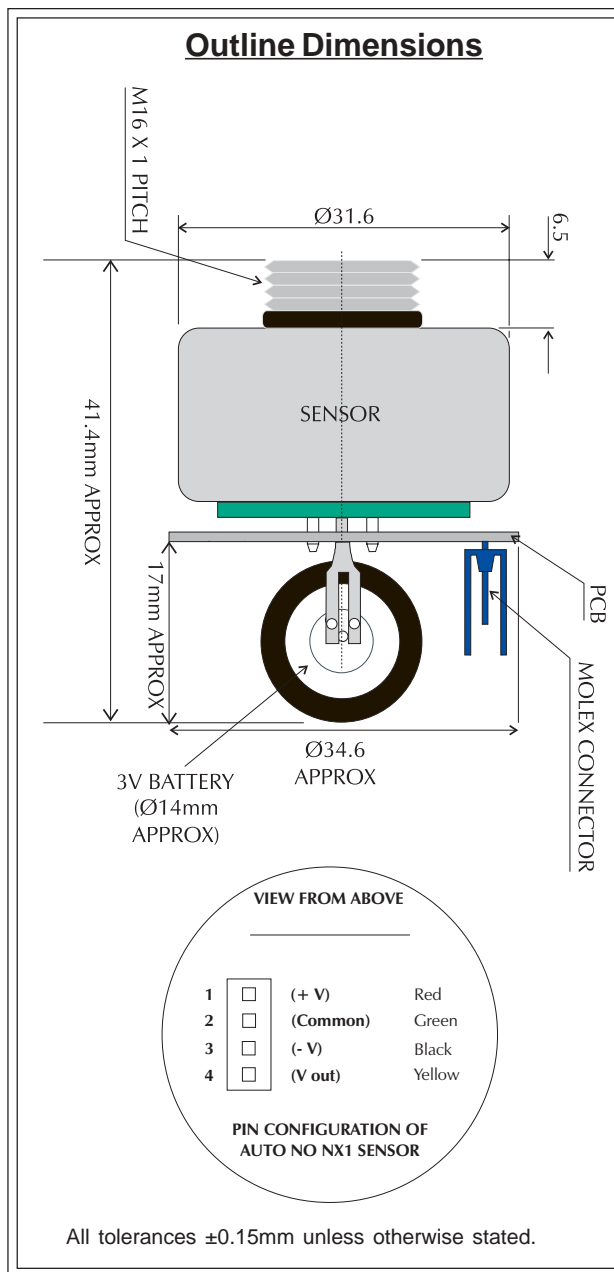
<b>Nominal Range</b>	0-5000ppm
<b>Inboard Filter</b>	To remove effect of SO <sub>2</sub> in gas stream
<b>Output Signal</b>	0.05 ± 0.01 µA/ppm
<b>Resolution</b>	1ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	800 to 1100 mBar
<b>Pressure Coefficient</b>	0.02% signal/mBar
<b>T<sub>95</sub> Response Time*</b>	≤5.5 seconds
<b>T<sub>90</sub> Response Time*</b>	≤4.5 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	0 to +12ppm equivalent
<b>Maximum Zero Shift (0°C to +40°C)</b>	<30ppm equivalent
<b>Long Term Output Drift</b>	Typically <5% signal loss/year
<b>Recommended Load Resistor</b>	10 Ω
<b>Bias Voltage</b>	+300mV
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear

\* Prolonged exposure to high or low humidity may lead to an increased Response Time

