

Chlorine Sensor 0-50 ppm

Performance Characteristics

Part Number	CLE-0951-400
Nominal Range	0 to 50 ppm
Maximum Overload	100 ppm
Sensitivity	0.45 ± 0.20 µA/ppm
Baseline (20 °C)	< ± 0.1 µA
Baseline Drift (-20 to 40 °C)	0 to -0.3 ppm equivalent
Resolution	0.1 ppm
Response Time (T₉₀)	≤ 30 seconds
Linearity	Linear
Long Term Output Drift	< 2% signal/month

Operation Conditions

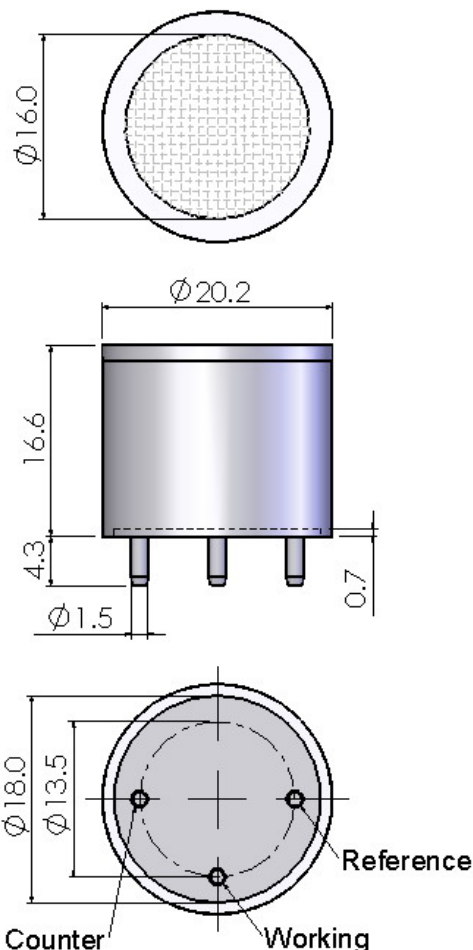
Temperature Range	-20 °C to 50 °C
Operating Humidity	15 to 90%RH non-condensing
Pressure Range	90 to 110 kPa
Bias Potential	0 mV
Storage Life	6 months in sealed container
Storage Temperature	0 °C to 20 °C
Expected Operating Life	2 years in air
Warranty	12 months from date of despatch

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

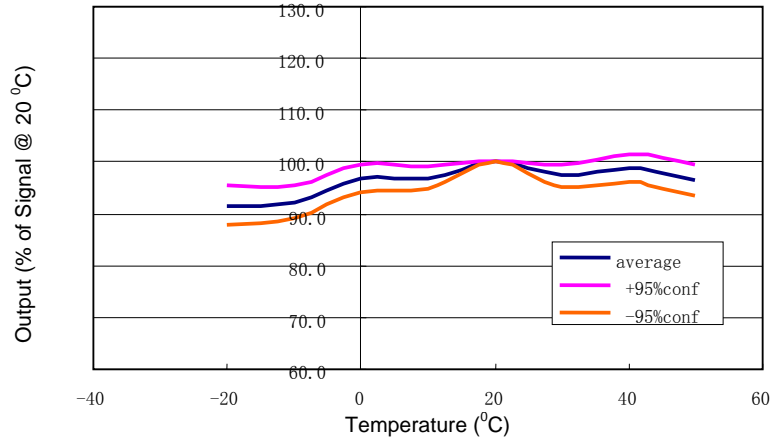


All dimensions are in millimeters.
All tolerances are ±0.2mm.

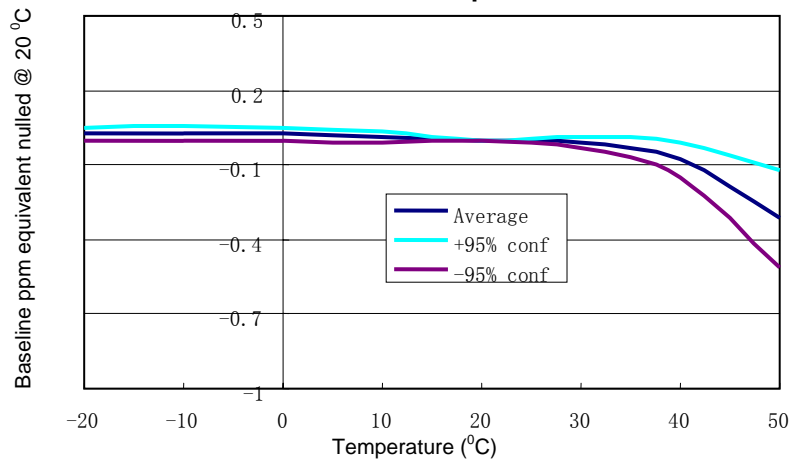
Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence

Output vs Temperature



Baseline vs Temperature



Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm Cl ₂ equivalent)
Hydrogen Sulfide	20	-4
Carbon Monoxide	100	0
Sulphur Dioxide	20	0
Nitric Oxide	35	0
Nitrogen Dioxide	10	12
Hydrogen	3000	0
Ammonia	100	0
Carbon Dioxide	10000	0
Chlorine Dioxide	1	3.5

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.