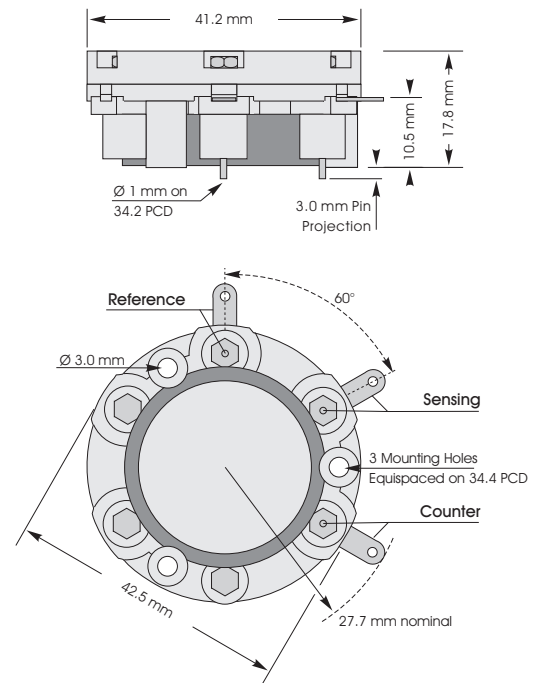


Performance Characteristics

Nominal Range	0-2ppm
Maximum Overload	5ppm
Expected Operating Life	Two years in air
Output Signal	7.2µA/ppm ± 20%
Resolution	20ppb
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T₉₀ Response Time	≤150 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 to +120ppb equivalent
Maximum Baseline Shift (+20°C to +40°C)	+36ppb equivalent
Long Term Output Drift	<4% signal loss/month
Recommended Load Resistor	33Ω
Bias Voltage	Not required
Repeatability	5% of signal
Output Linearity	Linear

Product Dimensions



All tolerances ±0.15mm unless otherwise stated. Sensor shown with side tags and gold pins.

Ordering Information

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

The 30Z Ozone CiTiceL is available with both gold-plated PCB pins and side tags.

Type 30Z
With side tag and PCB pin connections - 30Z

Physical Characteristics

Weight	22g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

Temperature Dependence

The output of a CiTiceL can vary with temperature. A programme of data acquisition is currently underway at City Technology to establish a statistically based relationship for 3OZ sensors. For applications where accurate data is required please contact City Technology.

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 3OZ 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). The results are based on the chlorine sensitivity and assume the response of the sensor to ozone is 120% of the chlorine response.

Gas	Conc.	3OZ	Gas	Conc.	3OZ
Carbon monoxide:	300ppm	0ppm	Chlorine:	1ppm	$0.5 \text{ ppm} \leq x \leq 1 \text{ ppm}$
Hydrogen sulphide:	15ppm	$\approx 2 \text{ ppm}$	Hydrogen:	100ppm	0ppm
Sulphur dioxide:	5ppm	0ppm	Hydrogen cyanide:	10ppm	0ppm
Nitric oxide:	35ppm	0ppm	Hydrogen chloride:	5ppm	0ppm
Nitrogen dioxide:	5ppm	$\approx 3.5 \text{ ppm}$	Ethylene:	100ppm	0ppm

For information on other possible cross-interferents please contact City Technology.

SAFETY NOTE

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

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