



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, O₂, H₂S 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, H₂S, 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, H₂S, and CO available.

IR (infrared) sensor versions available for LEL detection.

Explosion Proof Tri-Sensor Head

	LEL	LEL Infrared		O ₂	CO	H ₂ S
		CH ₄	HC			
Sensor Only	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
Measuring Range	0-100% LEL	0-100% LEL		0-25% Vol.	0-300 ppm	0-100 ppm
Response Time	30 seconds to 90%	30 seconds to 90%		20 seconds to 90%	30 second to 90%	
Operating Environment						
Location	Indoor or outdoor. Explosion proof for Class I, Div. 1, Groups B, C, and D atmospheres.					
Temperature	-40 ~ 185° F	-4 ~ 122° F		-4 ~ 113° F		
Humidity	0 - 99% RH non condensing					
Housing						
Housing J-Box	Cast aluminum, explosion-proof, epoxy coated					
Sensor	Stainless steel		Stainless steel	Stainless steel		
Sensor						
Type	Catalytic	Infrared		Galvanic cell	Electrochemical	
Life Expectancy	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	
Ordering Info	Part Numbers	Description	Part Numbers	Description		
	65-2480RK-01	LEL catalytic / O ₂ / H ₂ S	65-2482RK-01	LEL (IR) / O ₂ / H ₂ S		
	65-2480RK-03	LEL catalytic / H ₂ S	65-2482RK-03	LEL (IR) / O ₂ / H ₂ S		
	65-2481RK	LEL catalytic / O ₂ / H ₂ S / CO	65-2481RK-01	LEL (IR) / O ₂ / H ₂ S / CO		
	Note: Additional gas combinations and CSA versions available, please contact factory.					
Approvals	UL or CSA	UL		CSA NRTL		
Warranty	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



INSTRUMENTS

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