

RKI Sensor Specification

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

Part Number:
Sensor Application:

Chlorine (Cl₂)
ESM-K01-Cl₂
SC-01, Direct Connect,
S2, M2, EAGLE 2,

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 – 3 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T ₉₀ 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)	20.0	3.2
Arsine AsH ₃	0.54	0.0
Ammonia (NH ₃)	39.7	-0.1
Bromine (Br ₂)	1.0	0.8
Carbon Dioxide (CO ₂)	1.0% Vol.	-0.1
Carbon Monoxide (CO)	1000	-0.1
Diborane (B ₂ H ₆)	4.95	0.1
Disilane (Si ₂ H ₆)	10.0	0.0
Ethylene (C ₂ H ₄)	2.0	0.0
Ethanol (C ₂ H ₅ OH)	1.0	0.0
Fluorine (F ₂)	2.0	1.3
Hydrogen (H ₂)	2.0% Vol.	0.0
Hydrogen Bromide (HBr)	4.8	1.2

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	10.5	5.3
Hydrogen Fluoride (HF)	6.0	5.3
Hydrogen Sulfide (H ₂ S)	30.2	0.8
I.P.A. ((CH ₃) ₂ CHOH)	1.0% Vol.	0.0
Iodine (I ₂)	1.0	1.2
Methanol (CH ₃ OH)	1% Vol.	0.0
Nitric Acid (HN0 ₃)	7.0	5.2
Nitric Oxide (NO)	100.1	1.3
Nitrogen Dioxide (NO ₂)	48.5	0.0
Ozone (O ₃)	0.5	0.5
Phosphine (PH ₃)	0.53	0.0
Silane (SiH ₄)	8.3	0.0
Sulfur Dioxide (SO ₂)	14.7	5.5