

# RKI Sensor Specification

## Ozone (O<sub>3</sub>)

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

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

ES/ESM/ESU-K239C-O3  
GD-K8A, GD-K7D2, GD-K71D,  
Eagle, GD-K77D, GD-70D

Technical Specifications			
<b>Measuring Principle</b>	Amperometric 3-electrode sensor	<b>Accuracy</b>	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
<b>Range of Measurement</b>	0 – 0.6 ppm, 0 – 1 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			
<b>Temperature Range</b>	-20°C to +45°C	<b>Life Expectancy</b>	2-3 Years
<b>Humidity Range</b>	10-95% RH, Non Condensing	<b>Warranty</b>	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% Vol.	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% Vol.	0
Ethylene (C <sub>2</sub> H <sub>4</sub> )	1,000	0
Fluorine (F <sub>2</sub> )	2	2
R 14 (CF <sub>4</sub> )	1,000	0
Hydrogen (H <sub>2</sub> )	100% Vol.	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% Vol.	0
Methane (CH <sub>4</sub> )	100% Vol.	0
Methanol (CH <sub>3</sub> OH)	10% Vol.	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

Part # Prefix	Applicable Instruments
ES	GD-K8A, GD-K7D2, Eagle
ESM	GD-K71D, GD-K77D
ESU	GD-70D