

## Hydrogen Sulfide Sensor 0-50 ppm

### Performance Characteristics

<b>Part Number</b>	CLE-0151-700
<b>Nominal Range</b>	0 to 50 ppm
<b>Sensitivity</b>	0.37 ± 0.07 μA/ppm
<b>Baseline (20 °C)</b>	< ±0.4 μA
<b>Baseline Drift (-20 to 50 °C)</b>	0 to 0.5 ppm equivalent
<b>Resolution</b>	0.25 ppm
<b>Response Time (T<sub>90</sub>)</b>	≤ 30 seconds
<b>Linearity</b>	Linear
<b>Long Term Output Drift</b>	< 2% signal/month

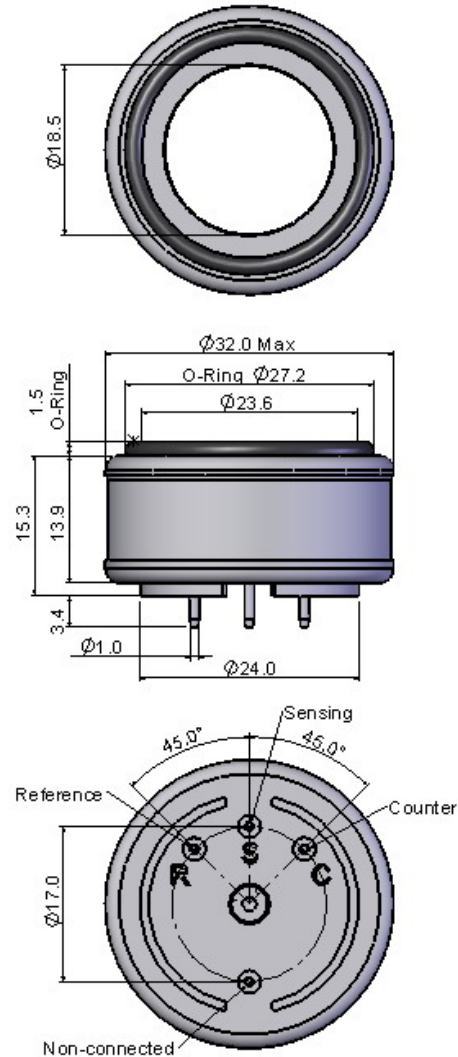
### Operation Conditions

<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>	8 g (approx)
<b>Orientation Sensitivity</b>	None

### Outline Dimensions



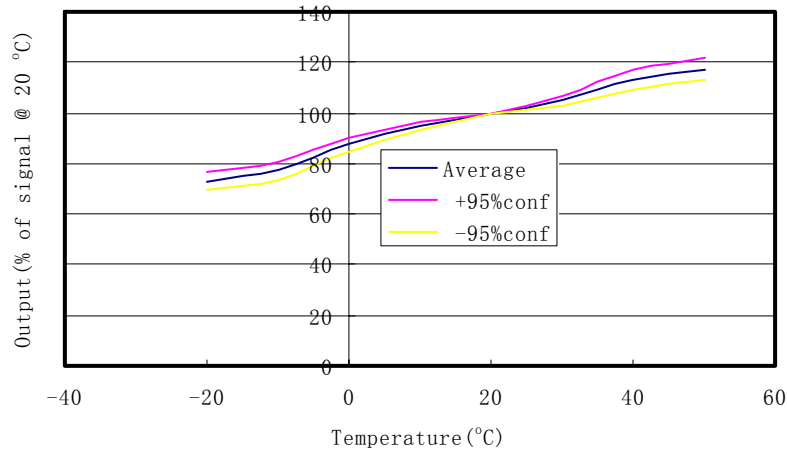
All dimensions are in millimeters.  
All tolerances are ±0.2mm.

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

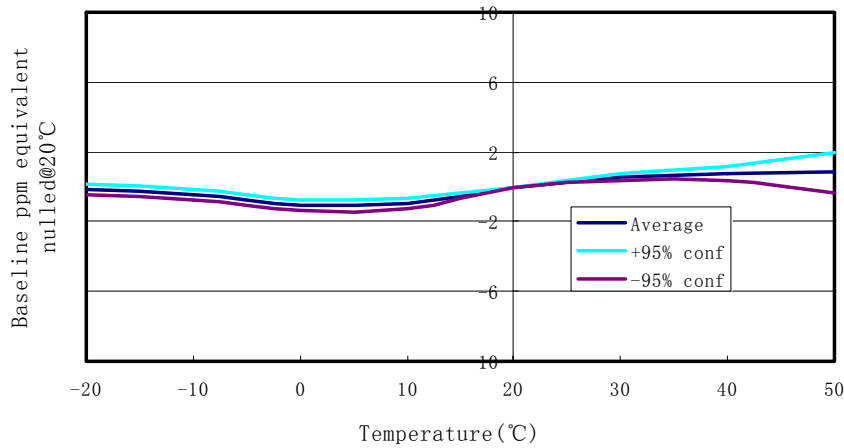
**Note:** All performance specifications are based upon the following environment conditions: 20°C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure).

**Temperature Dependence**

Output vs Temperature



Baseline vs Temperature



**Cross-sensitivity Data (20 °C)**

Gas	Concentration (ppm)	Output Signal (ppm H <sub>2</sub> S equivalent)
Carbon Monoxide	300	≤6
Sulphur Dioxide	5	1
Nitric Oxide	35	≤0.7
Nitrogen Dioxide	5	-1
Hydrogen	10000	<15
Ethylene	100	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.

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