

# RKI Sensor Specification

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

**Part Number:**  
**Sensor Application:**

**Ozone (O3)**  
ES-K239C-O3  
Fixed Systems

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 0.6 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)	40	0
Acetaldehyde (CH <sub>3</sub> CHO)	1,000	0
Ammonia (NH <sub>3</sub> )	40.3	0
Carbon Dioxide (CO <sub>2</sub> )	1%	0
Carbon Monoxide (CO)	286.6	0
Chlorine (Cl <sub>2</sub> )	0.8	0.9
Ethane (C <sub>2</sub> H <sub>6</sub> )	1,000	0
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	10%	0
Ethylene (C <sub>2</sub> H <sub>4</sub> )	1,000	0
Fluorine (F <sub>2</sub> )	2	0
R 14 (CF <sub>4</sub> )	1,000	0
Hydrogen (H <sub>2</sub> )	100%	0

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	3	0
Hydrogen Fluoride (HF)	6	0
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> )	5	1
Hydrogen Sulfide (H <sub>2</sub> S)	27.7	0
Isopropyl Alcohol (IPA) ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1.5%	0
Methane (CH <sub>4</sub> )	100%	0
Methanol (CH <sub>3</sub> OH)	10%	0
Nitric Acid (HNO <sub>3</sub> )	2	0
Nitrogen Dioxide (NO <sub>2</sub> )	96	2.3
Phosphine (Ph <sub>3</sub> )	1	0
Sulfur Dioxide (SO <sub>2</sub> )	10.4	0
TEOS (Si(OC <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )	15	0