

# RKI Sensor Specification

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

**Chlorine (Cl<sub>2</sub>)**  
**Part Number:** ES-K233-Cl<sub>2</sub>  
**Sensor Application:** EAGLE, Fixed Systems

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 3 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T <sub>90</sub> 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 <sub>3</sub> COOH)	100.0	16.5
Ammonia (NH <sub>3</sub> )	39.4	0.0
Bromine (Br <sub>2</sub> )	1.0	1.0
Carbon Dioxide (CO <sub>2</sub> )	1.0% vol.	0.0
Carbon Monoxide (CO)	286.6	0.0
Chlorine Trifluoride (ClF <sub>3</sub> )	1.0	0.9
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	10% vol.	0.0
Fluorine (F <sub>2</sub> )	2.0	1.3
Hydrogen (H <sub>2</sub> )	99.9% vol.	0.0
Hydrogen Bromide (HBr)	5.6	0.2
Hydrogen Chloride (HCl)	3.0	2.0
Hydrogen Cyanide (HCN)	20.0	-0.4

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	6.0	4.6
Hydrogen Sulfide (H <sub>2</sub> S)	32.8	-0.1
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	3.0% vol.	0.0
Iodine (I <sub>2</sub> )	1.0	0.8
Methane (CH <sub>4</sub> )	99.9% vol.	0.0
Methanol (CH <sub>3</sub> OH)	10% vol.	0.0
Nitric Acid (HNO <sub>3</sub> )	5.0	1.7
Nitrogen Dioxide (NO <sub>2</sub> )	101.0	3.0
Ozone (O <sub>3</sub> )	5.0	3.5
Phosgene (COCl <sub>2</sub> )	1.0	0.0
Phosphine (PH <sub>3</sub> )	1.1	0.0
Sulfur Dioxide (SO <sub>2</sub> )	10.0	2.0