



## 2CF-3 CiTiceL<sup>®</sup>

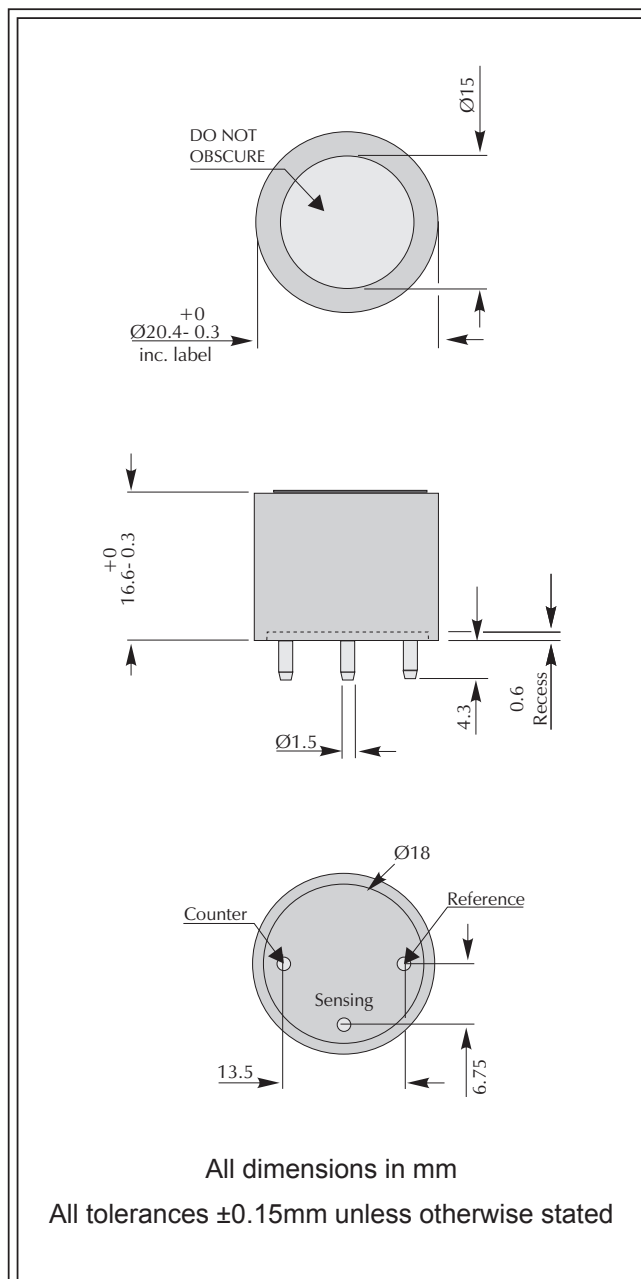
### Performance Characteristics

Nominal Range	0-500 ppm
Maximum Overload	1000 ppm
Expected Operating Life	Two years in air
Output Signal	50±20 nA/ppm
Inboard Filter	To remove SO <sub>2</sub> and H <sub>2</sub> S
Resolution	1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
T <sub>90</sub> Response Time	≤17 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-1 to +3ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	9ppm equivalent
Long Term Output Drift	<10% signal loss/year
Recommended Load Resistor	10 Ω
Bias Voltage	Not required
Repeatability	<3% of signal
Output Linearity	Linear

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

### Physical Characteristics

Weight	Approx 5g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch



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



## Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 2CF3 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>2CF3</u>
Hydrogen Sulphide	15ppm	-0.5ppm < x\$ < +0.5ppm
Sulphur Dioxide	5ppm	0ppm
Nitrogen Dioxide	5ppm	<0.5ppm
Hydrogen	100ppm	-5ppm < x\$ < +5ppm
Nitric Oxide	35ppm	12ppm
Ethylene	100ppm	60ppm

\*\*For details of other possible cross-interfering gases 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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Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.