

RKI Sensor Specification

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

Hydrogen Bromide (HBr)

Part Number: ES/ESM/ESU-23E-HBr
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 – 9 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
Acetylene (C ₂ H ₂)	210.0	7.6
Acetone ((CH ₃) ₂ CO)	2.07% Vol.	2.0
Arsine (AsH ₃)	0.14	0.8
Carbon Dioxide (CO ₂)	99.9% Vol.	0.0
Carbon Monoxide (CO)	287.0	0.2
Chlorine (Cl ₂)	10.0	-0.2
Diborane (B ₂ H ₆)	5.4	0.8
Disilane (Si ₂ H ₆)	7.8	5.7
Ethylene (C ₂ H ₄)	1,020.0	6.1
Fluorine (F ₂)	15.0	-3.7
Germanium Tetrahydride (GeH ₄)	1.6	0.6
Hydrogen (H ₂)	2.03% Vol.	0.5
Hydrogen Chloride (HCl)	5.0	6.0

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	10.0	0.5
Hydrogen Selenide (SeH ₂)	1.0	7.2
Hydrogen Sulfide (H ₂ S)	2.6	0.3
I.P.A. ((CH ₃) ₂ CHOH)	1.51% Vol.	0.3
Methanol (CH ₃ OH)	5.18% Vol.	0.2
Nitric Oxide (NO)	20.0	5.0
Nitrogen Dioxide (NO ₂)	16.7	1.6
Ozone (O ₃)	6.0	-0.9
Phosphine (PH ₃)	1.0	6.4
Silane (SiH ₄)	14.1	2.4
Sulfur Dioxide (SO ₂)	10.0	2.7
Toluene (C ₆ H ₅ CH ₃)	0.75% Vol.	2.5

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