

Carbon Monoxide Sensor 0-500 ppm

Performance Characteristics

Part number	CLE-0052-300
Nominal Range	0 - 500 ppm
Maximum Overload	1500 ppm
Sensitivity	0.08 ± 0.02µA/ppm
Baseline (20 °C)	< ±0.2 µA
Baseline Drift (-20 to 50 °C)	0 to 3 ppm CO equivalent
Resolution	1 ppm
Response Time(T90)	≤ 30 s
Linearity	Linear
Long Term Output Drift	<2% signal/month

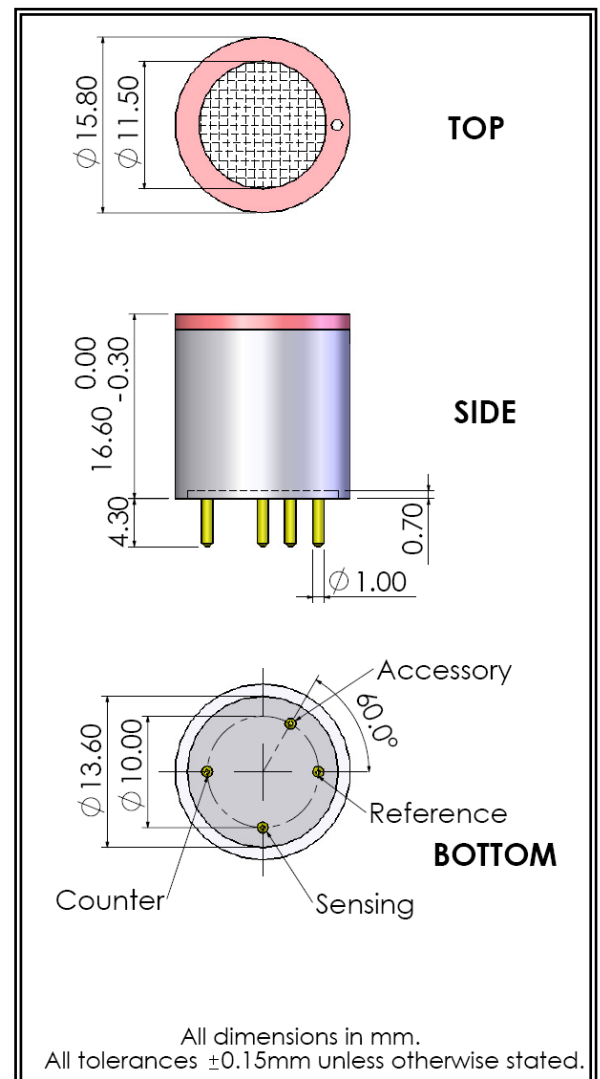
Operation Conditions

Temperature Range	-20°C to 50°C
Operating Humidity	15 ~ 90%RH non-condensing
Pressure Range	90 to 110 kPa
Bias Potential	0 mV
Storage Life	6 months in 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	3 g (approx)
Orientation Sensitivity	None

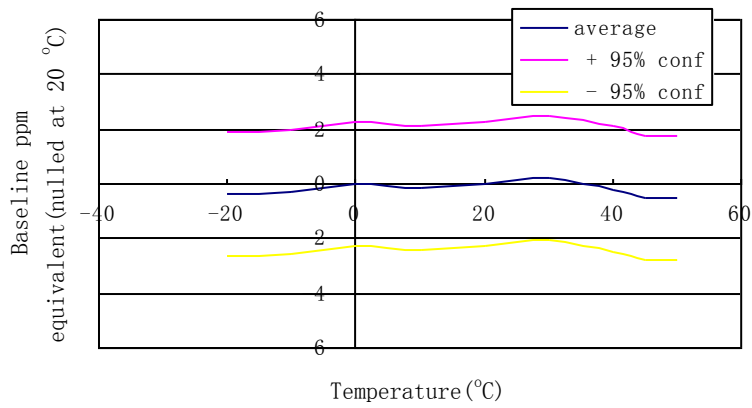
Outline Dimensions



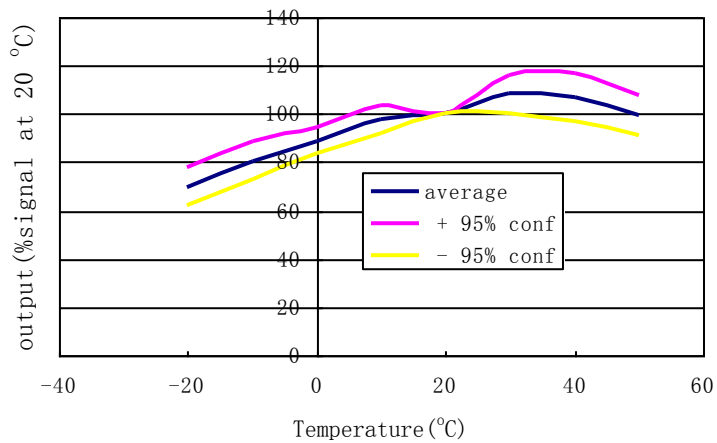
Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence

3CO-500-Baseline vs. Temperature



3CO-500-Sensitivity temperature dependence



Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm CO equivalent)
Hydrogen Sulfide	15	1
Sulphur Dioxide	5	0
Nitric Oxide	35	<3
Nitrogen Dioxide	5	-1 ~ 0

Notes:

1. All performance specifications are based upon the following environment conditions: 20 °C, 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.