

# RKI Sensor Specification

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

## Chlorinetrifluoride ClF3

**Part Number:** ES-K233C-S-CLF3  
**Sensor Application:** GD-K8A, GD-K7D2

Technical Specifications			
Measuring Principle	Amperometric 3-electrode sensor	Accuracy	+/- 10 % of reading
Range of Measurement	0 – 0.6 ppm	Repeatability	+/- 5% of reading
Resolution	1% of full scale	T <sub>90</sub> 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 Acid (CH <sub>3</sub> COOH)	100 ppm	19.5 ppm
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	1% vol	0 ppm
Ammonia (NH <sub>3</sub> )	39.4 ppm	0.0 ppm
Arsine (AsH <sub>3</sub> )	1 ppm	0 ppm
Butane (C <sub>4</sub> H <sub>10</sub> )	1% vol	0 ppm
Carbon Dioxide (CO <sub>2</sub> )	1% vol	0 ppm
Carbon Monoxide (CO)	286.6 ppm	0 ppm
Diborane (B <sub>2</sub> H <sub>6</sub> )	10 ppm	0 ppm
Disilane (Si <sub>2</sub> H <sub>6</sub> )	10 ppm	0 ppm
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	10% vol	0 ppm
Halocarbon 14 (CF <sub>4</sub> )	1% vol	0 ppm
Halocarbon 116 (C <sub>2</sub> F <sub>6</sub> )	1% vol	0 ppm
Hydrogen (H <sub>2</sub> )	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 <sub>2</sub> S)	32.8 ppm	-0.1 ppm
Isopropyl Alcohol (IPA) ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	3% vol	0 ppm
Methane (CH <sub>4</sub> )	99.9% vol	0 ppm
Methanol (CH <sub>3</sub> OH)	10% vol	0 ppm
Nitric Acid (HNO <sub>3</sub> )	5 ppm	2 ppm
Nitric Oxide (NO)	102.4 ppm	0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	101 ppm	3.5 ppm
Ozone (O <sub>3</sub> )	5 ppm	< 1.5 ppm
Phosgene (COCl <sub>2</sub> )	1 ppm	0.0 ppm
Phosphine (Ph <sub>3</sub> )	1.1 ppm	0 ppm
Silane (SiH <sub>4</sub> )	10 ppm	0 ppm
Sulfur Dioxide (SO <sub>2</sub> )	10 ppm	2.4 ppm