

## Hydrogen Sensor 0-1000 ppm

### Performance Characteristics

<b>Part Number</b>	CLE-0613-400
<b>Nominal Range</b>	0 to 1000 ppm
<b>Maximum Overload</b>	2000 ppm
<b>Sensitivity</b>	0.02 ± 0.01 µA/ppm
<b>Baseline ( 20 °C )</b>	< ± 0.2 µA
<b>Baseline Drift (-20 °C to 50 °C)</b>	0 to 10 ppm equivalent
<b>Resolution</b>	10 ppm
<b>Response Time (T<sub>90</sub>)</b>	≤ 70 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>	12 months from date of despatch

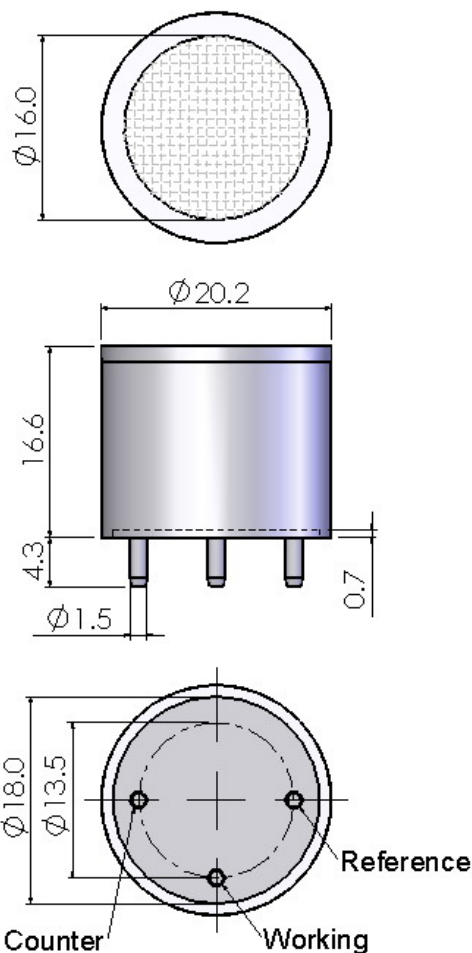
### Physical Characteristics

<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

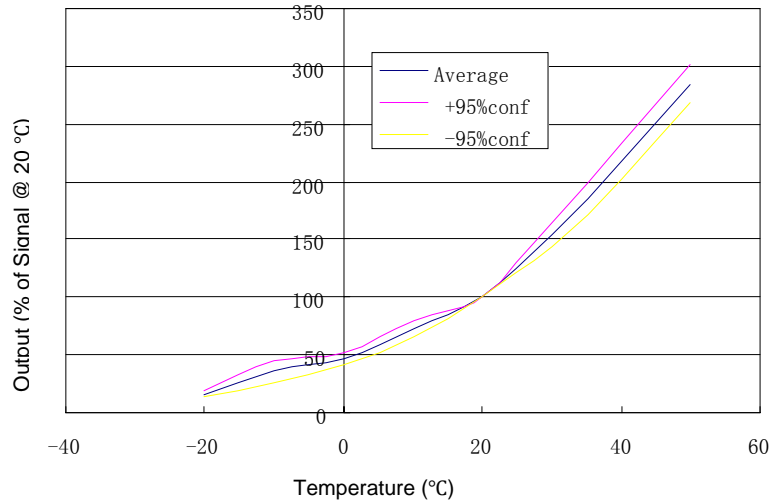


All dimensions are in millimeters.  
All tolerances are ±0.2mm.

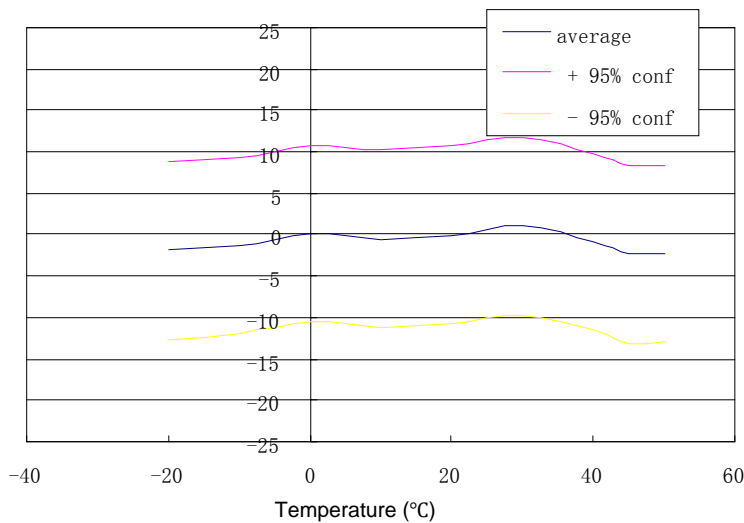
**Note:** PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

## Temperature Dependence

**Output vs Temperature**



**Baseline vs Temperature**



## Cross-sensitivity Data

Gas	Concentration (ppm)	Output Signal (ppm H <sub>2</sub> equivalent)
Hydrogen Sulfide	24	0
Sulfur Dioxide	5	0
Nitric Oxide	35	10
Nitrogen Dioxide	5	0
Carbon Monoxide	50	200
Ethylene	100	80
Chlorine	10	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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