

RAE Systems, Inc. 1339 Moffett Park Dr.

Telephone 408-752-0723 Tube Orders 1-888-723-8823 Sunnyvale, CA 94089 USA Web www.raesystems.com

Gas Detection Tube Data Sheet Hydrogen Sulfide H₂S No. 10-103-15

	Extended Range	Standard Range	Extended Range
Range (ppmv)	5 - 60	10 - 120	20 - 240
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	0.5	1	2

Precision (Relative Standard Deviation)*: ≤ ± 12%

Linearity with No. of Pump Strokes: $r^2 = 0.999$

Humidity: No effect 5 - 85% RH

Temperature Range: 0 - 40°C

(32 - 104°F)

Temp (°C/°F)	0/32	10/50	24/75	40/104
Corr. Factor	0.88	0.96	1.0	1.1

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

<u>Color Change</u>: White → Brown

Reaction Principle: $H_2S + Pb(OAc)_2 \rightarrow PbS + 2HOAc$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
СО	250	0
CH₄	25000	0
NH ₃	100	0
NO ₂	200	O [‡]
CS ₂	100	0
Methyl mercaptan	1000	0#
Diethyl sulfide	100	0
Isobutylene	100	0
Toluene	100	0

^{*}Data based on RAE pumps and tubes used in standard range.

[‡] Interferes in mixtures; may result in transient light brown H2S response.

^{*} No effect in mixtures. Concentrations in the high % range leave a yellow color over the entire tube.