



STAND ALONE TRANSMITTER

Gas Detection For Life

M2 Series



Features

- Non-intrusive calibration via magnetic wand
- 4-20 mA & digital Modbus outputs standard
- Direct digital readout on backlit LCD
- Operates independent of a controller
- 2 fully programmable alarm relays & fail relay
- Explosion proof housing
- Available for LEL, H₂S, CO, and O₂
- H₂ specific version available
- Patented water repellent sensor coating
- User friendly setup, push buttons & LCD menus
- Long-life sensors (2 + years typical)

Industry Applications

- Petrochemical plants
- Refineries
- Offshore drilling platforms
- Water & wastewater treatment plants
- Pulp & paper mills
- Gas, telephone, & electric utilities
- Parking garages
- Manufacturing facilities
- Steel
- Automotive
- HVAC

The RKI M2™ is a state-of-the-art transmitter that can operate as an independent, stand-alone system or as part of a system connected with an analog or digital signal to virtually any controller, PLC, or DCS. The M2 series detects LEL combustibles, oxygen, hydrogen sulfide, or carbon monoxide. It utilizes a magnetic wand technique for performing non-intrusive calibration. The M2 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 M2 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. The stainless steel flame arrestor housing that covers the sensor (LEL, H₂S, or CO) is water repellent with a special patented water resistant coating.

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. A digital display of the gas concentration, as well as alarm and status lights can be viewed through the front window.

The M2 represents the latest leading edge technology in sensor / transmitters today.

M2 Series

Sensors	LEL	O2	H2S	CO
Types	Catalytic combustion	Electrochemical-Galv.	Electrochemical	Electrochemical
Measuring Ranges	0 - 100 % LEL	0 - 25.0 % Vol	0 - 100 ppm	0 - 300 ppm
Weather Resistant	Patented water repellent sensor coating		Patented water repellent sensor coating	
Outputs				
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			
Alarms				
Alarm Settings	Fully programmable alarm setpoints, increasing / decreasing, latching / self-resetting, on delays, off delays, normally energized or de-energized, programmable deadband, programmable smoothing filter			
Alarm Indication	Visual LED's. 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 display with backlighting. 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 4, 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	-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, and D.			
Operating Voltage	19 VDC - 30 VDC			
Approvals	LEL sensors: UL standard, CSA optional H2S and CO sensors: CSA optional			
Warranty	One year			

* Specifications subject to change without notice.

Made in the USA



A9812



ISO 9001:2000

Authorized Distributor:

33248 Central Avenue, Union City, CA 94587
 Toll Free: (800) 754-5165 • Phone: (510) 441-5656 • Fax: (510) 441-5650
 mail4rki@rkiinstruments.com • www.rkiinstruments.com