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

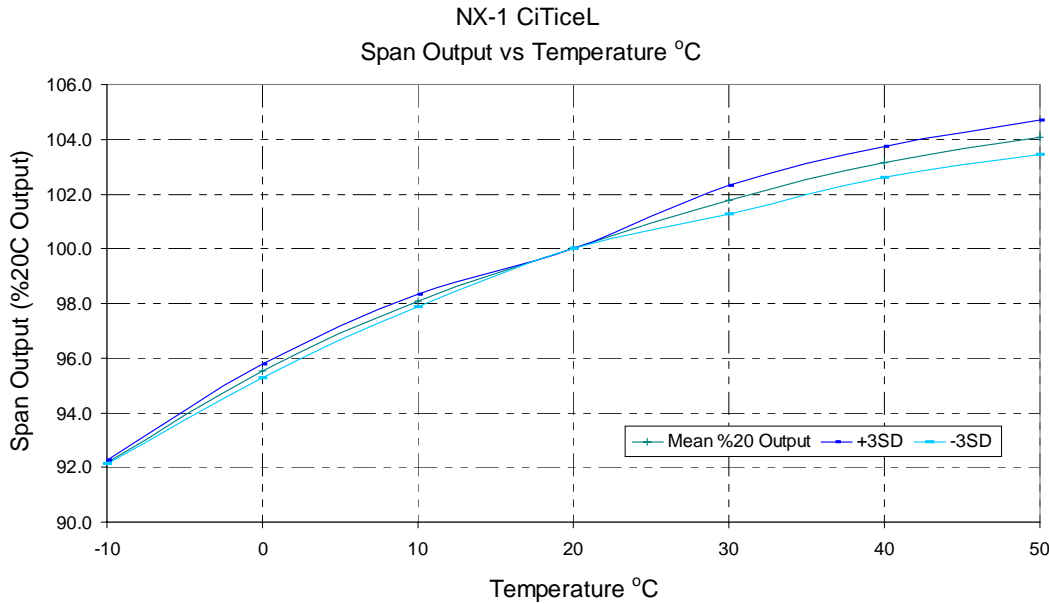
### Physical Characteristics

<b>Weight</b>	32g
<b>Position Sensitivity</b>	None
<b>Storage Life</b>	Six months in CTL container
<b>Recommended Storage Temperature</b>	0°C to 25°C in CTL packaging
<b>Warranty Period</b>	15 months from date of despatch



Automotive NX1 CiTiceL <sup>®</sup> Part Details	
MOLEX HEADER (0.100"/2.54mm)	Molex Part Number 22-29-2041
CRIMP TERMINAL HOUSING (MATING PART)	Molex Part Number 22-01-2045

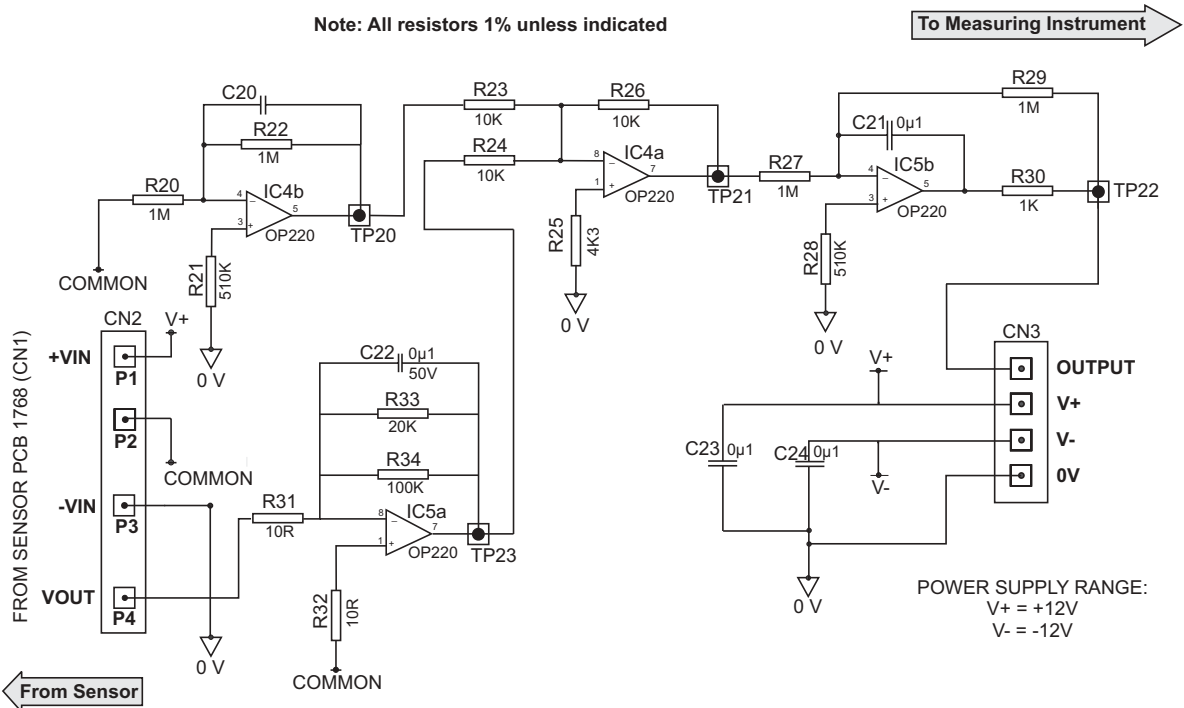
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## Recommended External Circuit for Sensor

This diagram shows the recommended operating circuit for the NX1 CiTiceL, designed to give an output of 0-5V over the range 0-5000ppm, where the sensitivity is 60nA/ppm.

Note: All resistors 1% unless indicated



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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.