


EXPLOSION PROOF

	LEL General Purpose	LEL H2 Specific	O2 Oxygen	H2S Hydrogen Sulphide	CO Carbon Monoxide	CH4 Methane	HC Hydrocarbons	CO2 Carbon Dioxide	
Part#	R65-2640RK	R65-2641RK	R65-2643RK-05	R65-2645RK-05	R65-2646RK-05	R65-2649RK-CH4 R65-2658RK-CH4	R65-2649RK-HC	R65-2660RK-02 R65-2660RK-03 R65-2660RK-05 R65-2660RK-10	
	R65-2640RK-05	R65-2641RK-05							
Sensors	Catalytic		Galvanic cell	Electrochemical		Infrared			
Measuring Ranges	0 - 100 % LEL		0 - 25.0% Vol.	0 - 100 ppm	0 - 300 ppm	0 - 100% LEL 0 - 100% Vol.	0 - 100% LEL	-02	0 - 5000 ppm
								-03 -05	0 - 5% Vol. 0 - 50% Vol.
								-10	0 - 100% Vol.
Resolution	1% LEL		0.1% Vol.	1 ppm		1% LEL / 1% Vol.		20 ppm / 0.1% Vol. / 1% Vol.	
Lower Detectable Limit (LDL)	2% of full scale		0.1% Vol.	2% of full scale					
Max Current Draw (24VDC)	160 mA with alarm 1 and alarm 2 active and all relays energized		125 mA with alarm 1 and alarm 2 active and all relays energized						
Response Time(T-90)	35 Seconds or less					30 Seconds or less			
Life Expectancy	2 to 3 years with normal service	3 to 5 years with normal service	2 to 3 years with normal service			5 years plus with normal service			
Accuracy (which ever is greater)	± 5% of reading or ± 2 % LEL		± 0.5% Vol. O2	± 5% of reading or ± 2 ppm H2S	± 5% of reading or ± 5 ppm CO	± 5% of reading or ± 2 % of full scale			
Weather Resistant	Patented water repellent sensor coating								
Alarms									
Alarm Settings	Two fully programmable alarm set points, increasing / decreasing, latching / self-resetting, on delays, off delays, normally energized or de-energized								
Alarm Indication	Visual LEDs. Alarm 1, Amber; Alarm 2, Red; Fail, Red								
Relays	5 amp form 'C' contacts for alarm 1, alarm 2, and fail								
Physical									
Dimensions	Height: 8.5" (215 mm), Width: 5.2" (132 mm), Depth: 4.5" (114 mm)								
Display	Alphanumeric OLED display. 8 characters per line; 2 lines for gas concentration readout, plus user-friendly calibration and setup								
Enclosure	Explosion proof for Class I, Div 1, Groups B, C, D.								
Enclosure Rating	NEMA 4X, explosion proof, watertight, cast aluminum with o-ring seal and epoxy powder coating								
Controls	Magnet used for calibration functions. Calibrates without opening the housing. Internal push-button controls also available for calibration and setup								
Operating Environment									
Operating Temperature	40°C to 75°C	-20°C to 45°C	-40°C to 40°C	-5°C to 40°C	-40°C to 50°C				
Relative Humidity	5 - 95% RH non-condensing								
Location	Indoor or outdoor. Explosion proof for Class I, Div. 1, Groups B, C, D.								
Operating Voltage	10 VDC - 30 VDC								
Outputs									
Analog	Linear 4-20 mA signal, into 1000 ohms impedance max (24DC), 0 - 500 ohms max (12VDC) corresponding to 0 - full scale								
Digital	Modbus RTU output standard, fully configurable, 2-wire RS-485, 1200 to 19.2k baud								
Approvals	R65-2610RK UL	R65-2611RK UL	C CSA US			C UL US			
	R65-2610RK-05 C CSA US	R65-2611RK-05 C CSA US							
Controllers	Compatible with all RKI Beacon controllers, as well as most DCS / PLC systems: Beacon 110, Beacon 200, Beacon 410, Beacon 800								
Warranty	One year material and workmanship								

