

**REFRIGERATOR / FREEZER GUARD™ MODEL VM500-5**

- ◆ You need to safeguard the temperature sensitive contents of your refrigerators and freezers.
- ◆ You must be notified immediately, day or night if a refrigerator or freezer malfunctions.
- ◆ **The Refrigerator/Freezer Guard is the perfect solution!**
- ◆ The Refrigerator/Freezer Guard monitors temperature, doors, and power.
- ◆ The Refrigerator/Freezer Guard will call and alert you if the temperature goes out of limits, a door is left open, or the power fails.
- ◆ The Refrigerator/Freezer Guard utilizes a high quality natural sounding voice to report problems with your refrigerators or freezers.

**Features**

- Monitor up to eight refrigerators and freezers down to  $-148^{\circ}\text{F}$  ( $-100^{\circ}\text{C}$ ).
- Program high and low temperature limits and an out of limits time delay for each sensor.
- The Door Open Inputs prevents accidental temperature changes by generating an alarm if a refrigerator or freezer door has been left open.
- Program the Refrigerator/Freezer Guard easily and conveniently over the telephone following voice instructions. Programming is password protected.
- The buzzer and alarm relay output are used to alert onsite staff when a problem occurs so they can take immediate action.
- View real time refrigerator/freezer status on the LCD display.
- The four hour rechargeable battery backup allows the temperature to be monitored during a power loss.
- No need to install additional phone lines, the Refrigerator/Freezer Guard can share the phone line with faxes and other devices.
- Maintain temperature records in electronic format with the optional Data Collection Package.

**The Refrigerator/Freezer Guard makes solving problems quick and easy:**

- The programmable Callout Time Delay gives local personnel time to react before alarm notification phone calls are made.
- Receive a phone call or pager message if the temperature goes out of limits, a door is left open or if there is a power failure.
- The recordable Unit Identification Message quickly identifies the location of the Refrigerator/Freezer Guard.
- The recordable Sensor Identification Message allows personnel to easily locate the problem refrigerator or freezer.
- The Alarm Reminder Time Delay repeats the alarm notification phone calls if a problem still exists after this programmable time has expired.

### User Programmable Features

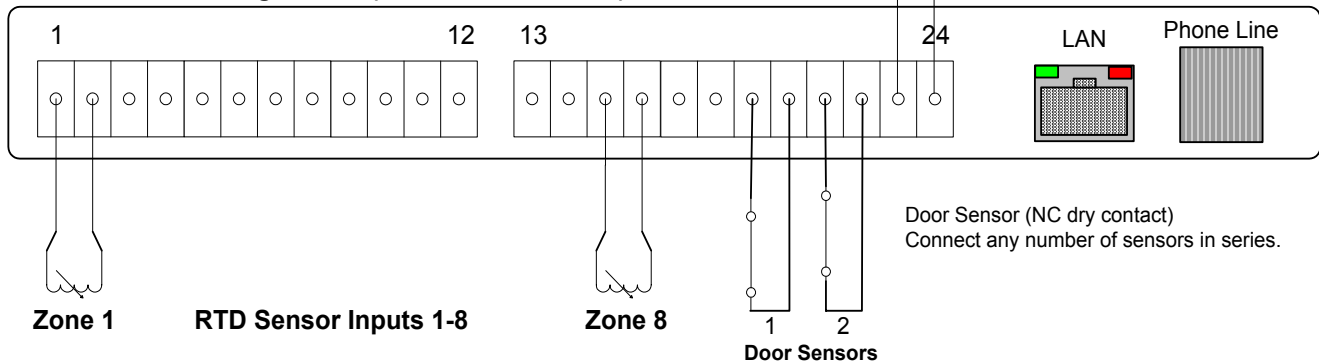
Number of programmable emergency phone numbers: 4  
 Number of digits for each phone number: 20  
 Number of digits for the Local ID which is displayed when calling a pager: 20  
 Recording time for the Local Identification message: 5 seconds  
 Programmable range of incoming rings before the Refrigerator/Freezer Guard answers: 1 to 20  
 Number of digits in programmable PIN: 4  
 All Programmable time delays: 0 to 999 minutes

