

MRLDS-450 Gas Detector

For Safety Compliance in Freezers, Cold Rooms and Industrial Cold Storage

Emerson's MRLDS-450 (modular refrigerant leak detection system) makes compliance with refrigeration safety codes simple and easy, saving time and money on equipment and installation. Users can commission and maintain their gas detection system without the need for specialty training tools. Pre-calibrated sensor modules simplify maintenance, takes minutes to exchange and do not require the use of calibration gas. The MRLDS-450 sensors can trigger additional audio-visual alarms and act as a standalone gas detection system, or can be easily integrated into an E2 or Site Supervisor via Modbus RTU.



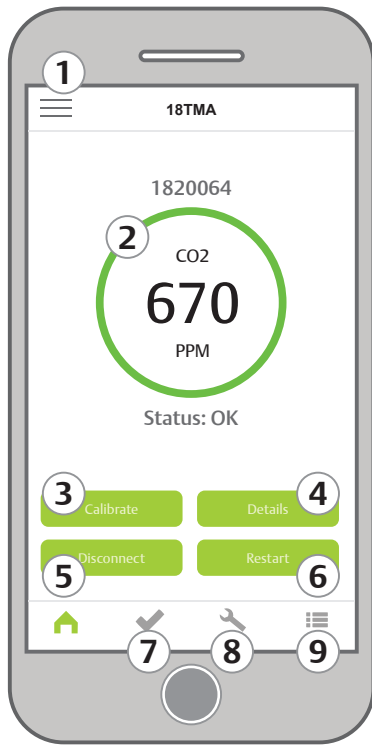
Features	Benefits
BMS Fully Integrated & Mobile App Interface	Quick, easy and intuitive commissioning, configuration and maintenance requires no special training. No tools required to set alarm levels and behavior.
Pre-calibrated Sensors	Fast and easy sensor maintenance. Eliminates need for calibration gas.
Temperature-Compensated Measurement	Mitigates false alarms and optimizes accuracy in refrigeration applications.
Low Temperature Performance	Suitable for use in cold rooms and freezers down to -40 F/C
Audio & Visual Alarms	On-board alarm notification supports compliance with ASHRAE 15/EN 378 and 3 relays available for alarm and fault events to active horn/strobes and ventilation

Mobile Application Interface

The use of the MRLDS 400 Series smartphone application, allows users to interface with the gas detector directly and aid in troubleshooting and calibration quickly and easily.



App now available in Google Play Store and Apple App Store



#	Description
1	Main Menu (App Settings)
2	Status (Gas Concentration)
3	Calibrate (Calibration / Bump Test)
4	Details (Instrument Information)
5	Disconnect Bluetooth®
6	Restart Connected Device
7	Test Mode (LED/Buzzer/Relays/Analog Output)
8	Device Configuration
9	Logs

Technical Specifications

Specification	Description
Size (HxWxD)	6.5" x 6.5" x 3.4" (165x165x87mm)
Weight	1.05 lbs (480g)
Indicators	Multi-color Status LED
	Internal Alarm Buzzer: 72dB @ 3.9" (10cm)
Alarm Delay	Configurable (1-15 minutes)
Inputs	Tactile Switches (x2), Magnetic Switches (x2)
Outputs	Analog Output: 1 to 5V (default), 0 to 5V, 0 to 10V, 2 to 10V or 4 to 20mA
Bluetooth®	Bluetooth® Low Energy, BLE 4.2
Modbus	Baud Rate: 9600, 19200 (default)
	Connection: RS48 terminal block
Power Supply	19.5 to 28.5 VDC or 24 VAC \pm 20%; 4W
Enclosure	ABS IP66
Temperature	Semiconductor (SC): -40°F to 122°F (-40°C to 50°C)
	Infrared (IR): -40°F to 122°F (-40°C to 50°C)
Humidity	5 to 90% RH, non-condensing
Pressure	23.6 to 32.5" Hg (800 to 1,100 mbar)
Elevation	0 to 6,560' (3,000 m) altitude
Approvals	CE, UL / CSA / IEC EN 61010-1

Order Information

Part #	Description	Sensor Type
809-1040	MRLDS-450, CO2 0-5,000ppm	IR
809-1041	MRLDS-450, CO2 0-10,000ppm	IR
809-1047	MRLDS-450, R404A 0-1,000ppm	SC
809-1048	MRLDS-450, R407A 0-1,000ppm	SC
809-1049	MRLDS-450, R410A 0-1,000ppm	SC
809-1050	MRLDS-450, R22 0-1,000ppm	SC
809-1056	MRLDS-450, R448A 0-1,000ppm	SC
809-1058	MRLDS-450, R513A 0-1,000ppm	SC
809-1066	MRLDS-450, R422D 0-1,000ppm	SC
809-1190	MRLDS-450 Calibration Adapter	

*Additional gases are available upon request