

# RKI Sensor Specification

## Acetic Acid

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

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

ES-K233-ACET  
Eagle, GD-K8A, GD-K7D2

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 – 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			
<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
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	1% Vol	0.0
Ammonia (NH <sub>3</sub> )	39.4	0.0
Arsine (AsH <sub>3</sub> )	1	0.0
Bromine (Br <sub>2</sub> )	1	19
Butane (C <sub>4</sub> H <sub>10</sub> )	1.0% Vol	0.0
Carbon Dioxide (CO <sub>2</sub> )	1.0 % Vol	0.0
Carbon Monoxide (CO)	286.6	0.0
Chloroform (CHCl <sub>3</sub> )	0.69% Vol	0.0
Chlorine (Cl <sub>2</sub> )	0.8	15
Chlorine Trifluoride (ClF <sub>3</sub> )	1	17
Diborane (B <sub>2</sub> H <sub>6</sub> )	10	0.0
Disilane (Si <sub>2</sub> H <sub>6</sub> )	10	0.0
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	10% Vol	0.0
Fluorine (F <sub>2</sub> )	2.0	24
Freon 14 (CF <sub>4</sub> )	1% Vol	0.0
Freon 16 (C <sub>2</sub> F <sub>6</sub> )	1% Vol	0.0
Hydrogen (H <sub>2</sub> )	99.9% Vol	0.0
Hydrogen Bromide (HBr)	5.6	3.8

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	3.0	38
Hydrogen Cyanide (HCN)	20	-7.5
Hydrogen Fluoride (HF)	6	86
Hydrogen Sulfide (H <sub>2</sub> S)	32.8	-1.9
Isopropyl Alcohol (IPA) ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	3.0% Vol	0.0
Iodine (I <sub>2</sub> )	1	15
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	32
Nitric Oxide (NO)	102.4	0.0
Nitrogen Dioxide (NO <sub>2</sub> )	101	56
Nitrogen Trifluoride (NF <sub>3</sub> )	1.0	0.0
Ozone (O <sub>3</sub> )	5	66
Phosgene (COCl <sub>2</sub> )	1	0.0
Phosphine (Ph <sub>3</sub> )	1.1	0.0
Silane (SiH <sub>4</sub> )	10	0.0
Sulfur Dioxide (SO <sub>2</sub> )	10	37.5