



RAE Systems, Inc.  
1339 Moffett Park Dr.  
Sunnyvale, CA 94089 USA

Telephone 408-752-0723  
Tube Orders 1-888-723-8823  
Web www.raesystems.com

# Gas Detection Tube Data Sheet

## Carbon Monoxide CO No. 10-102-45

	Extended Range	Extended Range	Standard Range
Range	0.05 - 1%	0.1 - 2%	0.2 - 4%
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.5	1.5	1
Correction Factor	0.25	0.5	1

Precision (Relative Standard Deviation)\*:  $\leq \pm 10\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.99$

Humidity: No effect 5 - 100% RH.

Temperature Range: 0 - 40°C  
(32 - 104°F)

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	1.0	1.0	1.0	1.1

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: White → Dark Brown

Reaction Principle:  $5\text{CO} + \text{KIO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{I}_2 + \text{CO}_2 + \text{sulfur products}$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
H <sub>2</sub> S	100	0
NH <sub>3</sub>	300	0
CH <sub>4</sub>	25000	0
Hexane	1200	0
Isobutylene	100	0
Toluene	100	0

\*Data based on RAE pumps and tubes used in standard range.

Other Possible Interferences: Hydrocarbons and similar reducing gases. Most hydrocarbon interferences can be eliminated using a pretreatment tube. Methane does not interfere in mixtures.

Caution: Dispose of spent or expired tubes according to local regulations. Possibly hazardous materials are given under the section Reaction Principle.