



STAND ALONE TRANSMITTER

Gas Detection For Life

M2A Series



Features

- Operates with or without a controller
- Direct digital readout with OLED display
- Available gases include LEL and CO₂
- Infrared sensor for combustibles and CO₂
- 4-20 mA & digital Modbus outputs standard
- 2 fully programmable alarm relays & fail relay
- Non-intrusive calibration via magnetic wand
- Explosion proof construction
- Patented water repellent sensor cover
- User friendly setup, push buttons & LCD menus
- Long-life sensors (2 - 5 years typical for catalytic, 5 -10 years typical for IR)

Industry Applications

- Petrochemical plants
- Refineries
- Water & wastewater treatment plants
- Pulp & paper mills
- Manufacturing facilities
- Automotive
- Semiconductor plants
- Chemical plants

The RKI M2A™ is a state-of-the-art transmitter that can operate as an independent, stand-alone monitor or as part of an integrated system. The M2A connects with an analog or digital signal to virtually any controller, PLC, or DCS. Setup procedures are simplified with user friendly push buttons and LCD menus. It utilizes a magnetic wand technique for performing non-intrusive calibration. The M2A provides an automatic zero drift correction feature, which results in more stable readings and reduces the need for adjustments due to sensor aging.

The housing of the M2A does not need to be opened for zeroing or calibration, making it unnecessary to declassify the area for routine maintenance. It is designed so that a complete field calibration can be performed by one person. Sensor construction is rated Class I, Div. 1 groups B, C, D for flammables and CO₂. For CO₂, a general purpose (not explosion proof) construction is also available.

The transmitter provides a 4-20 mA output in addition to a Modbus digital output. It also has two levels of alarms with relays, plus a fail alarm with relay. A digital display of the gas concentration, as well as alarm and status lights, can be viewed through the front window.

The M2A represents the latest leading edge technology in sensor / transmitters today.

The "A" version of the M2 style instrument includes several improvements over the past design. This includes an OLED display for cold temperature operation (to -40 C or F), side access conduit opening for better leak protection, improved RFI/EMI resistance, and superior protection against power surges or spikes.

	LEL General Purpose	LEL H2 Specific	CH4 Methane	HC Hydrocarbons	CO2 Carbon Dioxide	
Part#	65-2640RK	65-2641RK	65-2619RK-CH4	65-2619RK-HC	65-2660RK-02	
	65-2640RK-05	65-2641RK-05	65-2628RK-CH4		65-2660RK-03 65-2660RK-05 65-2660RK-10	
Sensors	Catalytic		Infrared			
Measuring Ranges	0 - 100 % LEL		0 - 100% LEL 0 - 100% Vol.	0 - 100% LEL	-02 -03 -05 -10	0 - 5000 ppm 0 - 5% Vol. 0 - 50% Vol. 0 - 100% Vol.
Resolution	1% LEL		1% LEL / 1% Vol.		20 ppm / 0.1% Vol.	
Lower Detectable Limit (LDL)	2% of full scale					
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	5 years plus with normal service			
Accuracy (which ever is greater)	± 5% of reading or ± 2 % LEL		± 5% of reading or ± 2 % of full scale			
Weather Resistant	Patented water repellent sensor coating					
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					
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 Temperature	-40°F to 167°F, -40°C to 75°C		-4°F to 122°F, -20°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	19 VDC - 30 VDC, 12 VDC versions available					
Analog	4-20 mA signal, into 500 ohms impedance max, corresponding to 0 - full scale					
Digital	Modbus RTU output standard, fully configurable, 2-wire RS-485, 1200 to 19.2k baud					
Approvals	65-2640RK-05 UL	65-2641RK UL	(all IR)			
	65-2640RK-05 C CSA US	65-2641RK-05 C CSA US	C UL US			
Controllers	Compatible with all RKI Beacon controllers, as well as most DCS / PLC systems: Beacon 110, Beacon 200, Beacon 410 and Beacon 800					
Warranty	One year material and workmanship					

* Specifications subject to change without notice.

Made in the USA



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ISO 9001

Authorized Distributor:

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