

### Combustible Gas Sensor 0 – 100% LEL

#### Performance Characteristics

<b>Part Number</b>	CLL-6112-400
<b>Gas Detected</b>	Most combustible gases and vapors
<b>Nominal Range</b>	0 - 100% LEL
<b>Sensitivity Range</b>	23 ± 7 mV/%CH <sub>4</sub>
<b>T90 Response Time</b>	< 20 seconds (methane)
<b>Linear to</b>	0 - 75% LEL
<b>Long Term Sensitivity Drift</b>	< ± 5% FSS/month
<b>Long Term Zero Drift</b>	< ± 5% LEL <sub>methane</sub> /month
<b>Warranty Period</b>	12 months

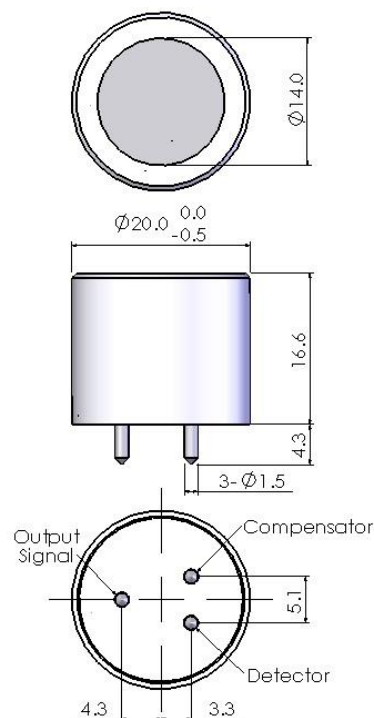
#### Operation Conditions

<b>Temperature Range</b>	-20°C to 50°C
<b>Operating Humidity</b>	15 - 90%RH non-condensing
<b>Operating Voltage</b>	2.3V D.C.
<b>Operating Current</b>	110 ± 10mA
<b>Storage</b>	no Si,Pb, Sn and S etc.vapors allowed

#### Physical Characteristics

<b>Weight</b>	20 g (approx)
<b>Orientation Sensitivity</b>	None

#### Outline Dimensions



All dimensions are in millimeters.  
All tolerances are ±0.2mm,  
unless otherwise stated.

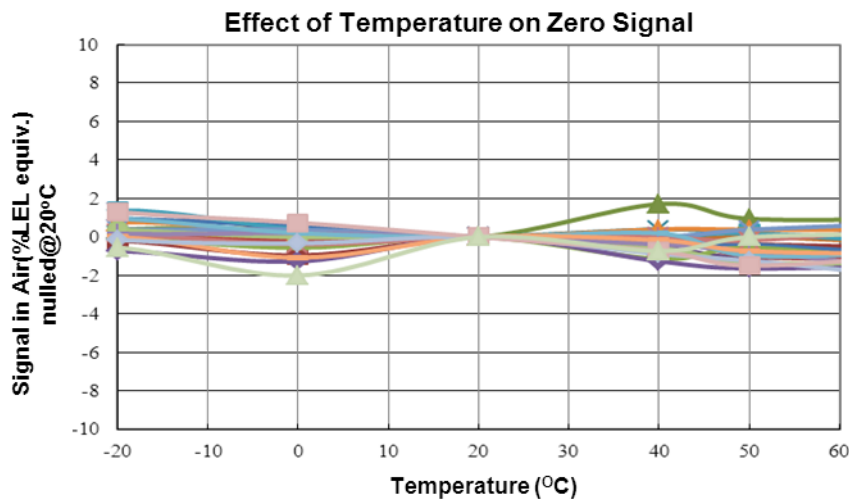
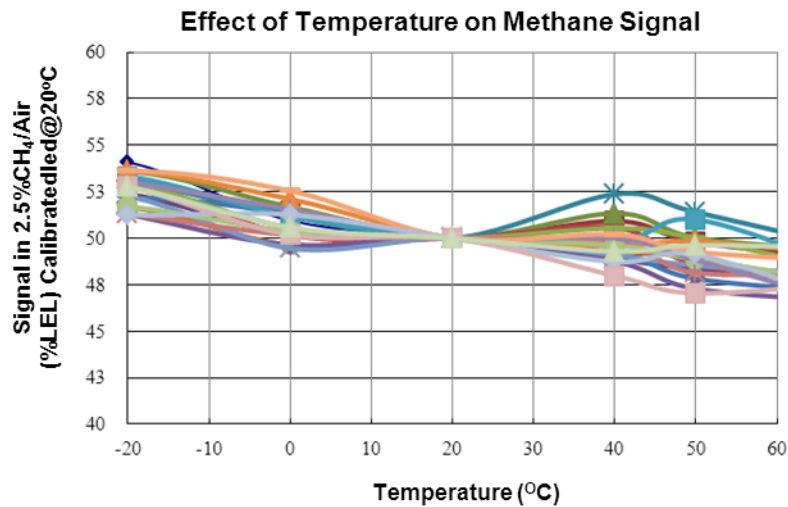
#### Relative Sensitivity

Gas/Vapor	LEL (%vol)	Relative Sensitivity
Methane	5.0	100
Propane	2.1	63
n-Butane	1.9	63
n-Pentane	1.5	50
n-Hexane	1.1	33
n-Octane	1.0	26
Gasoline	1.3	36
Hydrogen	4.0	45
Acetone	2.5	34
Ethanol	3.3	36
m-Xylene	1.1	22
Toluene	1.1	29
Benzene	1.2	36
Styrene	N/A	N/A

**Note:** Relative Sensitivities are listed for guidance only. Calibration must be made using the gas under investigation for most accurate consideration.

## 4-2.3 Comb. Gas Sensor

### Temperature Dependence



Note: Temperature dependence data is supplied for guidance only.

### Product Approval

- **UL**  
Class I, Division I, Groups A, B, C&D Hazardous Locations  
Certificate No: E187829
- **ATEX(94/9/EC)**  
II 2G Ex d IIC  
Certificate No: DEMKO 03 ATEX 0311958U  
Certificate No: 03 ATEX 0311958U
- **IECEX**  
Ex d IIC  
Certificate No: IECEX UL 07.0001U

#### Notes:

1. All performance specifications are based upon the following environment conditions: 20 °C, 50% relative humidity and 1 atmospheric pressure (100 kPa or ambient pressure).
2. Recommend calibration with target gas. If calibration with a cross sensitivity gas, we cannot ensure the accuracy of calibration and measurement.
3. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
4. The cross sensitivities are including but not limited to the above gases. It may also respond to other gases.