

GRM2 Refrigerant Detector

A Multi-Channel Gas Detection Monitor



DESCRIPTION

The GRM2 is a multi-channel gas detection monitor utilizing a unique infrared absorption technology. Monitors are available in 1, 4, 8, 12 and 16 channel configurations with a number of output options.

Uses

- Monitoring and response to leakage from various gases including: CFC, HCFC, HFC, HC, HFO, CO₂ and others on request.
- Systems employed in refrigeration, HVAC, process and military environments.

Features

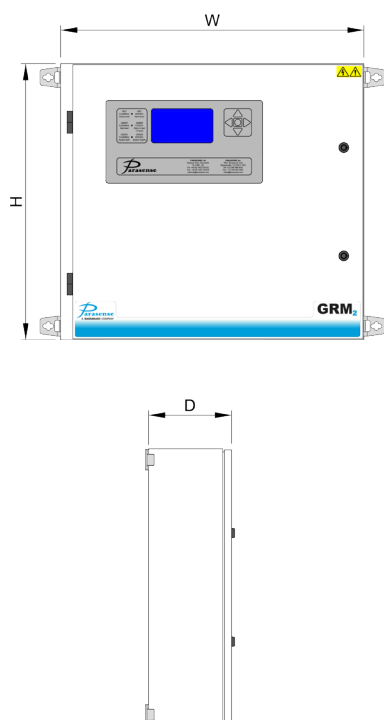
- Draws a sample of air through remote tubing and analyses for content of target gas and displays the results as PPM.
- Continuous logging of samples and response to excursions above configurable alarm thresholds.
- 1 sampling pump and alarm per channel for enhanced reliability and longevity.

Product Extensions

- Remote shut off using cluster outputs.
- Remote annunciation.
- Automated alarm emails and KPI's (Key Performance Indicator) using the Parasense Information Centre website.
- Cluster I/O configurations available

Certifications

- EN61010-1:2010
- UL61010-1
- CSA C22.2 61010-1
- MET Listing E112074



Product Dimensions

Specification	Description
MONITOR TYPE	GRM2-104D2-xxx
HEIGHT	19.7" (500mm)
WIDTH	15.8" (550mm)
DEPTH	5.9" (150mm)
WEIGHT	33.3lb (22kg)

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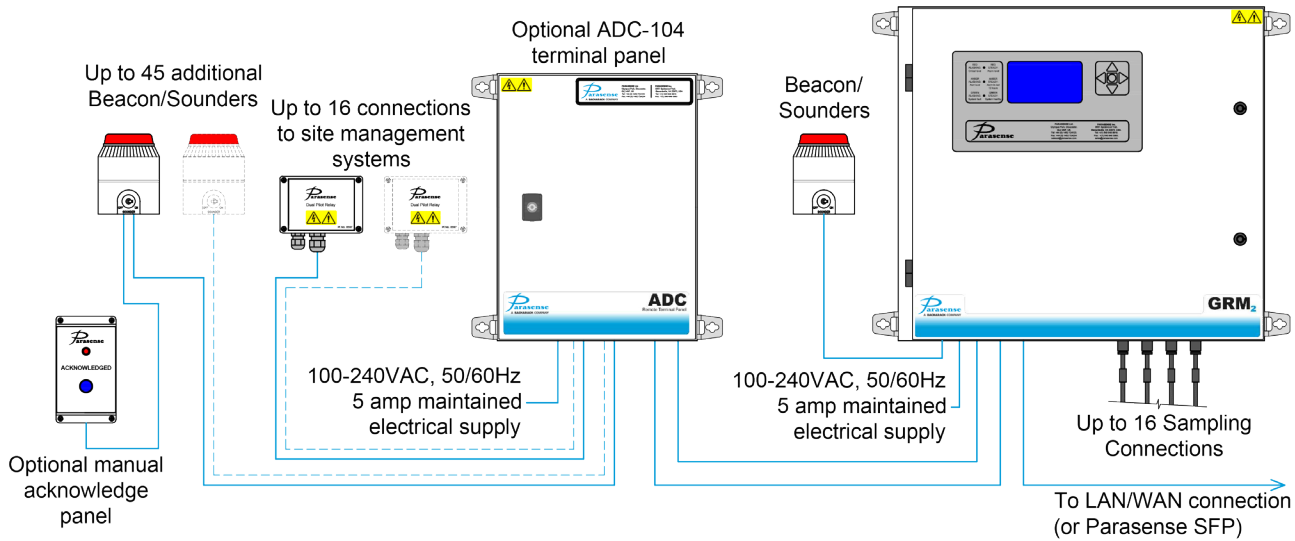


Technical Specification

Specifications	Description
ETHERNET	• 10 Base-T RJ45 socket
USB	• USB2.0, Type B socket
CONFIGURABLE RELAYS X 16	• Volt free, change-over and configurable • Fault and alarm indication • Max switching voltage: 24V AC/DC • Max switching current: 5A AC/DC, resistive
2 PILOT RELAYS	• Volt free, change-over and configurable • Max switching voltage: 240V AC/DC • Max switching current: 5A AC/DC, resistive
DISPLAY & OPERATOR CONTROLS OPTIONS	• Traffic lights, LCD status display & navigation keypad
CLUSTER NETWORKS	• RS485 communication • Network power: 24V DC max 650mA • Baud rate: 115kbps • Total number of I/O clusters dependent on application
SENSOR, CFC, HCFC, HFC	• Styx infrared absorption sensor • 24V DC plus serial coms • Resolution: 1ppm • Accuracy: better than 15% (species dependant)

Specifications	Description
SAMPLE PUMPS	• 24V DC, 360mA
MAXIMUM NUMBER OF SAMPLE PUMPS	• 16
MAXIMUM LENGTH OF SAMPLE PIPE	• 500ft (150m)
OPERATING CONDITIONS	• Operating temperature: 15°F (-9°C) to 110°F (43°C) • Storage temperature: -10°F (-23°C) to 150°F (65°C) • Relative Humidity: 0 to 95% RH (non-condensing)
POWER REQUIREMENTS	• 100V to 240V, 100W, 50/60Hz or • 240V to 280V, 100W, 50/60Hz
OVERCURRENT PROTECTION	• 6A DP MCB
MAINS FILTER	• Overvoltage Protection
ENCLOSURE RATING	• NEMA 12 • IP54

GRM2 Typical Application



Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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