

RKI Sensor Specification

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

Carbon Monoxide (CO) with filter

Part Number: ES/ESU-231-CO w/ filter
Sensor Application: GD-K8A, GD-K7D2,
 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 – 75 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 | PPM Gas Applied | Reading |
|---|-----------------|---------|
| Acetone ((CH ₃) ₂ CO) | 1.60 % vol | 25 ppm |
| Acetylene (C ₂ H ₂) | 19 ppm | 25 ppm |
| Arsine (AsH ₃) | 2.5 ppm | 25 ppm |
| Carbon Dioxide (CO ₂) | 5.00 % vol | 0 ppm |
| Ethanol (C ₂ H ₅ OH) | 43 ppm | 25 ppm |
| Ethylene (C ₂ H ₄) | 110 ppm | 25 ppm |
| Hydrogen (H ₂) | 530 ppm | 25 ppm |
| Hydrogen Sulfide (H ₂ S) | 1.7 ppm | 25 ppm |
| Isopropyl Alcohol (IPA) ((CH ₃) ₂ CHOH) | 35 ppm | 25 ppm |

| Gas | PPM Gas Applied | Reading |
|-------------------------------------|-----------------|---------|
| Methane (CH ₄) | 5000 ppm | 0 ppm |
| Methanol (CH ₃ OH) | 85 ppm | 25 ppm |
| Nitric Oxide (NO) | 8.0 ppm | 25 ppm |
| Nitrogen Dioxide (NO ₂) | 12 ppm | -25 ppm |
| Ozone (O ₃) | 11 ppm | -25 ppm |
| Phosphine (Ph ₃) | 2.5 ppm | 25 ppm |
| Silane (SiH ₄) | 2.7 ppm | 25 ppm |
| Sulfur Dioxide (SO ₂) | 9.2 ppm | 25 ppm |

| Part # Prefix | Applicable Instruments |
|---------------|------------------------|
| ES | GD-K8A, GD-K7D2, Eagle |
| ESU | GD-70D |