

# RKI Sensor Specification

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

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

**Ozone (O3)**  
ES-K239C-O3  
GD-K8A, GD-K7D2

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

Gas	Gas Applied	Reading
Hydrogen Fluoride (HF)	6 ppm	0 ppm
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> )	5 ppm	1 ppm
Hydrogen Sulfide (H <sub>2</sub> S)	27.7 ppm	0 ppm
Isopropyl Alcohol (IPA) ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1.5% vol	0 ppm
Methane (CH <sub>4</sub> )	100% vol	0 ppm
Methanol (CH <sub>3</sub> OH)	10% vol	0 ppm
Nitric Acid (HNO <sub>3</sub> )	2 ppm	0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	96 ppm	2.3 ppm
Ozone (O <sub>3</sub> )	0.6 ppm	0.6 ppm
Phosphine (Ph <sub>3</sub> )	1 ppm	0 ppm
Sulfur Dioxide (SO <sub>2</sub> )	10.4 ppm	0 ppm
Tetraethyl Orthosilicate (TEOS)	15 ppm	0 ppm