

RKI Sensor Specification

Germane (GeH4)

Features: Fast warm-up time
Good zero stability
Quick response time

Part Number: ES/ESM/ESU-23DH-GeH4
Sensor Application: GD-K8A, GD-K7D2, GD-K71D, Eagle, GD-K77D, GD-70D

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 - 0.8 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T₉₀ Response time (20°C, 2 min. exposure)	30 seconds

Operating Conditions			
Temperature Range	-20°C to +45°C	Life Expectancy	2-3 Years
Humidity Range	10-95% RH, Non Condensing	Warranty	1 Year

Known Gas Interferences

Gas	PPM Gas Applied	Reading
Acetone ((CH3)2CO)	1% Vol.	0.30
Acetylene (C2H2)	4.3	0.050
Ammonia (NH3)	250	0.27
Arsine (AsH3)	0.24	0.20
Carbon Dioxide (CO2)	99.8% Vol.	0.028
Carbon Monoxide (CO)	220	0.20
Chlorine (Cl2)	1.5	-0.20
Diborane (B2H6)	0.81	0.20
Disilane (Si2H6)	0.18	0.20
Ethanol (C2H3OH)	1.0%	0.03
Fluorinert FX-3300 (C8F18)	3.7%	0.01
HFE-7100 (C4F9OCH3)	22	-0.007
Hydrogen (H2)	450	0.20

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	2.6	0.20
Hydrogen Selenide (SeH2)	0.92	0.20
Hydrogen Sulfide (H2S)	0.7	0.20
I.P.A. ((CH3)2CHOH)	1% Vol.	0.38
Methanol (CH3OH)	1% Vol.	0.00
Nitric Oxide (NO)	100	-0.07
Nitrogen (N2)	99.99	0.01
Nitrogen Dioxide (NO2)	0.98	-0.20
Ozone (O3)	0.42	-0.20
Phosphine (PH3)	0.19	0.20
Phosphorous Trifluoride (PF3)	1.1	0.20
Silane (SiH4)	0.23	0.20
Sulfur Dioxide (SO2)	0.83	0.20

Part # Prefix	Applicable Instruments
ES	GD-K8A, GD-K7D2, Eagle
ESM	GD-K71D, GD-K77D
ESU	GD-70D