

# RKI Sensor Specification

## Chlorine Dioxide (ClO<sub>2</sub>)

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

**Part Number:** ES-23AH-D-CL2  
**Sensor Application:** EAGLE, Fixed Systems

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 – 1 ppm	<b>Repeatability</b>	+/- 5% of reading
<b>Resolution</b>	1% of full scale	<b>T<sub>90</sub> Response time</b> (20°C, 2 min. exposure)	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> )	150.0	0.0
n-Butyl Acetate (CH <sub>3</sub> COO(CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub> )	1 % Vol.	0.0
Bromine (Br <sub>2</sub> )	0.8	1.2
Chlorine (Cl <sub>2</sub> )	1.0	2.0
Ethanol (C <sub>2</sub> H <sub>5</sub> OH)	1.3% vol.	0.0
Fluorine (F <sub>2</sub> )	4.0	2.4
Hydrogen (H <sub>2</sub> )	1% vol.	0.0
Hydrogen Chloride (HCl)	6.0	-0.88
Hydrogen Cyanide (HCN)	8.0	0.00

Gas	PPM Gas Applied	Reading
Hydrogen Sulfide (H <sub>2</sub> S)	1.0	-2.59
I.P.A. ((CH <sub>3</sub> ) <sub>2</sub> CHOH)	1.1% vol.	0.0
Ethanol (CH <sub>3</sub> OH)	1% vol.	0.0
Nitrogen Dioxide (NO <sub>2</sub> )	8.0	11.0
Ozone (O <sub>3</sub> )	0.6	1.2
Sulfur Dioxide (SO <sub>2</sub> )	5.0	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> )	1.1% vol.	0.0
Xylene (C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>3</sub> )	0.6% vol.	0.0