

Carbon Monoxide Sensor 0-500 ppm

Performance Characteristics

Part Number	CLE-0052-400
Nominal Range	0 to 500 ppm
Maximum Overload	2000 ppm
Sensitivity	0.070 ± 0.015 µA/ppm
Baseline (20 °C)	< ± 0.2 µA
Baseline Drift (-20 to 40 °C)	0 to 3 ppm equivalent
Resolution	1 ppm
Response Time (T90)	≤ 30 seconds
Linearity	Linear
Long Term Output Drift	< 2% signal/month

Operation Conditions

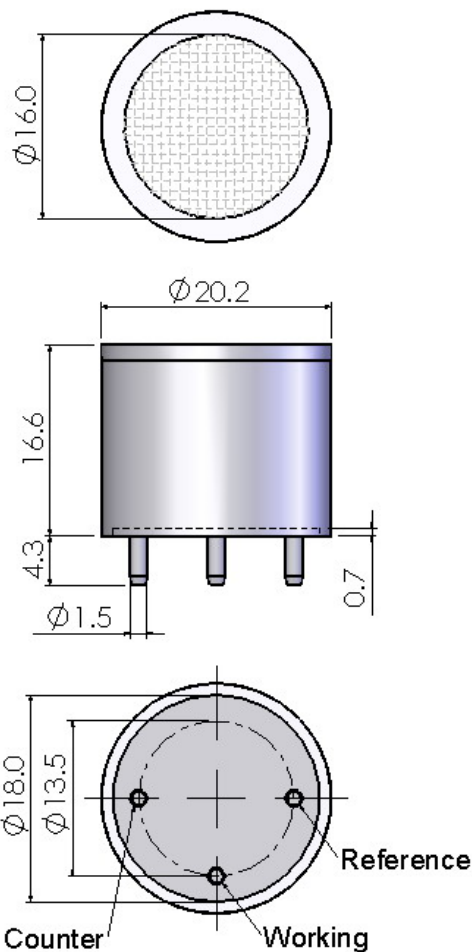
Temperature Range	-20 °C to 50 °C
Operating Humidity	15 to 90 %RH non-condensing
Pressure Range	90 to 110 kPa
Bias Potential	0 mV
Storage Life	6 months in sealed container
Storage Temperature	0 °C to 20 °C
Expected Operating Life	2 years in air
Warranty	18 months from date of despatch

Physical Characteristics

Weight	5 g (approx)
Orientation Sensitivity	None

Note: All performance specifications are based upon the following environment conditions: 20°C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure).

Outline Dimensions

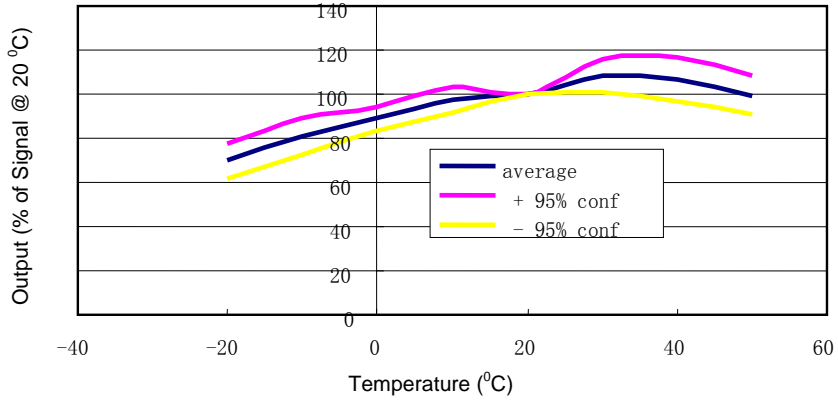


All dimensions are in millimeters.
All tolerances are ±0.2mm.

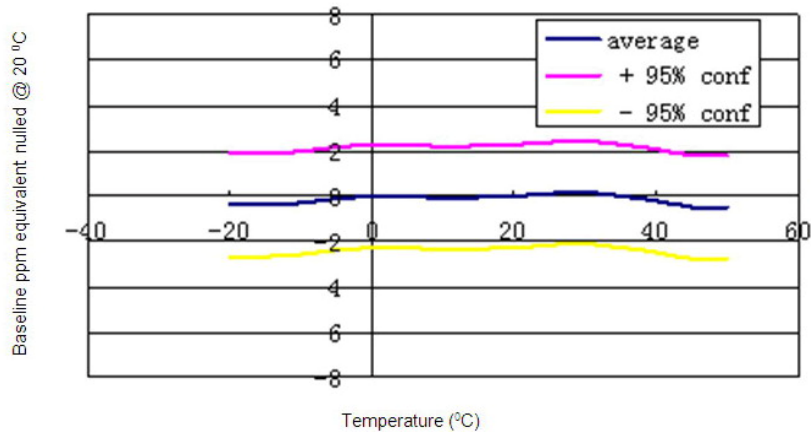
Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence

Output vs Temperature



Baseline vs Temperature



Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm CO equivalent)
Hydrogen Sulfide	24	0
Sulfur Dioxide	5	0
Chlorine	10	0 ~ 1
Nitric Oxide	25	0
Nitrogen Dioxide	5	0
Hydrogen	100	40
Ethylene	100	16

Notes:

1. Calibration with cross sensitivity gas is not recommended.
2. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
3. The cross sensitivities are including but not limited to the above gases . It may also respond to other gases.