

RKI Sensor Specification

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

Part Number:
Sensor Application:

Phosphine (PH₃)
ES/ESM/ESU-23DH-PH3
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 – 1 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	Gas Applied	Reading
Ammonia (NH ₃)	250	0.18
Acetone ((CH ₃) ₂ CO)	0.9% Vol.	0.02
Acetylene	0.91	0.3
Arsine (AsH ₃)	0.38	0.3
Carbon Dioxide (CO ₂)	99.9% Vol.	0.03
Carbon Monoxide (CO)	330	0.3
Chlorine (Cl ₂)	2.4	-0.3
Diborane (B ₂ H ₆)	1.3	0.3
Disilane (Si ₂ H ₆)	0.28	0.3
Ethyl Acetate (CH ₃ CO ₂ H ₅)	2.8% Vol.	0.3
Germanium Tetrahydride (GeH ₄)	0.32	0.3
Hydrogen (H ₂)	810	0.3
Hydrogen Chloride (HCl)	6.4	0.3
Hydrogen Sulfide (H ₂ S)	1.1	0.3

Gas	Gas Applied	Reading
Hydrogen Selenide (H ₂ Se)	1.5	0.3
Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH)	2.1% Vol.	0.78
Methane (CH ₄)	100% Vol.	0
Nitric Oxide (NO)	100	-0.06
Nitrogen (N ₂)	99.99% Vol.	0.01
Nitrogen Dioxide (NO ₂)	1.7	-0.3
Silane (SiH ₄)	0.37	0.3
Sulfur Dioxide (SO ₂)	1.4	0.3
Toluene (C ₇ H ₈)	0.56% Vol.	0.3
o-Xylene (C ₈ H ₁₀)	0.5% Vol.	0.3
p-Xylene (C ₈ H ₁₀)	0.88% Vol.	0.3

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