4HS - Hydrogen Sulphide

(Standard version)

Performance Characteristics
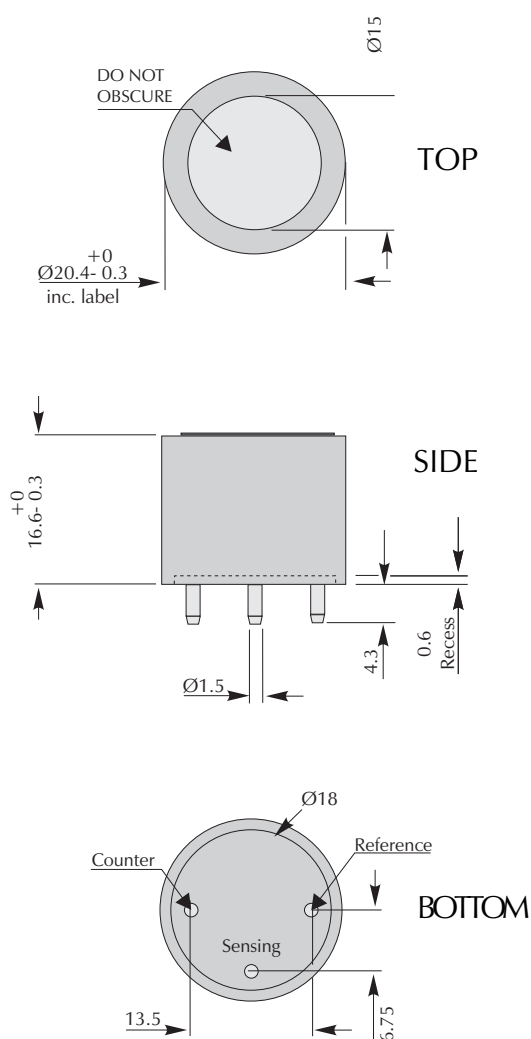
Nominal Range	0-100ppm
Maximum Overload	500ppm
Expected Operating Life	Two years in air
Output Signal	$0.70 \pm 0.15 \, \mu A/ppm$
Resolution	0.1ppm
Temperature Range	-40°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T_{90} Response Time	≤30 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	0 to +0.4ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	<0.2ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Repeatability	<2% of signal
Output Linearity	Linear

Physical Characteristics

Weight	5g (approx.)
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C

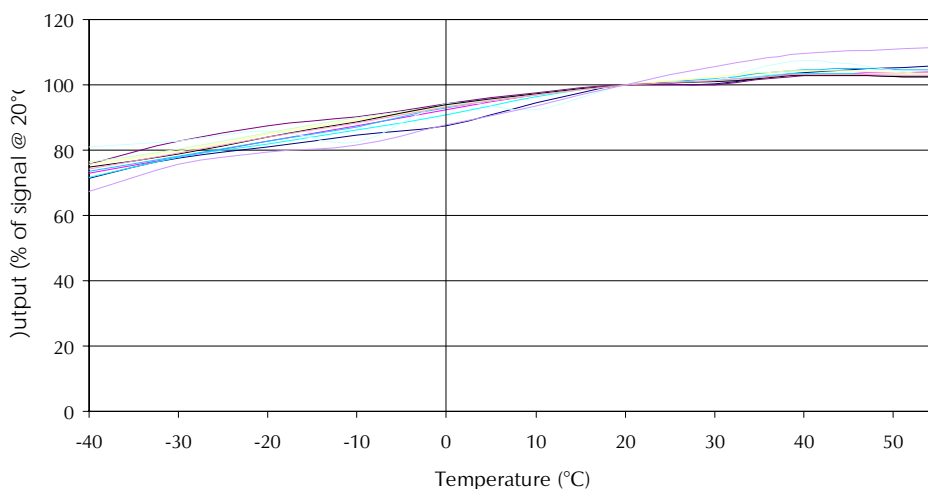**IMPORTANT NOTE**: Connection should be made via PCB sockets only. Soldering to the pins will seriously damage your sensor.

Outline Dimensions

TOP

DO NOT OBSCURE

Ø15

Ø20.4 +0 -0.3 inc. label

SIDE

16.6 +0 -0.3

4.3

0.6 Recess

Ø1.5

BOTTOM

Ø18

Counter

Reference

Sensing

13.5

6.75

All dimensions in mm
All tolerances ±0.15mm unless othewise stated

City Technology Ltd, City Technology Centre, Walton Rd, Portsmouth PO6 1SZ, UK
Tel:+44 1705 325511, Fax:+44 1705 386611, Email:sensors@citytech.co.uk

4HS Hydrogen Sulphide CiTiceL - Output vs Temperature

4HS Hydrogen Sulphide CiTiceL - Baseline vs Temperature
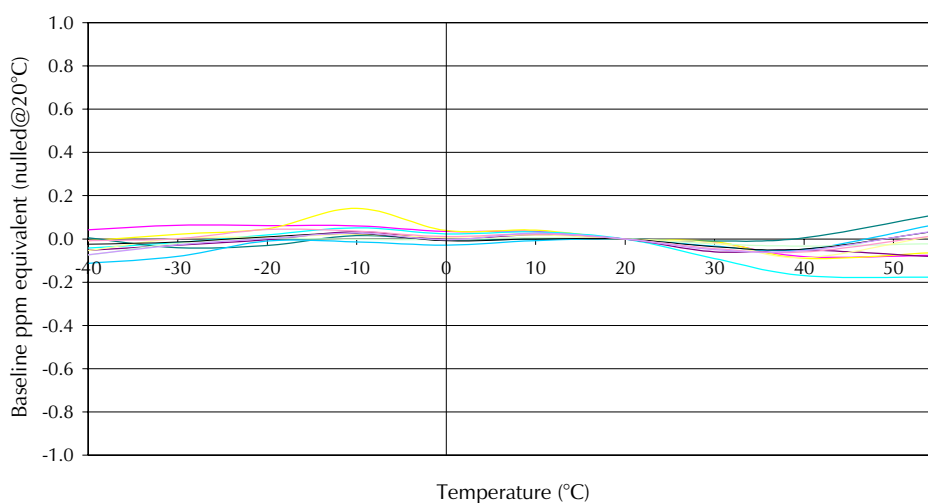
Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 4HS 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).

Gas	Conc.	4HS	Gas	Conc.	4HS
Carbon monoxide:	300ppm	≤2ppm	**Hydrogen:**	10000ppm	≤10ppm
Sulphur dioxide:	5ppm	≈1ppm	**Nitrogen dioxide:**	5ppm	≈-1ppm
Nitric oxide:	35ppm	<0.7ppm			

For details of other possible cross-interfering gases contact City Technology.