



4CL CiTiceL®

Performance Characteristics

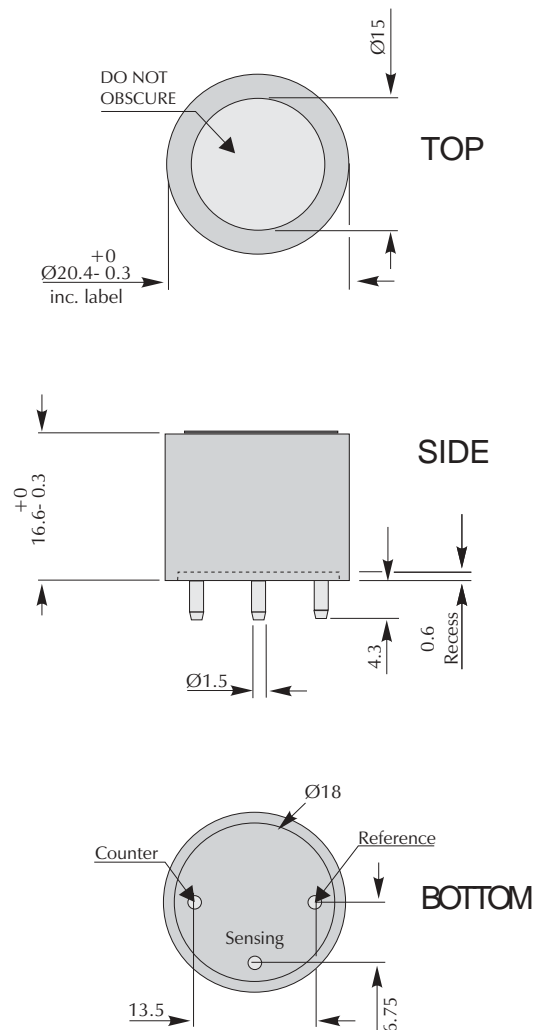
Nominal Range	0-10ppm
Maximum Overload	100ppm
Expected Operating Life	Two years in air
Output Signal	$0.6 \pm 0.15 \mu\text{A/ppm}$
Resolution	0.1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric $\pm 10\%$
T₈₀* Response Time	<60 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-0.2 to +0.2ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	<0.2 ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	33Ω
Bias Voltage	Not required
Repeatability	2% of signal
Output Linearity	Linear

*T₈₀ : Time taken for signal to reach 80% of final signal.
 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



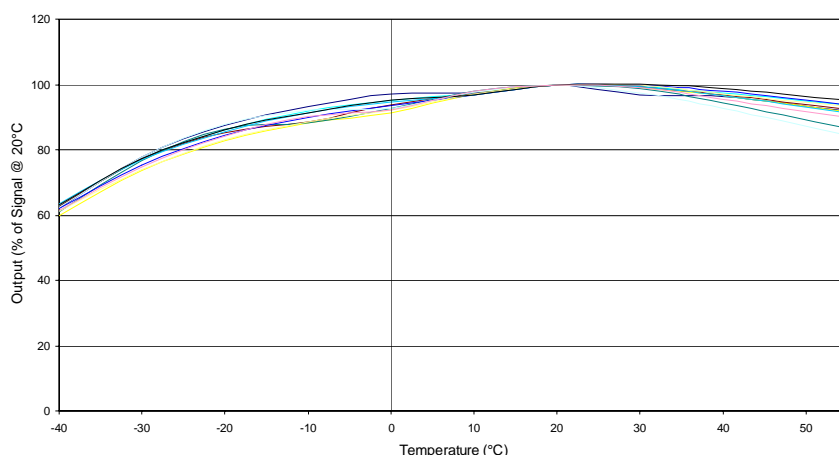
All dimensions in mm
 All tolerances $\pm 0.15\text{mm}$ unless otherwise stated

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

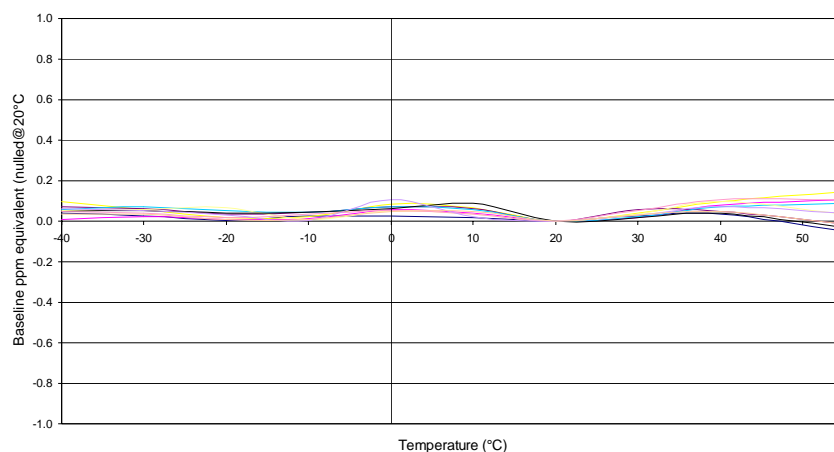
Chlorine CiTiceL[®] Specification



4CL Chlorine CiTiceL - Output vs Temperature



4CL Chlorine CiTiceL - Baseline vs Temperature



Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4CL 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>4CL</u>	<u>Gas</u>	<u>Conc.</u>	<u>4CL</u>
Carbon monoxide:	300ppm	0ppm	Sulphur dioxide:	5ppm	0ppm
Hydrogen sulphide	15ppm	-7.5 ≤ x ≤ 0ppm	Nitric oxide:	35ppm	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.