

Classic Line 4-CIO₂-1 Sensor

Chlorine Dioxide Sensor 0-1 ppm

Performance Characteristics

| | |
|---|------------------------------|
| Part Number | CLE-0810-400 |
| Nominal Range | 0 to 1 ppm |
| Sensitivity | 0.65 ± 0.30 µA/ppm |
| Baseline (20°C) | < ± 0.02 µA |
| Baseline Drift (-20 °C to 40 °C) | -0.06 to 0.03 ppm equivalent |
| Resolution | 0.03 ppm |
| Response Time (T₉₀) | ≤ 60 seconds |
| Linearity | Linear |
| Long Term Output Drift | < 2% signal/month |

Operation Conditions

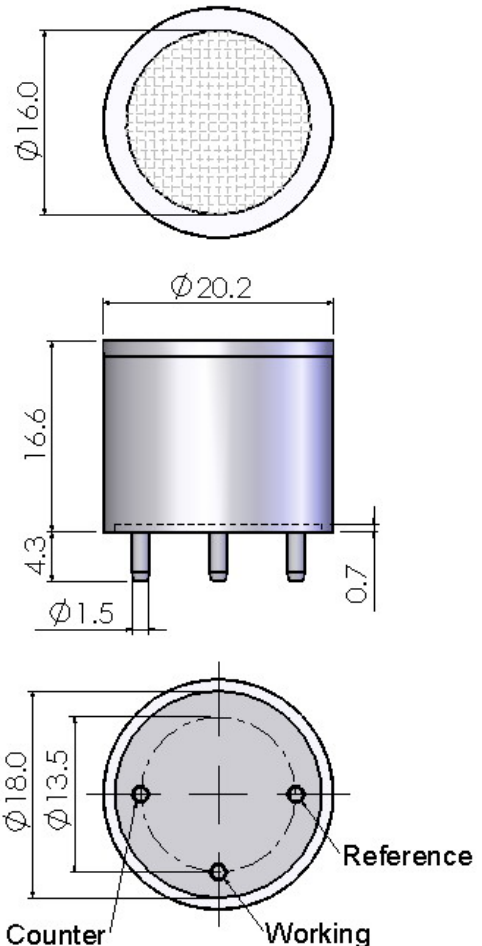
| | |
|--------------------------------|---------------------------------|
| Temperature Range | -20 °C to 50 °C |
| Operating Humidity | 15 to 90%RH non-condensing |
| Pressure Range | 90 to 110 kPa |
| Bias Potential | 0 mV |
| Storage Life | 6 months in sealed container |
| Storage Temperature | 0 °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

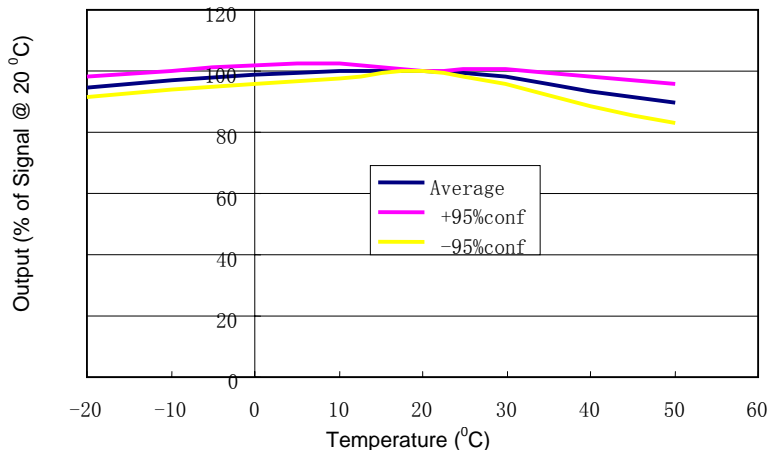


All dimensions are in millimeters.
All tolerances are ±0.2mm.

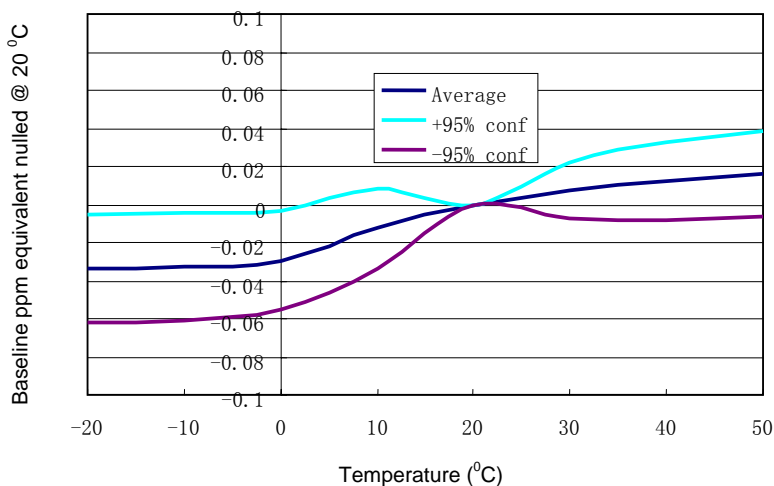
Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

Temperature Dependence

Output vs Temperature



Baseline vs Temperature



Cross-sensitivity Data

| Gas | Concentration (ppm) | Output Signal (ppm ClO ₂ equivalent) |
|------------------|---------------------|---|
| Carbon Dioxide | 5000 | 0 |
| Carbon Monoxide | 100 | 0 |
| Chlorine | 1 | 0.35 |
| Hydrogen | 3000 | 0 |
| Hydrogen Sulfide | 20 | -12 |
| Nitrogen Dioxide | 10 | 6 |

- 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.