

RKI Sensor Specification

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

Chlorine Trifluoride (ClF₃)

Part Number: ES/ESM/ESU-K233C-S(A)-ClF₃
Sensor Application: GD-K8A, GD-K7D2, GD-K71D,
Eagle, GD-K77D, GD-70D

Technical Specifications						
Measuring Principle	Amperometric 3-electrode sensor		Accuracy	+/- 10% of reading or +/- 5% of full scale (whichever is greater)		
	Range of Measurement	0 – 0.6 ppm		Repeatability	+/- 5% of reading	
		Resolution			1% of full scale	

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

Known Gas Interferences

Gas	PPM Gas Applied	Reading
Acetic Acid (CH ₃ COOH)	100 ppm	19.5 ppm
Acetone ((CH ₃) ₂ CO)	1% Vol	0 ppm
Ammonia (NH ₃)	39.4 ppm	0.0 ppm
Arsine (AsH ₃)	1 ppm	0 ppm
Butane (C ₄ H ₁₀)	1% Vol	0 ppm
Carbon Dioxide (CO ₂)	1% Vol	0 ppm
Carbon Monoxide (CO)	286.6 ppm	0 ppm
Diborane (B ₂ H ₆)	10 ppm	0 ppm
Disilane (Si ₂ H ₆)	10 ppm	0 ppm
Ethanol (C ₂ H ₅ OH)	10% Vol	0 ppm
Halocarbon 14 (CF ₄)	1% Vol	0 ppm
Halocarbon 116 (C ₂ F ₆)	1% Vol	0 ppm
Hydrogen (H ₂)	99.9% Vol	0 ppm
Hydrogen Bromide (HBr)	5.6 ppm	0.2 ppm

Gas	PPM Gas Applied	Reading
Hydrogen Cyanide (HCN)	20 ppm	-0.5 ppm
Hydrogen Sulfide (H ₂ S)	32.8 ppm	-0.1 ppm
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	3% Vol	0 ppm
Methane (CH ₄)	99.9% Vol	0 ppm
Methanol (CH ₃ OH)	10% Vol	0 ppm
Nitric Acid (HNO ₃)	5 ppm	2 ppm
Nitric Oxide (NO)	102.4 ppm	0 ppm
Nitrogen Dioxide (NO ₂)	101 ppm	3.5 ppm
Ozone (O ₃)	5 ppm	< 1.5 ppm
Phosgene (COCl ₂)	1 ppm	0.0 ppm
Phosphine (Ph ₃)	1.1 ppm	0 ppm
Silane (SiH ₄)	10 ppm	0 ppm
Sulfur Dioxide (SO ₂)	10 ppm	2.4 ppm

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