

# RKI Sensor Specification

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

## Sulfur Dioxide (SO<sub>2</sub>)

**Part Number:** ES-23A-SO<sub>2</sub>  
**Sensor Application:** EAGLE, Fixed Systems

Technical Specifications			
<b>Measuring Principle</b>	Amperometric 3-electrode sensor	<b>Accuracy</b>	+/- 10 % of reading
<b>Range of Measurement</b>	0 – 30 ppm	<b>Repeatability</b>	+/- 5% of reading
<b>Resolution</b>	1% of full scale	<b>T<sub>90</sub> Response time (20°C, 2 min. exposure)</b>	90 seconds

Operating Conditions			
Temperature Range	-20°C to +45°C	<b>Life Expectancy</b>	2-3 Years
Humidity Range	10-95% RH, Non Condensing	<b>Warranty</b>	1 Year

## Known Gas Interferences

Gas	PPM Gas Applied	Reading
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	8.2% vol.	15.0
Acetylene (C <sub>2</sub> H <sub>2</sub> )	140.0	15.0
Ammonia (NH <sub>3</sub> )	2.9% vol.	15.0
Bromine (Br <sub>2</sub> )	13.0	-15.0
Carbon Dioxide (CO <sub>2</sub> )	1,000	no response
Carbon Monoxide (CO)	0.37% vol.	15.0
Chlorine (Cl <sub>2</sub> )	17.0	-15.0
Ethylene (C <sub>2</sub> H <sub>4</sub> )	0.16% vol.	15.0
Fluorine (F <sub>2</sub> )	39.0	-15.0
Hydrogen (H <sub>2</sub> )	2.0% vol.	15.0
Hydrogen Bromide (HBr)	7.6	15.0
Hydrogen Chloride (HCl)	5.1	15.0

Gas	PPM Gas Applied	Reading
Hydrogen Cyanide (HCN)	200.0	15.0
Hydrogen Sulfide (H <sub>2</sub> S)	0.56	15.0
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	11.0% vol.	15.0
Iodine (I <sub>2</sub> )	8.8	15.0
	5.6	-15.0
Methanol (CH <sub>3</sub> OH)	8.9% vol.	15.0
Nitric Oxide (NO)	65.0	15.0
Nitrogen Dioxide (NO <sub>2</sub> )	59.0	15.0
Nitrogen Trifluoride (NF <sub>3</sub> )	1.9% vol.	15.0
Ozone (O <sub>3</sub> )	45.0	-15.0
Toluene (C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> )	74% vol.	15.0