



# 4COSH CiTiceL<sup>®</sup> (rev.03)

(Four electrode dual gas sensor)

## Performance Characteristics

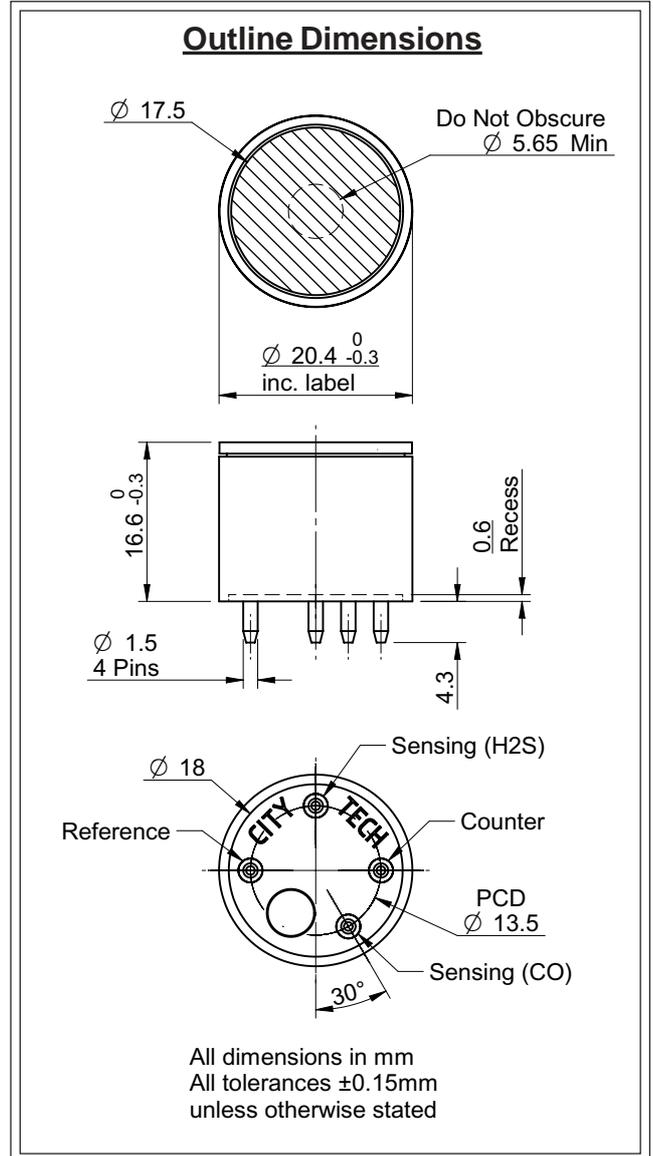
<b>Nominal Range</b>	For CO: 0-500ppm For H <sub>2</sub> S: 0-200ppm
<b>Maximum Overload</b>	For CO: 1500ppm For H <sub>2</sub> S: 500ppm
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	For CO: 80±30nA/ppm For H <sub>2</sub> S: 775±275nA/ppm
<b>Resolution</b>	For CO: ±1.0ppm For H <sub>2</sub> S: ±0.5ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ±10%
<b>T<sub>90</sub> Response Time</b>	For CO: ≤35 seconds For H <sub>2</sub> S: ≤35 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (ppm equiv.)</b>	For CO: -2 to +3ppm For H <sub>2</sub> S: -0.4 to +0.4ppm
<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>	For CO: ≤3% of signal For H <sub>2</sub> S: ≤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

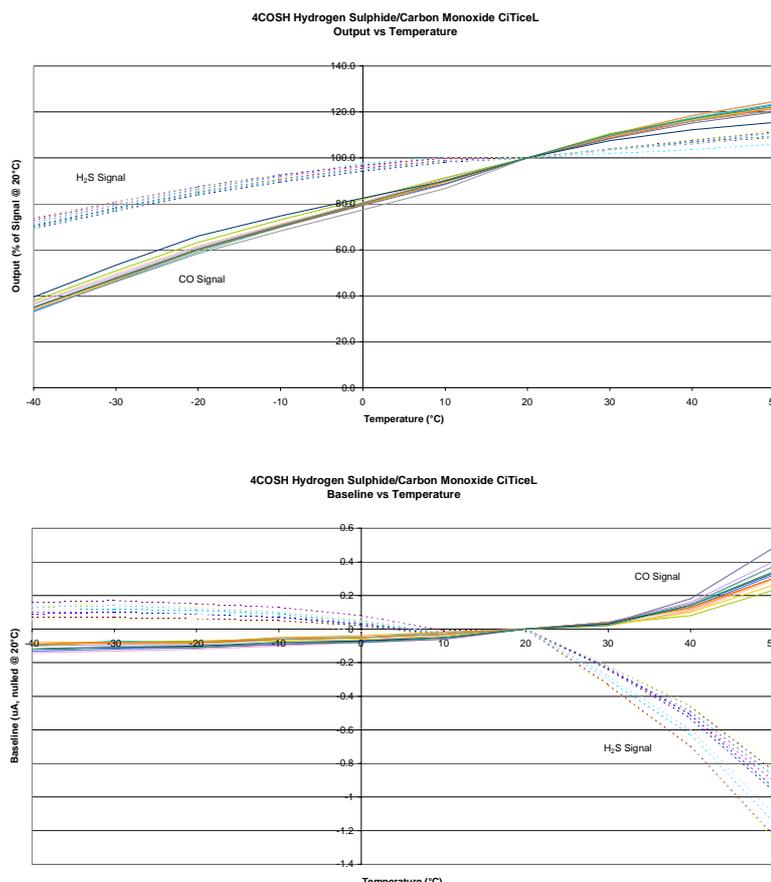
<b>Weight</b>	5g approx.
<b>Position Sensitivity</b>	None
<b>Storage Life</b>	Six months in CTL container
<b>Recommended Storage Temperature</b>	0-20°C
<b>Warranty Period</b>	12 months from date of despatch

## Outline Dimensions



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

# Carbon monoxide/Hydrogen sulphide CiTiceL<sup>®</sup> Specification



## Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4COSH 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>Test Gas</u>	<u>Test gas conc. (ppm)</u>	<u>ppm on H<sub>2</sub>S elect.</u>	<u>ppm on CO elect.</u>
Carbon monoxide	300	<6	300
Hydrogen sulphide	15	15	0 to 6
Hydrogen	100	0.03	~20
Nitric oxide	35	<1.0	<0.1
Nitrogen dioxide	5	~-1	<0.1
Chlorine	1	0	0
Sulphur dioxide	5	0.4 to 1	<1

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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.