

TIP TEMPerature Products

1-800-TIP-TEMP

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MODEL VM605E

REFRIGERATOR / FREEZER GUARD™

- ◆ 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.



Features

- Monitor up to eight refrigerators and freezers down to -148°F (-100°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, or with our Data Capture software. 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 twelve 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 VM605E.

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.

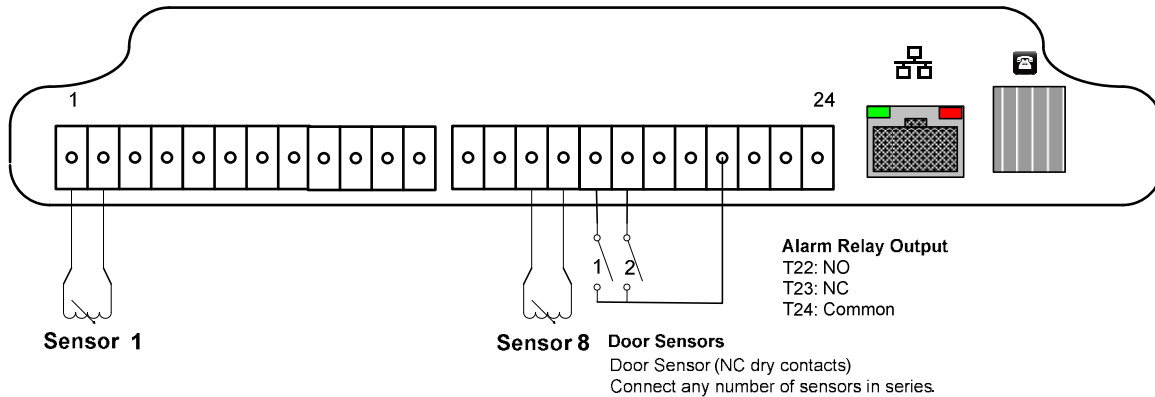
User Programmable Features

Number of programmable emergency phone numbers: 8
 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: 8 seconds
 Programmable range of incoming rings before the Refrigerator/Freezer Guard answers: 1 to 20
 Number of digits in programmable PIN: 4
 Programmable time delays: 0 to 900 minutes

Specifications

Calibrated Measuring Range:	-148°F to 69°F, -100°C to 21°C (0.1° resolution)
Temperature Sensor Type:	RTD: 2 wire, 1000 ohm, Platinum, .00385 TCR, bullet style
Door Sensor Inputs:	2 @ 12VDC 10ma source
Outputs:	
Relay:	SPDT 24VDC 1A contacts
Alarm Buzzer:	90 dB
Power Requirements:	120VAC at 50/60 Hz wall mount transformer (included)
Electrical Connections:	2 Pluggable 12 position terminal blocks
Enclosure Material:	Flame retardant ABS plastic, 94-5VA
Dimensions:	Enclosure: 5.0" x 7.5" x 1.75" (W x L x H) Keyhole Mounting Holes: 3.937" between holes
Ambient Operating Conditions:	32°F to 125°F
Shipping Weight:	3 lbs
Agency Compliance:	FCC Approved and Registered, power supply is UL listed

Wiring Diagram (side view of enclosure)



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 250 feet using 22 AWG two conductor cable or CAT5e cable is recommended. For distances over 250 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).

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- ◆ You need to receive alarm emails to notify you if your Refrigerator/Freezer Guard detects a problem.
- ◆ You need to maintain a log file of the data collected from your Refrigerator/Freezer Guard.
- ◆ With the VM605E Refrigerator/Freezer Guard and a PC you can set up a complete monitoring and alarming solution. A PC running our Data Capture software can send emails and sms messages detailing the problem so you can quickly take corrective actions to avoid an expensive loss of property.
- ◆ The Data Capture software automatically collects and maintains a log of the data obtained from your Refrigerator/Freezer Guard.

Features

- View real time data.
- View historical data.
- Automatically sends alarm emails (via the computer) 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.
- Program limits remotely.

Specifications

LAN:	Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
Transport Protocol:	TCP/IP, UDP
Connector	RJ45
EMI Compliance:	Radiated & conducted emissions - complies with Class B limits of EN 55022:1998 Direct & Indirect ESD - complies with EN55024:1998 RF Electromagnetic Field Immunity - complies with EN55024:1998 Electrical Fast Transient/Burst Immunity - complies with EN55024:1998 Power Frequency Magnetic Field Immunity - complies with EN55024:1998 RF Common Mode Conducted Susceptibility - complies with EN55024:1998
LED Indicators:	10Base-T connection 100Base-TX connection Link & activity indicator - Full/half duplex
Ambient Operating Conditions:	32°F to 125°F