

# RKI Sensor Specification

## Dimethylamine (C2H7N)

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

**Part Number:** ES/ESM/ESU-23RVM-C2H7N  
**Sensor Application:** GD-K8A, GD-K7D2, Eagle,  
GD-K71D, 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 – 15 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
Ammonia (NH3)	20 ppm	31.4 ppm
Arsine (AsH3)	0.5 ppm	0.0 ppm
Carbon Dioxide (CO2)	2,500 ppm	0.0 ppm
Carbon Monoxide (CO)	100 ppm	0.0 ppm
Diborane (B2H6)	5 ppm	-2.9 ppm
Diethylamine (C2H5)2NH	4.5 ppm	2.3 ppm
Ethanol	1% Vol	0.0 ppm
Hydrogen (H2)	1.96% Vol	0.8 ppm
Hydrogen (H2)	99.9% Vol	32.7 ppm
Hydrogen Chloride (HCl)	18 ppm	-32.4 ppm
Hydrogen Peroxide (H2O2)	3 ppm	-2.3 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Peroxide (H2O2)	3 ppm	-2.3 ppm
Hydrogen Sulfide (H2S)	29.8 ppm	1.7 ppm
Isopropyl Alcohol (IPA) ((CH3)2CHOH)	1% Vol	0.0 ppm
Methanol (CH3OH)	1% Vol	0.0 ppm
Monomethylamine (CH3)NH2	8 ppm	9.1 ppm
Nitrogen Dioxide (NO2)	51.5 ppm	- 42.2 ppm
Oxone O3	0.54 ppm	-0.5 ppm
Phosphine (Ph3)	0.5 ppm	0. ppm
Silane (SiH4)	15 ppm	0.0 ppm
Sulfur Dioxide (SO2)	49.1 ppm	-41.7 ppm
Trimethylamine (CH3)3N	4 ppm	4.5 ppm

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