

RKI Sensor Specification

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

Ammonia (NH₃)

Part Number: ESM-01R-D-NH3
Sensor Application: Direct Connect, S2, M2, SC-01

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
Range of Measurement	0 – 75 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T₉₀ Response time (20°C, 2 min. exposure)	90 seconds

Operating Conditions			
Temperature Range	-20°C to +45°C	Life Expectancy	2-3 Years
Humidity Range	10-95% RH, Non Condensing	Warranty	1 Year

Known Gas Interferences

Gas	PPM Gas Applied	Reading
Arsine (AsH ₃)	0.54	0.0
Carbon Dioxide (CO ₂)	1021	1.7
Diborane (B ₂ H ₆)	4.95	0.1
Hydrogen Fluoride (HF)	6.0	-4.0
Hydrogen (H ₂)	0.98% Vol.	-2.0
Hydrogen (H ₂)	99.9% Vol.	107.3
Hydrogen Chloride (HCl)	8.00	-3.2
Hydrogen Sulfide (H ₂ S)	494	14.8

Gas	PPM Gas Applied	Reading
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	1% Vol.	0.0
Nitrogen Dioxide (NO ₂)	45.4	-52.1
Methanol (CH ₃ OH)	1.0% Vol.	0.0
Methylamine (CH ₃ NH ₂)	5.9	1.3
Phosphine (Ph ₃)	0.53	0.0
Silane (SiH ₄)	8.3	0.0
Sulfur Dioxide (SO ₂)	49.7	-23.9