



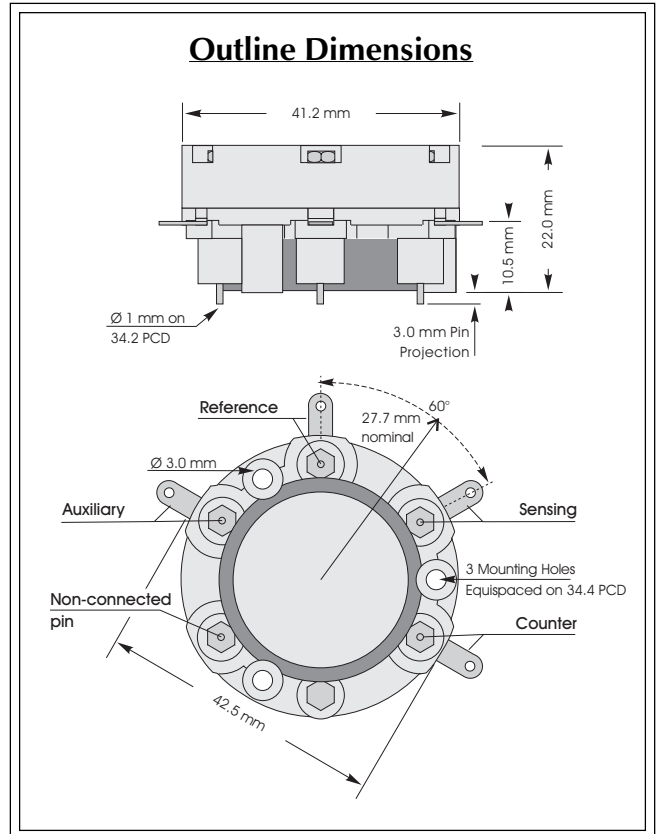
Carbon monoxide CiTiceL[®] Specification

A3E/D CiTiceL



Performance Characteristics

Nominal Range	0-2000ppm
Maximum Overload	4000ppm
Inboard Filter	'Double size' filter to remove acid gases from flue stream
Auxiliary Electrode	To compensate for H ₂ cross-interference
Expected Operating Life	Two years in air
Output Signal	0.075 ± 0.025 μA/ppm
Resolution	1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	0.02% signal/mBar
T₉₀ Response Time	< 38 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-2 to +17ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	No data
Long Term Output Drift	< 2% signal loss/month
Recommended Load Resistor	10 Ω
Bias Voltage	0 or +250mV (See page tox-10)
Repeatability	< 1% of signal
Output Linearity	Linear



All tolerances ±0.15mm unless otherwise stated
 Note: Do not solder to pin connections

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

Physical Characteristics

Weight	31g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

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Temperature Dependence

The output of a CiTiceL can vary with temperature. As the operation of the A3E/D CiTiceL is different to that of standard CiTiceLs, the temperature behaviour of these sensors is very different. Further details can be obtained from City Technology.

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. The table below shows the typical response of A3E/D sensors to a number of common cross-interfering gases. The figures are expressed as a percentage of the primary sensitivity (i.e. carbon monoxide = 100%).

Gas	Response	Gas	Response
Hydrogen sulphide:	0	Hydrogen:	<1 (see note)
Sulphur dioxide:	0	Hydrogen chloride:	0
Nitric oxide:	0	Ethylene:	≈35
Nitrogen dioxide:	0	** For details of other possible cross-interfering gases contact City Technology.**	

Note: Cross-sensitivity to H₂ <1% after compensation

Ordering Information

The A3E/D Carbon Monoxide CiTiceL is available with both PCB pins and side tags only.

Type A3E/D:- With side tag and PCB pin connections - A3E/D



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