

Ethylene Oxide Sensor 0-100 ppm

Performance Characteristics

Part Number	CLE-1222-400
Nominal Range	0 to 100 ppm
Sensitivity	0.25 ± 0.125 µA/ppm
Baseline (20 °C)	-0.2 to 2.5 µA
Baseline Drift (-20 to 40 °C)	0 to 10 ppm equivalent
Resolution	1 ppm
Response Time (T₉₀)	≤ 120 seconds
Linearity	Linear
Long Term Output Drift	< 2% signal/month

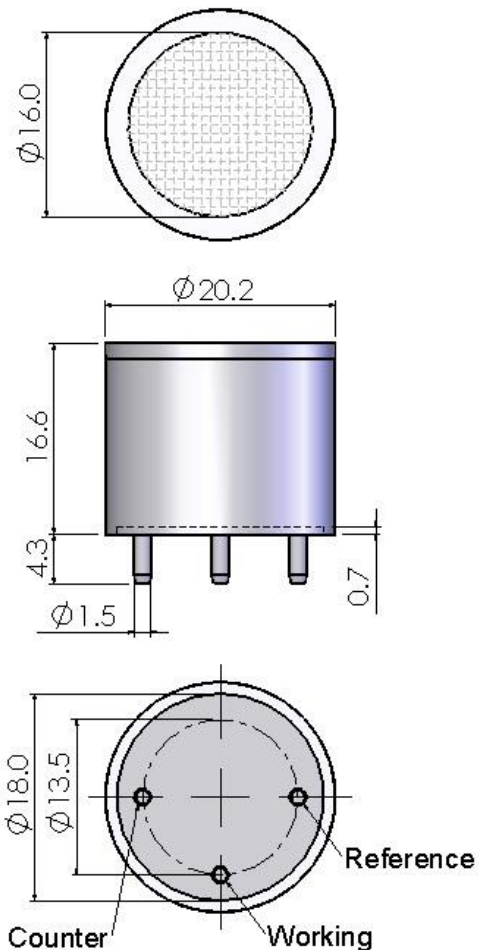
Operation Conditions

Temperature Range	-20 °C to 50 °C
Operating Humidity	15 to 90%RH non-condensing
Pressure Range	90 to 110 kPa
Bias Potential	+ 300 mV
Storage Life	6 months in sealed container
Storage Temperature	0 °C to 20 °C
Expected Operating Life	2 years in air
Warranty	12 months from date of shipment

Physical Characteristics

Weight	5 g (approx)
Orientation Sensitivity:	None

Outline Dimensions

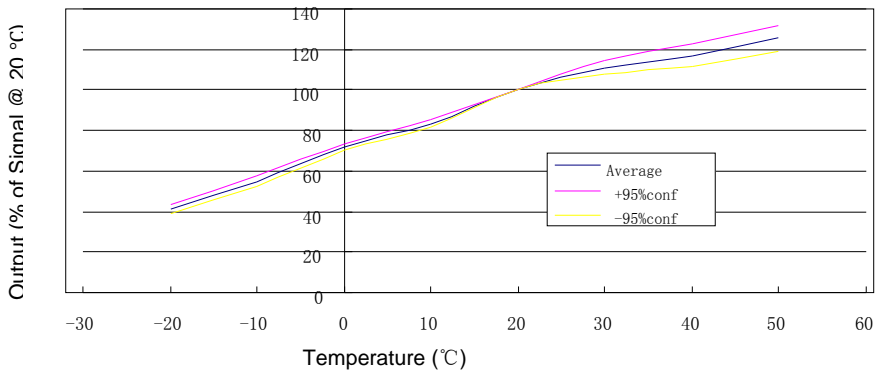


All dimensions are in millimeters.
All tolerances are ±0.2mm.

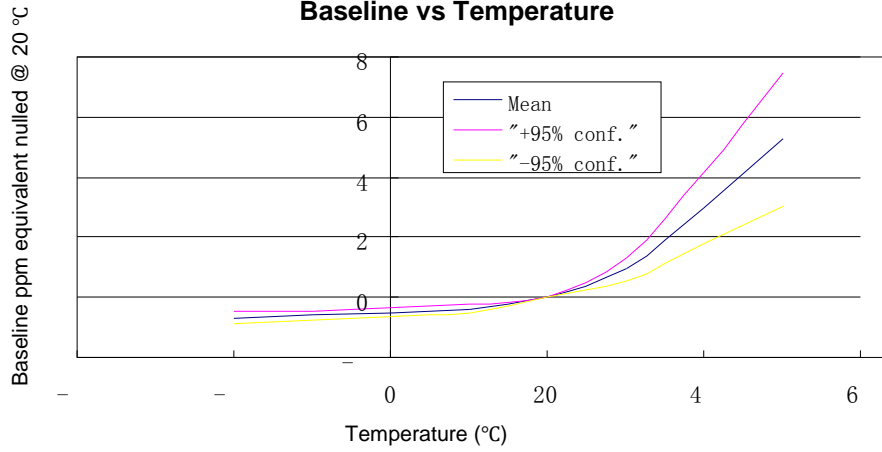
Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence

Output vs Temperature



Baseline vs Temperature



Cross-sensitivity Data

Gas	Correction Factor to ETO
Ethylene Oxide	1.0
Carbon Monoxide	2.5
Ethanol	2.0
Methanol	0.5
Isopropanol	5.0
i-Butylene	2.5
Butadiene	0.9
Ethylene	0.8
Propene	1.7
Vinyl Chloride	1.3
Vinyl Acetate	2.0
Formic Acid	3.3
Ethyl ether	2.5
Formaldehyde	1.0

*** Correction Factor of ETO= Sensitivity of ETO/Sensitivity of test gas.**

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.