

RKI Sensor Specification

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

Hydrogen Chloride (HCl)

Part Number: ES/ESM-K233-HCl
Sensor Application: GD-K8A, GD-K7D2, GD-K71D, Eagle, GD-K77D

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
Acetic Acid (CH ₃ COOH)	100.0	25.1
Ammonia (NH ₃)	39.4	0.0
Bromine (Br ₂)	1.0	1.6
Carbon Dioxide (CO ₂)	1% Vol.	0
Carbon Monoxide (CO)	286.6	0.0
Carbon Tetrafluoride (CF ₄)	1.0	1.4
Chlorine (Cl ₂)	1.0	1.6
Ethanol (C ₂ H ₅ OH)	10.0% Vol.	0.0
Fluorine (F ₂)	2.0	2.1
Hydrogen (H ₂)	99.9% Vol.	0.0
Hydrogen Bromide (HBr)	5.6	0.3
Hydrogen Cyanide (HCN)	20.0	-0.6

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	6.0	7.0
Hydrogen Sulfide (H ₂ S)	32.8	-0.1
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	3.0% Vol.	0.0
Iodine (I ₂)	1.0	1.3
Methane (CH ₄)	99.9% Vol.	0.0
Methanol (CH ₃ OH)	10.0% Vol.	0.0
Nitric Acid (HNO ₃)	5.0	2.6
Nitrogen Dioxide (NO ₂)	101.0	3.9
Ozone (O ₃)	5.0	5.3
Phosgene (COCl ₂)	1.0	0.0
Phosphine (Ph ₃)	1.1	0.0
Sulfur Dioxide (SO ₂)	10.0	3.2

Part # Prefix	Applicable Instruments
ES	GD-K7D2, Eagle
ESM	GD-K71D, GD-K77D