

# RKI Sensor Specification

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

## Hydrogen Iodine (HI)

**Part Number:** ES-23E-HI  
**Sensor Application:** EAGLE, Fixed Systems

Technical Specifications			
<b>Measuring Principle</b>	Amperometric 3-electrode sensor	<b>Accuracy</b>	+/- 10 % of reading
<b>Range of Measurement</b>	0 – 5 ppm	<b>Repeatability</b>	+/- 5% of reading
<b>Resolution</b>	1% of full scale	<b>T<sub>90</sub> Response time</b> (20°C, 2 min. exposure)	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
Acetylene (C <sub>2</sub> H <sub>2</sub> )	210.0	5.0
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	2.07% vol.	1.3
Arsine (AsH <sub>3</sub> )	0.14	0.6
Carbon Dioxide (CO <sub>2</sub> )	99.9% vol.	0.0
Carbon Monoxide (CO)	287.0	0.1
Chlorine (Cl <sub>2</sub> )	10.0	-0.1
Diborane (B <sub>2</sub> H <sub>6</sub> )	5.4	0.6
Disilane (Si <sub>2</sub> H <sub>6</sub> )	15.6	7.4
Ethylene (C <sub>2</sub> H <sub>4</sub> )	1,020.0	4.0
Fluorine (F <sub>2</sub> )	15.0	-2.4
Germanium Tetrahydride (GeH <sub>4</sub> )	1.6	0.4
Hydrogen (H <sub>2</sub> )	2.03% vol.	0.3
Hydrogen Bromide (HBr)	7.9	5.4

Gas	PPM Gas Applied	Reading
Hydrogen Chloride (HCl)	8.0	6.2
Hydrogen Fluoride (HF)	10.0	0.3
Hydrogen Selenide (SeH <sub>2</sub> )	1.0	4.7
Hydrogen Sulfide (H <sub>2</sub> S)	2.6	0.2
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1.51% vol.	0.1
Methanol (CH <sub>3</sub> OH)	5.18% vol.	0.1
Nitric Oxide (NO)	98.4	16.6
Nitrogen Dioxide (NO <sub>2</sub> )	16.7	1.0
Ozone (O <sub>3</sub> )	6.0	-0.6
Phosphine (PH <sub>3</sub> )	1.0	4.1
Silane (SiH <sub>4</sub> )	14.1	1.6
Sulfur Dioxide (SO <sub>2</sub> )	50.7	7.5
Toluene (C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> )	.75% vol.	1.6