

RKI Sensor Specification

Silane (SiH₄)

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

Part Number:
Sensor Application:

ES/ESM/ESU-23AH-SiH₄
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 – 15 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T₉₀ Response time (20°C, 2 min. exposure)	90 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 ((CH ₃) ₂ CO)	1.2% Vol.	0.0
Ammonia (NH ₃)	150	0.0
Arsine (AsH ₃)	1.04	11.9
Butyl Acid (CH ₃ COO(CH ₂) ₃ CH ₃)	1.0% Vol.	0.0
Chlorine (Cl ₂)	2.0	-15.0
Diborane (B ₂ H ₆)	1.0	1.0
Disilane (Si ₂ H ₆)	3.3	8.0
Ethanol (C ₂ H ₅ OH)	1.0% Vol.	0.0
Ethyl Acetate (CH ₃ CO ₂ H ₅)	0.4% Vol.	1.0
Fluorine (F ₂)	3.0	-1.0
Hydrogen (H ₂)	1% Vol.	2.0

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	20.0	1.0
Hydrogen Cyanide (HCN)	10.0	2.0
Hydrogen Fluoride (HF)	6.0	1.8
Hydrogen Sulfide (H ₂ S)	1.0	10.0
I.P.A. ((CH ₃) ₂ CHOH)	1.0% Vol.	0.0
Nitric Acid (HN ₃)	10.0	-3.3
Phosphine (PH ₃)	0.5	10.6
Sulfur Dioxide (SO ₂)	5.0	1.0
Toluene (C ₆ H ₅ CH ₃)	1.0% Vol.	0.0
Trichloroethylene (CHCl:CCl ₂)	1% Vol.	0.0
Xylene (C ₆ H ₄ (CH ₃) ₃)	0.4% Vol.	0.0

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