



# WASTEWATER GAS MONITORING SYSTEM

Gas Detection For Life

Explosion Proof Tri-Sensor Head



## Features

- 3 Sensors, 1 explosion proof housing
- Infrared sensors available for combustible gases
- Interfaces with Beacon 410 controller
- Available for LEL, O<sub>2</sub>, H<sub>2</sub>S and CO
- Water repellent patented sensor coating
- Long life sensors (2 + years typical)
- Also available with 2 or 4 sensors

## Applications

- Wet Wells
- Dry Wells
- Bar Screen
- Lift Station
- Digesters
- Thickeners
- Primary Clarifiers
- Pump Stations
- Confined Spaces

The RKI direct connect series gas sensors are highly reliable and very cost effective for the detection of common gas hazards. The direct connect series are available for LEL, Oxygen, H<sub>2</sub>S, and CO for a variety of RKI's controllers. All sensors are explosion-proof with flame arrestors, and approved for use in hazardous locations.

The tri-sensor head can be used either indoors or outdoors. The flame arrestors for the explosion-proof versions utilize a patented coating which make them water repellent. Also, splash guards are available for use in very wet environments.

The unique tri-sensor design integrates 3 sensors into one explosion proof housing. This results in significant savings with installation and wiring cost versus traditional single sensor enclosures. Only one conduit needs to be run to the sensors.

The tri-sensor head is designed to exclusively interface with the RKI Beacon 410 controller. This 3 sensor head, used with the Beacon 410, is especially well suited for wastewater applications.

Also available in a two or four sensor version, with sensors for LEL, Oxygen, H<sub>2</sub>S, and CO available.

IR (infrared) sensor versions available for LEL detection.

# Explosion Proof Tri-Sensor Head

	LEL	LEL Infrared		O <sub>2</sub>	CO	H <sub>2</sub> S
		CH <sub>4</sub>	HC			
<b>Sensor Only</b>	61-0140RK (UL) 61-0140RK-05 (CSA)	61-0190RK-CH4	61-0190RK-HC	65-2511RK (non xp) 65-2514RK (xp)	65-2433RK-05	65-2423RK-05
<b>Measuring Range</b>	0-100% LEL	0-100% LEL		0-25% Vol.	0-300 ppm	0-100 ppm
<b>Response Time</b>	30 seconds to 90%	30 seconds to 90%		20 seconds to 90%	30 second to 90%	
<b>Operating Environment</b>						
<b>Location</b>	Indoor or outdoor. Explosion proof for Class I, Div. 1, Groups B, C, and D atmospheres.					
<b>Temperature</b>	-40 ~ 185° F	-4 ~ 122° F		-4 ~ 113° F		
<b>Humidity</b>	0 - 99% RH non condensing					
<b>Housing</b>						
<b>Housing J-Box</b>	Cast aluminum, explosion-proof, epoxy coated					
<b>Sensor</b>	Stainless steel			Stainless steel	Stainless steel	
<b>Sensor</b>						
<b>Type</b>	Catalytic	Infrared		Galvanic cell	Electrochemical	
<b>Life Expectancy</b>	1 to 2 years with normal intermittent exposure to flammable gas	5 + years normal service		2 years normal service	2 to 3 years normal service	
<b>Ordering Info</b>						
	<b>Part Numbers</b>	<b>Description</b>		<b>Part Numbers</b>	<b>Description</b>	
	65-2480RK-01	LEL catalytic / O <sub>2</sub> / H <sub>2</sub> S		65-2482RK-01	LEL (IR-CH <sub>4</sub> ) / O <sub>2</sub> / H <sub>2</sub> S	
	65-2480RK-03	LEL catalytic / H <sub>2</sub> S		65-2483RK-01	LEL (IR-HC) / O <sub>2</sub> / H <sub>2</sub> S	
	65-2481RK	LEL catalytic / O <sub>2</sub> / H <sub>2</sub> S / CO		65-2481RK-01	LEL (IR) / O <sub>2</sub> / H <sub>2</sub> S / CO	
	Note: Additional gas combinations and CSA versions available, please contact factory.					
<b>Approvals</b>	UL or CSA	UL		CSA NRTL		
<b>Warranty</b>	One year materials and workmanship					



## Beacon 410 Controller

- Digitally display all channels with gas name & concentration
- 3 programmable alarm levels per channel
- Up to 3 programmable alarm relays per channel
- Smart system provides industry leading stability of operation
- 4-20 mA analog & Modbus digital output standard
- Weather proof NEMA 4X enclosure
- Accepts RKI direct connect sensors (4-20 transmitter not required)

Specifications subject to change without notice.

Made in the USA



A9812



ISO 9001

Toll Free: (800) 754-5165 • Phone: (510) 441-5656  
Fax: (510) 441-5650 • www.rkiinstruments.com

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