Classic Line 4THT Sensor

Honeywell

Tetrahydrothiophene Sensor

Performance Characteristics

PN:	CLE-3501-400
Nominal Range	0– 50 mg/m^3
Maximum Overload	100 mg/m^3
Sensitivity	0.15± 0.05uA/(mg/m^3)
Baseline（20 ºC）	< ±0.4 μA
Resolution	0.3 mg/m^3
Response Time (T_{90})	≤ 60 seconds
Linearity	Linear
Long Term Output Drift	<2% signal/month

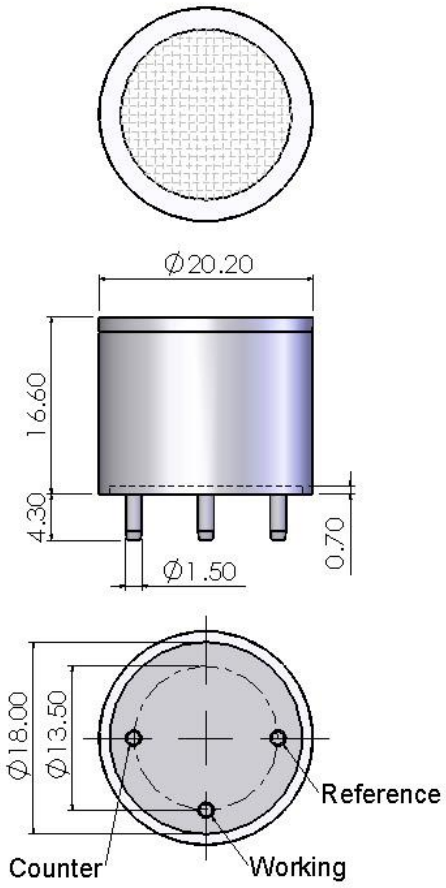
Operation Conditions

Temperature Range	-20ºC to 50ºC
Operating Humidity	15 ~ 90%RH non-condensing
Pressure Range	Atmospheric ±10%
Bias Potential	300 mV
Load Resistor	10 Ω (recommended)
Storage Life	6 months in container
Storage Temperature	0 ºC to 20ºC
Expected Operating Life	2 years in air
Warranty	12 months from dispatch

Physical Characteristics

Weight	5 g (approx)
Orientation Sensitivity	None

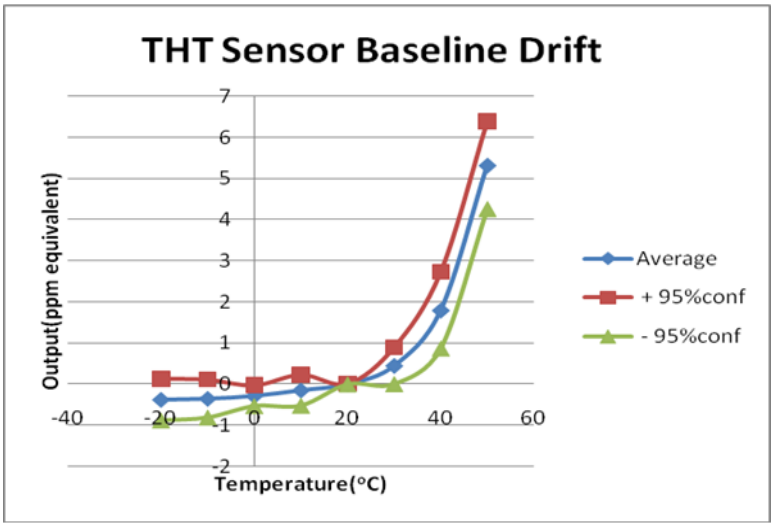
Outline Dimensions

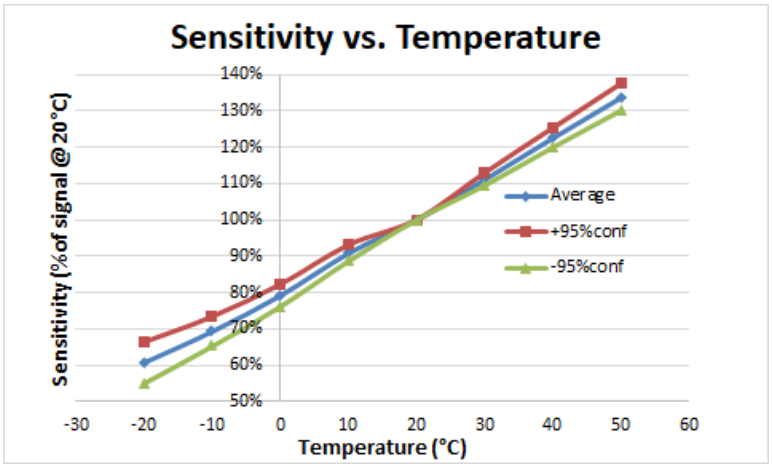


All dimensions in mm
All tolerances ±0.20mm
unless otherwise stated

Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence





Cross-sensitivity Data

Gas	Cross Sensitivity
10ppm Nitrogen Dioxide	15mg/m^3 THT
5ppm Sulphur Dioxide	0mg/m^3 THT
35ppm Nitric Oxide	120mg/m^3 THT
50ppm Carbon Monoxide	0.1mg/m^3 THT
25ppm Hydrogen Sulphide	8mg/m^3 THT

Notes:

1. All performance specifications are based upon the following environment conditions: 20 ℃, 50% relative humidity and 1 atmospheric pressure (100 kPa or ambient pressure).
2. Recommend calibration with target gas. If calibration with a cross sensitivity gas, we cannot ensure the accuracy of calibration and measurement.
3. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
4. The cross sensitivities are including but not limited to the above gases. It may also respond to other gases.