

## Carbon Monoxide Sensor 0-2000 ppm

### Performance Characteristics

|                                      |                        |
|--------------------------------------|------------------------|
| <b>Part Number</b>                   | CLE-0023-400           |
| <b>Nominal Range</b>                 | 0 - 2000 ppm           |
| <b>Maximum Overload</b>              | 5000 ppm               |
| <b>Sensitivity</b>                   | 0.028 ± 0.010 µA/ppm   |
| <b>Baseline (20 °C)</b>              | < ± 0.2 µA             |
| <b>Baseline Drift (-20 to 40 °C)</b> | 0 to 10 ppm equivalent |
| <b>Resolution</b>                    | 10 ppm                 |
| <b>Response Time (T90)</b>           | ≤ 30 seconds           |
| <b>Linearity</b>                     | Linear                 |
| <b>Long Term Output Drift</b>        | <2% signal/month       |

### Operation Conditions

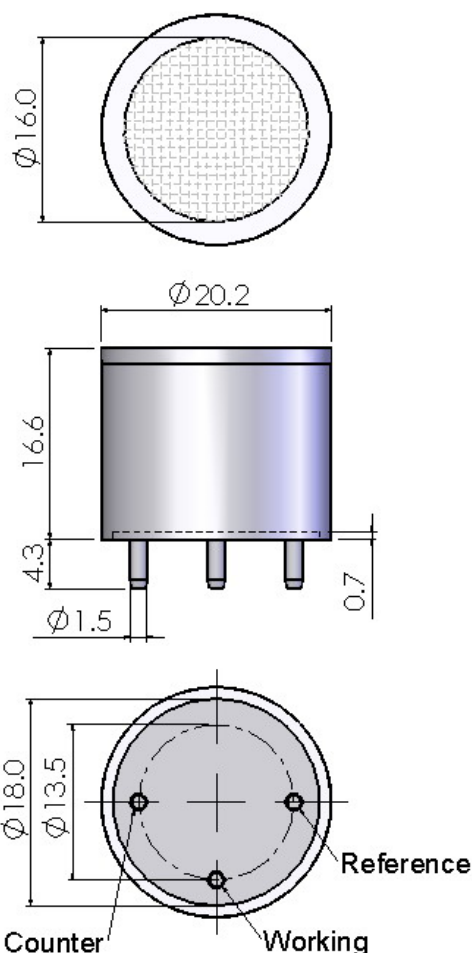
|                                |                                 |
|--------------------------------|---------------------------------|
| <b>Temperature Range</b>       | -20 °C to 50 °C                 |
| <b>Operating Humidity</b>      | 15 to 90%RH non-condensing      |
| <b>Pressure Range</b>          | 90 to 110 kPa                   |
| <b>Bias Potential</b>          | 0 mV                            |
| <b>Storage Life</b>            | 6 months in sealed container    |
| <b>Storage Temperature</b>     | 0 °C to 20 °C                   |
| <b>Expected Operating Life</b> | 2 years in air                  |
| <b>Warranty</b>                | 18 months from date of despatch |

### Physical Characteristics

|                                |              |
|--------------------------------|--------------|
| <b>Weight</b>                  | 5 g (approx) |
| <b>Orientation Sensitivity</b> | 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)

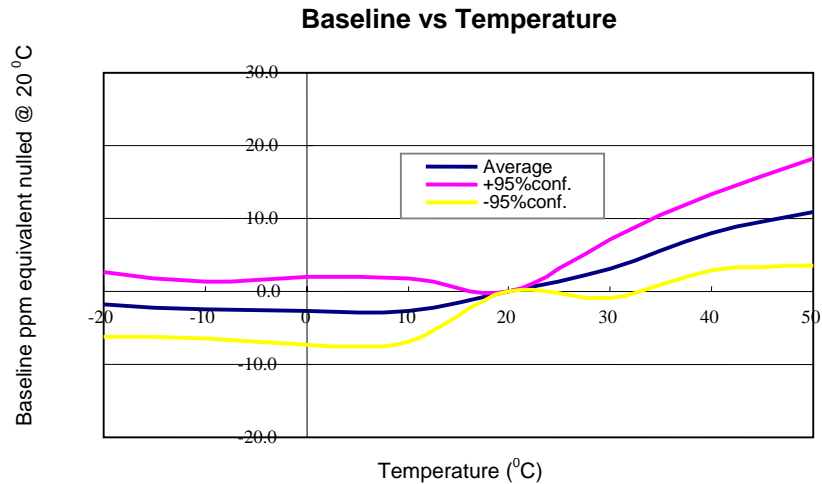
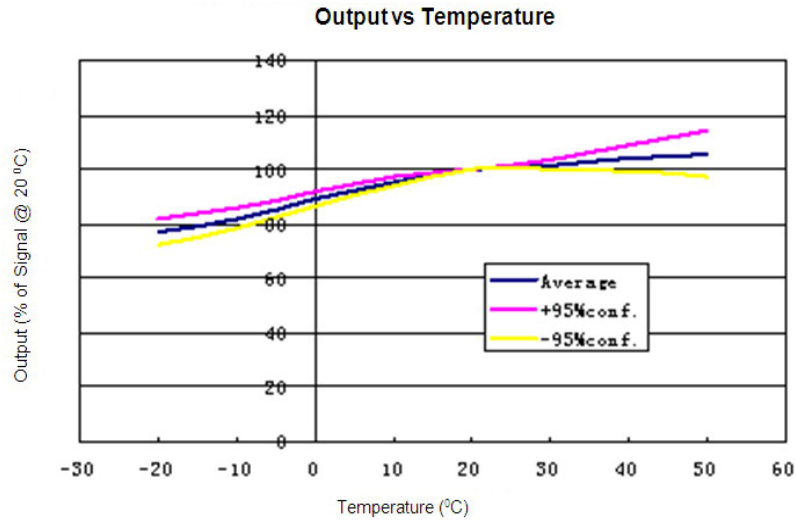
### Outline Dimensions



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



## Cross-sensitivity Data

| Gas              | Concentration (ppm) | Output Signal (ppm CO equivalent) |
|------------------|---------------------|-----------------------------------|
| Hydrogen Sulfide | 15                  | 0                                 |
| Sulfur Dioxide   | 5                   | 0                                 |
| Chlorine         | 10                  | 0                                 |
| Nitric Oxide     | 35                  | -10~0                             |
| Nitrogen Dioxide | 5                   | 0                                 |
| Hydrogen         | 100                 | <50                               |
| Ethylene         | 100                 | <30                               |
| Ethanol          | 200                 | 0                                 |

- 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.