

Ammonia Sensor 0 bias 0-500 ppm

Performance Characteristics

Part Number	CLE-1052-400
Nominal Range	0 to 500 ppm
Maximum Overload	1000 ppm
Sensitivity	0.035±0.015µA/ppm
Baseline (20 °C)	< ±0.4 µA
Baseline Drift (-20 to 40 °C)	-2 ~ 20 ppm equivalent
Resolution	3 ppm
Response Time (T₉₀)	90 seconds,
Linearity	Linear
Long Term Output Drift	< 10% signal loss/6 months

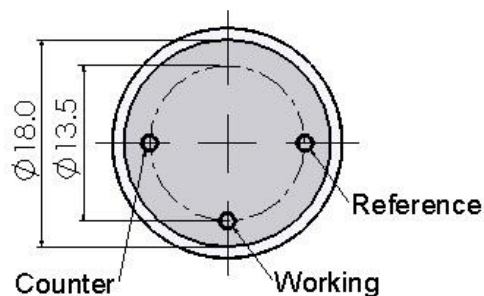
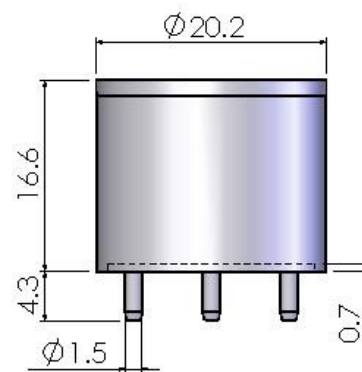
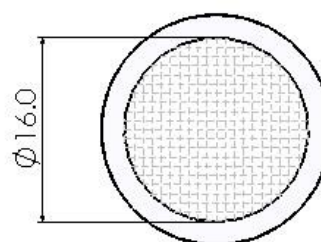
Operation Conditions

Temperature Range	-20 °C to + 40 °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	12 months from date of despatch

Physical Characteristics

Weight	5 g (approx)
Orientation Sensitivity	None

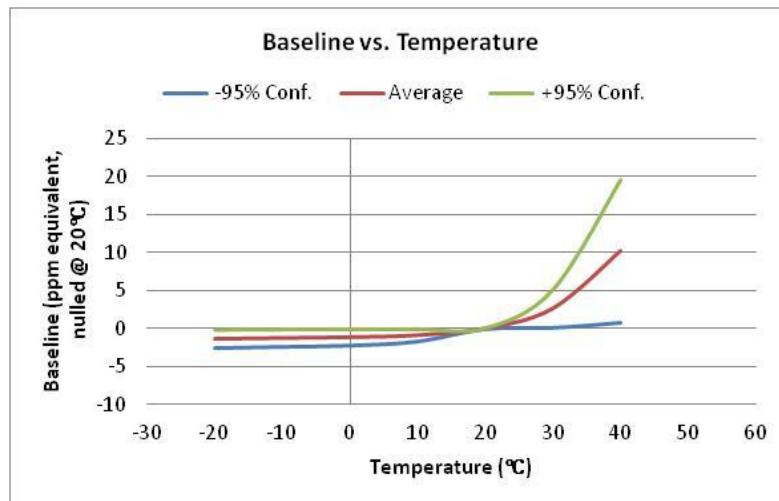
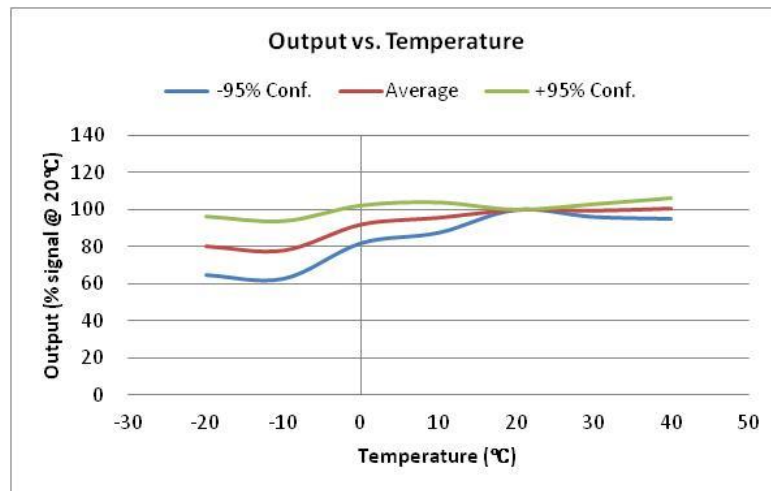
Outline Dimensions



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(to be updated)



Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm NH ₃ equivalent)
Carbon Monoxide	50	-1
Hydrogen sulfide	25	85
Carbon Dioxide	5000	-2.5
Hydrogen	1000	-1.5
Isobutylene	100	-1
Ethanol	1000	-1
Sulphur Dioxide	5	8
Nitric Oxide	35	0
Nitrogen Dioxide	5	-5
Chlorine	10	-5

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.
5. T90 spec.: it is tested with with the flow rate 500ml/min per each sensor, the T90 is 90 s.
6. At low temperature -20 °C, sensor's T90 will increase up to about 150 s.