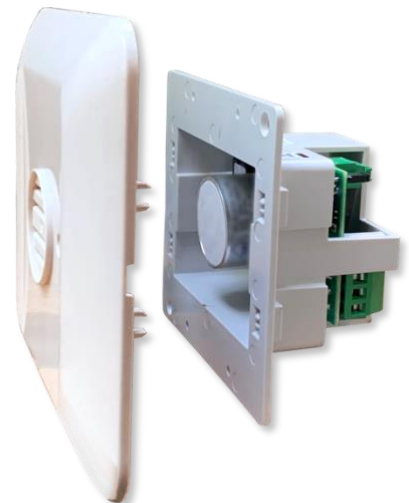


## RM7000 VRF Dual Beam Infrared Refrigerant Leak Detector For Indoor Spaces

### Key Features

- Specifically designed for use in detecting VRF system refrigerant leaks of R410a, R407a/c and other refrigerants in occupied spaces.
- Long life sensor technology (10+ years), featuring a dual-channel, patented, NDIR infrared sensor that is self-calibrating and maintenance free.
- Built in, continuously operating sensor diagnostics that can immediately identify transmitter malfunctions and sensor end-of-life (not possible with most gas sensors).
- Ability to do a complete functional test of the device in 5 seconds using a strategically placed magnet.
- Low profile enclosure designed to mount in a standard two-gang electrical box with minimal projection into the room to prevent occupant damage to sensor. White faceplate is easily painted to match room decor. Available without AirTest label.
- Modbus RTU, RS485 communication indicates local gas concentration. Two alarm relays (SPDT) activates at 1000 ppm (with 76dB buzzer) and 1800 ppm audible buzzer (76 dB).
- Incorporates unobtrusive LED status indication: Green - Operating, Amber - >1,000 ppm, Red >1,800 ppm.
- Version for 24VDC, 24VAC and 120VAC operation.
- Measurement range of 0-5,000 ppm, with accuracy of  $\pm 250$  ppm for levels below 2,500 ppm.
- Fast response. Detects 90% of current reading in less than 30 seconds. Minimal time necessary for bump tests or calibration checks if required.
- Lowest lifetime total cost over 10+ year sensor operating life.
- No maintenance required over sensor life.
- 5-year product warranty.
- Configured to specifically measure the refrigerant gas targeted.

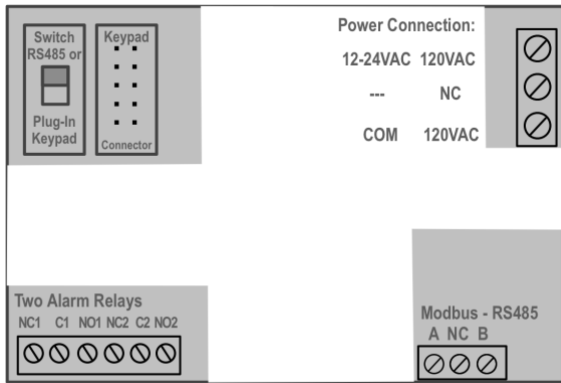


### Typical VRF Applications:

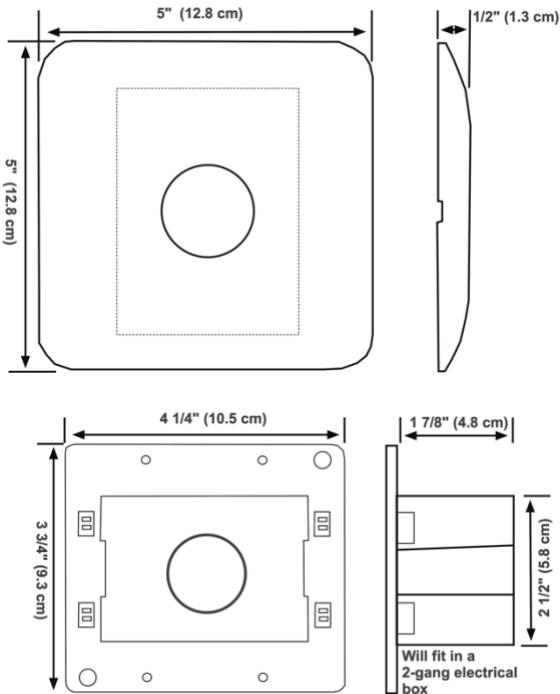
Variable Refrigerant Flow (VRF) is a relatively new approach in building heating and cooling. Rather than circulating water through a building for heating and cooling, a refrigerant is circulated. The result is a significant reduction in energy costs. Because the refrigerants used are toxic it is important to install leak detectors in all occupied spaces that have VRF systems or lines. Typical application include:

- Hotels
- Schools
- Senior Living
- Hospitality
- Restaurants
- Hospitals
- Universities
- Multi Family
- Historic Buildings
- Retail

### RM7000 Wiring



### Dimensions



### Specifications

#### Sensor

**Type:** Dual Beam, Non-Dispersive Infrared Sensor (NDIR)  
**Gas Detected:** R410a, R407a/c (or specify)  
**Measurement Range:** 0-5,000 ppm  
**Accuracy:** ± 5% full-scale range under 50% full-scale, ± 7% full-scale range above 50% of full-scale.  
**Repeatability:** 3% of full-scale range.  
**Response Time:** T90 <30 seconds  
**Long Term Stability:** ±3% of full-scale range per year.  
**Estimated Operating Life:** 10 Years (MTBF)  
**Calibration:** Dual Beam, self-calibrating.  
**End-of-Life Detection:** End of life can be detected and will activate alarm.  
**Operating Temperature Range:** -4 to 140F (-10 to 50°C)  
**Operating Humidity Range:** 0-95% non-condensing  
**Warm Up:** 1 hour for full specification performance

#### Power

**RM7000-A:** 24 VAC, **RM7000-B:** 24VDC, **RM7000-C:** 90-230 VAC

#### Transmitter

**Enclosure:** Flush mount cover with transmitter recessed in a 2-gang electrical box. IP40 Rating.

**Communication:** Modbus RTU, RS485

**Visual Interface:** LED lights: flashing green - warm up, green - operating, amber - over 1,000 ppm, red - over 1,800 ppm.

**Alarm Relay (SPDT):** Relay 1: 1000 ppm, Relay 2, 1800 ppm. (1A @ 120 VAC).

**Audible Indicator:** 76 dB buzzer (1,000 ppm)

**Functional Test:** Placing a magnet in a strategic location on the cover will initiate a self-test.

#### Portable Interface (Sold Separately)

**Adjustment:** Calibration, output range, adjust relay and alarm levels, current reading.



#### Approvals

- CE
- REACH/RoHS Compliant

#### Indicate Refrigerant to be Measured with Order

Specifications Subject to Change Without Notice

**AirTest™ Technologies Inc.** specializes in the application of cost effective, state-of-the-art air monitoring technology to ensure the comfort, security, health and energy efficiency of buildings.