NON EXPLOSION PROOF

	O2 Oxygen	H2S Hydrogen Sulfide	CO Carbon Monoxide	Toxics See Chart Below	CO2 Carbon Dioxide
Part#	R65-2666RK *R65-2644RK	R65-2662RK	R65-2663RK	See Chart Below	R65-2661RK-02 R65-2661RK-03 R65-2661RK-05 R65-2661RK-10
Sensors	Galvanic cell	Electrochemical			Infrared
Measuring Ranges	0-25% Vol.	0-100 ppm	0-300 ppm	See Chart Below	-02 0 - 5000 ppm -03 0 - 5% Vol. -05 0 - 50% Vol. -10 0 - 100% Vol.
Resolution	0.1% Vol.	1 ppm		See Chart Below	20 ppm / 0.1% Vol. / 1% Vol.
Lower Detectable Limit (LDL)	0.1% Vol.	2% of full scale			
Response Time (T-90)	35 Seconds or less			60 Seconds or less	30 Seconds or less
Max Current Draw (24VDC)	125 mA with alarm 1 and alarm 2 active and all relays energized				
Life Expectancy	2 to 3 years with normal service				5 years plus
Accuracy (which ever is greater)	± 0.5% Vol. O2	± 5% of reading or ± 2 ppm H2S	± 5% of reading or ± 5 ppm CO	± 10% of reading or ± 5% of full scale	± 5% of reading or ± 2% of full scale
Alarms					
Alarm Settings	Two fully programmable alarm set points, increasing / decreasing, latching / self-resetting, on delays, off delays, normally energized or de-energized				
Alarm Indication	Visual LEDs. Alarm 1=Amber; Alarm 2=Red; Fail=Red				
Relays	5 Amp form 'C' contacts for alarm 1, alarm 2, and fail				
Physical					
Dimensions	Height: (215 mm), Width: (132 mm), Depth: (114 mm)				
Display	Alphanumeric OLED display. 8 characters per line; 2 lines for gas concentration readout, plus user-friendly calibration and setup				
Sensor Rating	Non explosion proof construction, designed for Class I, Div. 2, Groups B, C, D (no certification)				
Housing J-Box	NEMA 4X, explosion proof, watertight, cast aluminum with o-ring seal and epoxy powder coating				
Controls	Magnet used for calibration functions. Calibrates without opening the housing. Internal push-button controls also available for calibration and setup				
Sensor	Aluminum / Plastic (non explosion proof)				
Operating Environment					
Operating Temperature	-20°C to 45°C	-40°C to 40°C	-5°C to 40°C	-10°C to 40°C	-40°C to 50°C
Relative Humidity	5 - 95% RH non-condensing				
Location	Indoor or outdoor				
Operating Voltage	10 VDC - 30 VDC				
Outputs					
Analog	Linear 4-20 mA signal, into 1000 ohms impedance max (24DC), 0 - 500 ohms max (12VDC) corresponding to 0 - full scale				
Digital	Modbus RTU output standard, fully configurable, 2-wire RS-485, 1200 to 19.2k baud				
Controllers	Compatible with all RKI Beacon controllers, as well as most DCS / PLC systems: Beacon 110, Beacon 200, Beacon 410, Beacon 800				
Warranty	One year materials and workmanship				

* Partial pressure sensor for helium applications. Consult factory for details.

	M2A Toxic Transmitter Sensor Ordering Information			
	Part Number With J-Box	Gas	Range	Resolution
	R65-2648RK-ASH3	Arsine (AsH3)	0 - 1.5 ppm	0.01 ppm
	R65-2648RK-NH3	Ammonia (NH3)	0 - 75.0 ppm	0.1 ppm
	R65-2648RK-PH3	Phosphine (PH3)	0 - 1.00 ppm	0.01 ppm
	R65-2648RK-HCN	Hydrogen Cyanide (HCN)	0 - 15.0 ppm	0.1 ppm
R65-2648RK-SO2	Sulfur Dioxide (SO2)	0 - 6.00 ppm	0.01 ppm	

AVAILABLE ACCESSORIES



AC power supply



Remote horns & lights



Air aspirator adaptors / panels



Calibration adaptors



Splash guards



Flow through adaptors



Dataloggers



Calibration kits

Direct Interface with Beacon 110/200/410/800 Controllers

M2A Wiring Matrix		
	Number of Wires to Controller	Maximum Distance to Controller
		14 AWG wire
M2A Transmitter		2,4000



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