

# RKI Sensor Specification

## Arsine (AsH<sub>3</sub>)

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

**Part Number:** ES-23AHS-ASH3  
**Sensor Application:** EAGLE, Fixed Systems

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 - 0.2 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.	0.006
Acetylene (C <sub>2</sub> H <sub>2</sub> )	4.3	0.050
Carbon Dioxide (CO <sub>2</sub> )	99.8% vol.	0.013
Carbon Monoxide (CO)	300	0.018
Chlorine (Cl <sub>2</sub> )	0.25	-0.050
Diborane (B <sub>2</sub> H <sub>6</sub> )	0.67	0.050
Disilane (Si <sub>2</sub> H <sub>6</sub> )	0.14	0.050
Ethylene (C <sub>2</sub> H <sub>4</sub> )	.17% vol.	0.050
Germanium Tetrahydride (GeH <sub>4</sub> )	0.18	0.050
Hydrogen (H <sub>2</sub> )	.8 % vol.	0.050
Hydrogen Bromide (HBr)	1.5	0.050
Hydrogen Chloride (HCl)	1.4	0.050

Gas	PPM Gas Applied	Reading
Hydrogen Fluoride (HF)	8.3	0.050
Hydrogen Selenide (SeH <sub>2</sub> )	0.059	0.050
Hydrogen Sulfide (H <sub>2</sub> S)	0.06	0.050
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1% vol.	0.008
Methanol (CH <sub>3</sub> OH)	1% vol.	0.002
Nitric Oxide (NO)	15	0.050
Nitrogen Dioxide (NO <sub>2</sub> )	0.29	-0.050
Ozone (O <sub>3</sub> )	0.24	0.050
Phosphine (Ph <sub>3</sub> )	0.034	0.050
Silane (SiH <sub>4</sub> )	0.3	0.050
Sulfur Dioxide (SO <sub>2</sub> )	0.4	0.050
Toluene (C <sub>7</sub> H <sub>8</sub> )	1% vol.	0.009