

# RKI Sensor Specification

## Nitrogen Dioxide (NO2)

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

**Part Number:** ES/ESM/ESU-23AH-NO2/NF3  
GD-K8A, GD-K7D2, Eagle,  
**Sensor Application:** GD-K71D, GD-K77D, GD-70D

Technical Specifications			
<b>Measuring Principle</b>	Amperometric 3-electrode sensor	<b>Accuracy</b>	+/- 10% of reading or +/- 5% of full scale (whichever is greater)
<b>Range of Measurement</b>	0 – 30 ppm	<b>Repeatability</b>	+/- 5% of reading
<b>Resolution</b>	1% of full scale	<b>T<sub>90</sub> Response time (20°C, 2 min. exposure)</b>	90 seconds

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

## Known Gas Interferences

Gas	PPM Gas Applied	Reading
Acetone ((CH <sub>3</sub> ) <sub>2</sub> CO)	1% Vol.	0.0
Ammonia (NH <sub>3</sub> )	50.0	0.0
Chlorine (Cl <sub>2</sub> )	0.5	0.9
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	1% Vol.	0.0
Fluorine (F <sub>2</sub> )	5.0	3.7
Hydrogen (H <sub>2</sub> )	2% Vol.	-1.2
Hydrogen Chloride (HCl)	4.4	-0.6
Hydrogen Fluoride (HF)	6.0	0.2

Gas	PPM Gas Applied	Reading
Hydrogen Sulfide (H <sub>2</sub> S)	1.2	-1.7
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1% Vol.	0.0
Nitric Oxide (NO)	103.0	4.0
Nitrogen Trifluoride (NF <sub>3</sub> )	20.0	0.0
Ozone (O <sub>3</sub> )	1.5	4.2
Sulfur Dioxide (SO <sub>2</sub> )	15.9	0.0
Toluene (C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> )	1% Vol.	0.0
Trichloroethylene (CHCl:CCl <sub>2</sub> )	1% Vol.	0.0

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