The RKI S series gas sensor/transmitters are highly reliable and cost effective basic 4-20 mA transmitters for the detection of common gas hazards. The S series transmitters are available for LEL (catalytic), LEL (IR) CH4, LEL (IR) HC, O2, H2S, CO, or CO2 (IR). The electronics are encased inside a potted package to avoid damage from mechanical abuse or corrosion, and this assembly is installed inside an explosion-proof enclosure. All sensors are explosion-proof with flame arrestors and approved for use in hazardous atmospheres. There is also an optional version for oxygen for use in non-hazardous atmospheres.

The only tools required to calibrate the S series are a voltmeter, screwdriver, and cal gas. The zero and calibration functions are performed by adjusting potentiometers on the amplifiers. The amplifier has test jacks for connecting to a voltmeter for calibration purposes, and the sensor response is viewed on the voltmeter as a 100 mV to 500 mV signal. Field calibration can be performed easily and quickly by one person.

The S series transmitters can be used either indoors or outdoors. The flame arrestors utilize a patented coating which make them water repellant, and splash guards are also available for use in very wet environments.

The transmitter operates from 24 VDC (11VDC to 30 VDC), and provides a 4-20mA signal which can be connected to a wide variety of controllers.
## S Series

<table>
<thead>
<tr>
<th>Part #</th>
<th>LEL</th>
<th>O2</th>
<th>H2S</th>
<th>CO</th>
<th>Infrared</th>
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<tbody>
<tr>
<td>65-2400RK-05</td>
<td>65-2516RK</td>
<td></td>
<td>(65-2435RK)</td>
<td>(H2 Compensated)</td>
<td>65-2390RK-HC</td>
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<td>65-2504RK*</td>
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<td>65-2391RK-03</td>
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</tbody>
</table>

### Measuring Range
- **LEL**: 0-100% LEL
- **O2**: 0-25% Vol.
- **H2S**: 0-100 ppm
- **CO**: 0-300 ppm
- **CO2**: 0-5% Vol.
- **CH4**: 0-100% LEL

### Max Current Draw
- **200 mA (power wires)**
- **25 mA (signal wires)**
- **25 mA (2 wire system)**
- **60 mA (power wires)**
- **25 mA (signal wires)**

### Outputs
- **3 wires**
- **4 - 20 mA signal**

### Response Time
- **30 seconds to 90% of concentration**
- **20 seconds to 90% of concentration**
- **45 seconds to 90% of concentration**
- **35 seconds**
- **30 seconds to 90% of concentration**

### Operating Environment

#### Location
- Indoor/outdoor. Explosion proof for Class I, Div. 1, Groups B, C, and D.

#### Temperature
- **-40 to 185° F**
- **-4 to 113° F**
- **-4 to 122° F**

#### Humidity
- **0 - 99% RH, non condensing**
- **0 - 99% RH, non condensing**
- **0 - 99% RH, non condensing**

#### Housing
- Aluminum explosion proof enclosure

### Sensors

#### Type
- Catalytic
- Combustion
- Galvanic Cell
- Electrochemical
- Infrared

#### Life Expectancy
- 1 to 2 years with normal intermittent exposure to flammable gas
- 2 years normal service when intermittently exposed to H2S
- 2 years normal service when intermittently exposed to H2S
- 2 years normal service
- 5 + years normal service

### Controls

#### Zero
- Sets transmitter output to 4 mA with 0% LEL output from combustible sensor
- Sets transmitter output to 4 mA with zero output from O2 sensor
- Sets transmitter output to 4 mA with zero output from H2S sensor
- Sets transmitter output to 4 mA with zero output from CO sensor
- Sets transmitter output to 4 mA with zero output from CO2 sensor

#### Span
- Sets transmitter output to 20 mA with 100% LEL output from combustible sensor
- Sets transmitter output to 17.44 mA with 20.9% Vol. O2 (fresh air) output from O2 sensor
- Sets transmitter output to 20 mA with 100 ppm output from H2S sensor
- Sets transmitter output to 20 mA with 300 ppm output from CO sensor
- Sets transmitter output to 20 mA with 5% volume output from CO2 sensor

### Operating Voltage
- 11 VDC to 30 VDC

### Approvals
- 65-2400RK UL
- 65-2400RK-05 C CSA US
- 65-2516RK C CSA US
- C CSA US
- C UL US

### Warranty
- One year materials and workmanship

Specifications subject to change without notice. *Partial pressure sensor for helium applications. Consult factory for detailed info. Made in the USA