

RKI Sensor Specification

Sulfur Dioxide (SO₂)

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

Part Number: ES-238-SO2
Sensor Application: EAGLE, Fixed Systems
(Standard Sensor)

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 – 10 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)	1.0 % vol	0.05 ppm
Ammonia (NH ₃)	2700 ppm	2.0 ppm
Carbon Dioxide (CO ₂)	99.9 % vol	0.1 ppm
Carbon Monoxide (CO)	490 ppm	2.0 ppm
Chlorine (Cl ₂)	3.6 ppm	-2.0 ppm
Ethanol (C ₂ H ₅ OH)	1.0 % vol	0.1 ppm
Ethylene (C ₂ H ₄)	210 ppm	2.0 ppm
Hydrogen (H ₂)	1000 ppm	2.0 ppm
Hydrogen Chloride (HCl)	19 ppm	2.0 ppm
Hydrogen Cyanide (HCN)	5.2 ppm	2.0 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	6 ppm	0 ppm
Hydrogen Sulfide (H ₂ S)	1.5 ppm	2.0 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	3.4 % vol	2.0 ppm
Methane (CH ₄)	100 % vol	0 ppm
Methanol (CH ₃ OH)	1.0 % vol	0 ppm
Nitric Oxide (NO)	1200 ppm	2.0 ppm
Nitrogen Dioxide (NO ₂)	1.8 ppm	-2.0 ppm
Ozone (O ₃)	1.5 ppm	-2.0 ppm
Silane (SiH ₄)	0.63 ppm	2.0 ppm