



8440 Central Ave, Suite# 2C, Newark, CA-94560  
 510-791-0951 [support@transducertech.com](mailto:support@transducertech.com)

INNOVATIVE SENSORS.  
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## T Series Carbon Monoxide Sensor – 2ETCO600 Two-electrode CO Sensor

	MECHANICAL	
	Dimensions	0.55" L x 0.55" B x 0.25" H
	Weight	Approximately 1.5 gram
	Material	Polypropylene
	Electrolyte	Etching liquid
	Connections	Contact pins
	Gas Supply	Diffusion through porous membrane

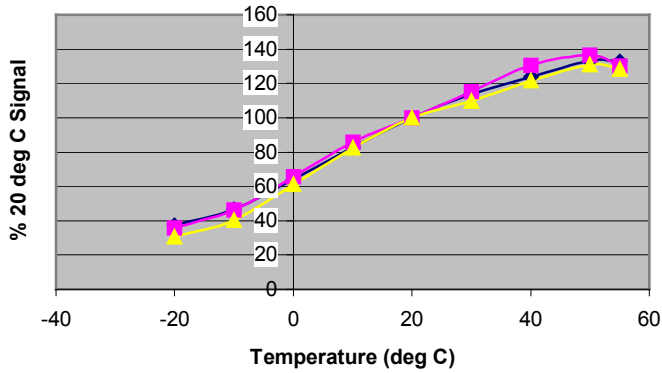
	2ETCO600
Nominal Range	0 to 600 ppm
Maximum Overload	TBD
Measuring Principle	Electrochemical Oxidation of CO
Bias Voltage	Not required
Output Signal, Zero, 25degC	-5.0 to +5.0 ppm equivalent maximum
Output Signal, Span, 25degC	20.0 ± 4.0 nA / ppm
Operating Temperature	-20 to 55° C (0 – 40° C recommended)
Operating Pressure Range	± 0.2 atm
Operating Humidity Range	5 to 95% RH Continuous (0 to 100% non-condensing)
Estimated Service Life	>2 Years
Storage Temperature Range	22° C recommended
Storage Pressure Range	1 ± 0.2 atm recommended
Storage Humidity Range	60 to 80% RH Recommended
Storage Life	1 years in sealed package
Lower Detection Limit	1 ppm (depends on circuitry)
Resolution	± 1 ppm (depends on circuitry)
Zero Reproducibility	± 3% of reading or 1 ppm
Span Reproducibility	± 3% (0-600 ppm)
Output Linearity	Linear
Effect of Orientation	None
Response Time (t-90)	< 20s typical at 20° C
Stabilization time	15 minutes when first installed in a circuit
Long Term Drift – Zero	Zero Signal ≤ ± 5 PPM / month
Long Term Drift – Span	Span Signal ≤ ± 5% of reading per month
Temperature Effect	Zero ≤ 0.25 ppm/° C Span ≤ 2 % per ° C (20° C to 0° C) Span ≤ 1 % per ° C (20° C to 40° C)
Effect of Pressure	Zero signal < 1 PPM per 0.1 atm Span signal < 1% per 0.1 atm
Warranty	One year (extended warranty available)



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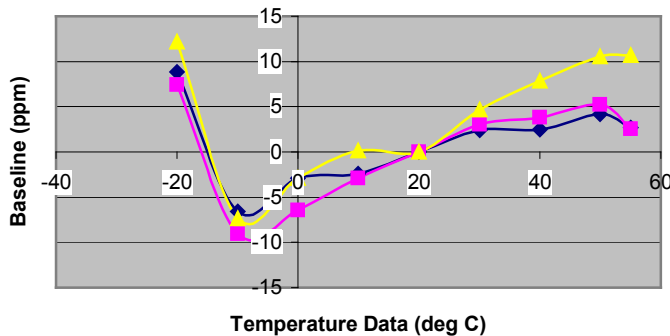
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### Span Temperature Data



The output will vary only slightly with temperature.  
The graph here shows the variation in output with temperature is  
Output  $\leq 2\%$  per  $^{\circ}\text{C}$  ( $20^{\circ}\text{C}$  to  $0^{\circ}\text{C}$ )  
Output  $\leq 1\%$  per  $^{\circ}\text{C}$  ( $20^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ ).  
The results are shown in the graph expressed as percentage of the signal at  $20^{\circ}\text{C}$

### Baseline Temperature Data



The baseline will vary only slightly with temperature.  
The graph here shows the variation in baseline with temperature is  
Baseline  $\leq 0.25\text{ ppm}/^{\circ}\text{C}$ .  
The results are shown in the graph expressed as percentage of the signal at  $20^{\circ}\text{C}$

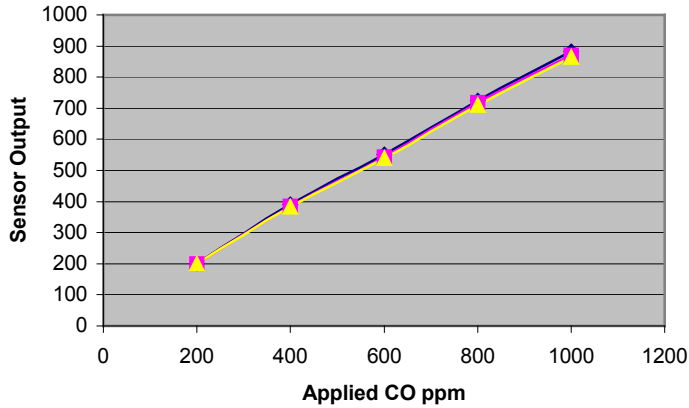
\*Recommended operating temperature are between  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$



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**Sensor Linearity**



The graph here shows the sensors are linear for 0 to 600 ppm.

<b>CROSS SENSITIVITIES*</b>		
GAS	CONCENTRATION (PPM)	TYPICAL CARBON MONOXIDE PPM EQUIVALENT
Hydrogen	1,000	140
Methane	10,000	< 1
Ethylene	50	154
Carbon Monoxide	100	100
Carbon Dioxide	25,000	< 2
Hydrogen Sulphide	15	50
Sulphur Dioxide	25	38
Chlorine	--	N/A
Nitric Oxide	100	44
Nitrogen Dioxide	--	N/A

\*Contact TTI for application information.  
 TTI reserves the right to alter design features and specifications without notice.