### Specifications

**Temperature Measuring Range:** -148°F to 96°F, -100°C to 35°C (1° resolution)  
**Temperature Sensor Type:** RTD: 2 wire, 1000 ohm, Platinum, .00385 TCR, bullet style  
**Door Sensor Inputs:** 2 @ 12VDC 10ma source  
**Outputs:**  
     Relay: 30VDC 1A contacts  
     Alarm Buzzer: 85 dB  
**Power Requirements:** 120VAC at 50/60 Hz wall mount transformer (included)  
**Electrical Connections:** 2 Pluggable 12 position terminal blocks  
**Material:** Flame retardant ABS plastic, 94-5VA  
**Dimensions:** Enclosure: 8.790" x 4.620" x 2.255"  
     Mounting Flange Holes: 8.250" x 3.500"  
**Ambient Operating Conditions:** 32°F to 125°F  
**Shipping Weight:** 2 lbs  
**Agency Compliance:** FCC Approved and Registered, power supply is UL listed

### Wiring Diagram (side view of enclosure)

Terminal Block Designations (LAN on DCP-E model only)



#### Temperature Sensors (RTD Sensors)

Temperature sensors are located in the refrigerator, freezer, or cooler and connected to the Refrigerator/Freezer Guard via a two conductor cable. Locate the sensors to yield an average temperature. Avoid placing sensors in air streams. The wiring can be extended as required. For distances under 350 feet using 22 AWG two conductor cable or CAT5e cable is recommended. For distances over 350 feet, a larger wire is recommended. Please contact sales for advice on long cable runs.

#### Door Sensor Inputs

Connect normally closed magnetic or limit switches to refrigerator/freezer doors. Any number of magnetic switches can be connected in series. The inputs source 12vdc at 10ma (see the manual for details on programming this input).

## REFRIGERATOR / FREEZER GUARD WITH THE ETHERNET DATA COLLECTION PACKAGE

- ◆ You need to receive alarm emails to notify you if your Temperature Guard detects a problem.
- ◆ You need to maintain a log file of the data collected from your Temperature Guard.
- ◆ Add the DCP-E option to Refrigerator/Freezer Guard to form a complete monitoring and alarming solution. The Refrigerator/Freezer Guard will call and send emails detailing the problem so you can quickly take corrective actions to avoid an expensive loss of property.
- ◆ The Data Capture Program automatically collects and maintains a log of the data obtained from your Temperature Guard.

## Features

- View real time data.
- View historical data.
- Automatically sends alarm emails to key personnel that specifies the exact location and cause of the problem.
- Maintains secure data log files for all data.
- Easily create and print graphs over specified time periods for any data.
- Remotely check the real time status with a web browser.

## Specifications

<b>LAN:</b>	Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
<b>Transport Protocol:</b>	TCP/IP, UDP
<b>Connector</b>	RJ45
<b>Regulatory Compliance:</b>	FCC Class B compliant — EMC compliant Class B limits of EN 55022:1998 EN55022: 1998 + A1: 2000 + A2: 2003 Class B EN61000-3-2: 2000 Class A EN61000-3-3: 1995 + A1: 2001 EN55024: 1998 + A1: 2001 + A2: 2003 FCC CFR 47, PART 15 SUBPART B CLASS B ICES-003 ISSUE 4: February 2004 CLASS B AS/NZS CISPR 22:2002 CLASS B CISPR22: 1997 + A1: 2000
<b>LED Indicators:</b>	10Base-T connection 100Base-TX connection Link & activity indicator - Full/half duplex
<b>Ambient Operating Conditions:</b>	32°F to 125°F

### A Networked Temperature Guard with DCP-E

