

RKI Sensor Specification

Acetic Acid

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

Part Number: ES/ESM/ESU-K233-ACET
Sensor Application: Eagle, GD-K8A, GD-K7D2, GD-K71D, GD-K77D, GD-70D

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 30 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
Acetic Anhydride (CH ₃ CO) ₂ O	16.0	0.0
Acetone ((CH ₃) ₂ CO)	1% Vol	0.0
Ammonia (NH ₃)	39.4	0.0
Arsine (AsH ₃)	1.0	0.0
Bromine (Br ₂)	1.0	19
Butane (C ₄ H ₁₀)	1.0% Vol	0.0
Carbon Dioxide (CO ₂)	1.0 % Vol	0.0
Carbon Monoxide (CO)	286.6	0.0
Chloroform (CHCl ₃)	0.69% Vol	0.0
Chlorine (Cl ₂)	0.8	15
Chlorine Trifluoride (ClF ₃)	1.0	17
Diborane (B ₂ H ₆)	10.0	0.0
Disilane (Si ₂ H ₆)	10.0	0.0
Ethanol (C ₂ H ₅ OH)	10% Vol	0.0
Fluorine (F ₂)	2.0	24
Formic Acid (HCOOH)	1.0	12.5
Freon 14 (CF ₄)	1% Vol	0.0
Freon 16 (C ₂ F ₆)	1% Vol	0.0
Hydrogen (H ₂)	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)	20.0	-7.5
Hydrogen Fluoride (HF)	6.0	86
Hydrogen Sulfide (H ₂ S)	32.8	-1.9
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	3.0% Vol	0.0
Iodine (I ₂)	1.0	15
Methane (CH ₄)	99.9% Vol	0.0
Methanol (CH ₃ OH)	10% Vol	0.0
Nitric Acid (HNO ₃)	5.0	32
Nitric Oxide (NO)	102.4	0.0
Nitrogen Dioxide (NO ₂)	101.0	56
Nitrogen Trifluoride (NF ₃)	1.0	0.0
Ozone (O ₃)	5.0	66
Phosgene (COCl ₂)	1.0	0.0
Phosphine (Ph ₃)	1.1	0.0
Silane (SiH ₄)	10.0	0.0
Sulfur Dioxide (SO ₂)	10.0	37.5
Xylene (C ₆ H ₄ (CH ₃) ₂)	1.0% Vol	0.0

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