MICROTECHNOLOGIES INCORPORATED

DATA SHEET

Refrigerator/Freezer netGuard - MODEL M305

- **Wireless or Wired Ethernet Communication**
- You need to maintain a log of the temperature in your refrigerator and freezer located down the hall or around the world.
- You need to receive alarm email if the temperature goes out of the limits you programmed.
- **The Molly305 is the perfect solution!**
- Our free **Data Capture Program** automatically collects and maintains a log of the data obtained from all Refrigerator/Freezer netGuard's on your network making data collection for hundreds of sites a breeze.

Hardware Features

- Monitor two temperature sensors and two magnetic door sensors.
- Alarm relay that can be connected to existing security systems or signaling equipment.
- Buzzer to indicate alarm conditions to onsite staff.
- **Internal data logging.** Store up to two weeks of date/time stamped temperature readings.
- Rechargeable battery backup allows the internal data logging to continue for up to four days in the event of a power outage. Data is never lost even after the batteries discharge.
- Remotely check the real time status with a web browser.
- LCD displays current temperature status, door status, alarm status, time and date.
- Pushbutton allow local staff to cancel alarms and take immediate action.

Molly305 and the Data Capture Program Features

- Automatically sends **alarm emails** to key personnel that specifies the cause of the problem.
- Program limits for each sensor with upper and lower thresholds and time delays.
- View real time and historical data.
- Maintains secure data log files for all data.
- Easily create and print graphs over specified time periods for any data.
- Easy field calibration / temperature correction.

Device Specifications

Inputs:	
Temperature Inputs:	2
Measuring Range:	-200°C to +200°C
Measurement Resolution:	0.1°
Measurement Accuracy:	±1.0°C from -100°C to +35°C
Temperature Sensor Type:	RTD: 2 wire (1000 ohm, Platinum, .00385 TCR)
Sensor Accuracy:	±0.3°C @ 0°C, ±0.8°C from –100°C to +35°C
Door Inputs:	2
Door Input Type:	5VDC 10ma source
Outputs:	
Relay:	NO and NC Contact
Alarm Buzzer:	85 dB
Power Requirements:	120VAC at 50/60 Hz wall mount transformer (included)
Electrical Connections:	Pluggable,12 position terminal block

Network Interface Specifications

Network Interface:	802.11b/g, Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
Transport Protocol:	TCP/IP, UDP, SNMP (read only), Telnet
Ethernet Connector:	1**,** RJ45
Wireless Antenna :	1, Omni-directional Antenna
Wireless Security:	Password protection, 64/128 bit WEP, WPA, 802.11i(PSK)
Wireless Distance:	Up to 328 feet indoors
Frequency Range:	2.400 – 2.484 GHz
Data Rates:	1,2,5.5,11,6,9,12,18,24,36,48,54 Mbps
Output Power:	14 +2.0/- 1.5 dBm 1, 2, 5.5, 11 Mbps 12 +/- 1.5 dBm 6, 9, > 12 Mbps
Number of Selectable Subchannels:	US 1-11 CA 1-11 JP 1-14 FR 10-13 SP 10-11 OT 1-13 (OT=Others)
Modulation:	DSSS,DBPSK,DQPSK,CCK, OFDM,16QAM, 64QAM
Maximum Receive Level:	-10 dBm (with PER < 8%)
Receiver Sensitivity:	-69 dBm for 54 Mbps -88 dBm for 11 Mbps -85 dBm for 6 Mbps -91 dBm for 1.0 Mbps

Regulatory Compliance:

Safety:

UL 60950-1
CAN/CSA-C22.2 No. 60950-1-03
EN 60950-1:2001, Low Voltage Directive (73/23/EEC)

EMC & Radio:

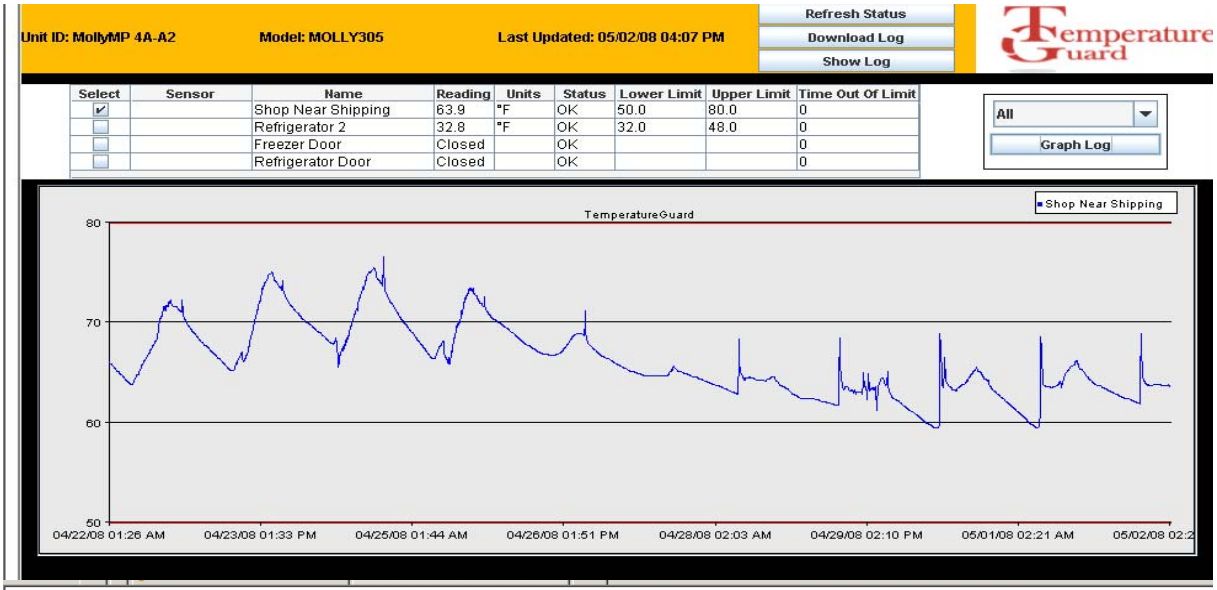
CFR Title 47 FCC Part 15, Subpart B and C, Class B
FCC Module Approval
FCC Identifier: R68MTCHDRCT
Industry Canada ICES-003 Issue 4 (2004), Class B
Industry Canada RSS-Gen Issue 1 (2005)
Industry Canada RSS-210 Issue 6 (2005)
Industry Canada Module Approval IC: 3867A-MTCHDRCT
EN 301 489-1 v1.6.1 (2006-07), EMC Directive (1999/5/EC)
EN 301 489-17 v.1.2.1 (2002-08), EMC Directive (1999/5/EC)
EN 300 328 v1.7.1 (2006-10), R&TTE Directive (1999/5/EC)
Australia / New Zealand AS/NZS CISPR 22 (2006), Class B
Australia / New Zealand AS/NZS 4771 (2000 + A1:2003)
EN55022: 1998 + A1: 2000 + A2: 2003
EN55024: 1998 + A1: 2001 + A2: 2003
EN61000-3-2: 2000 + A2: 2005
EN61000-3-3: 1995 + A1: 2001

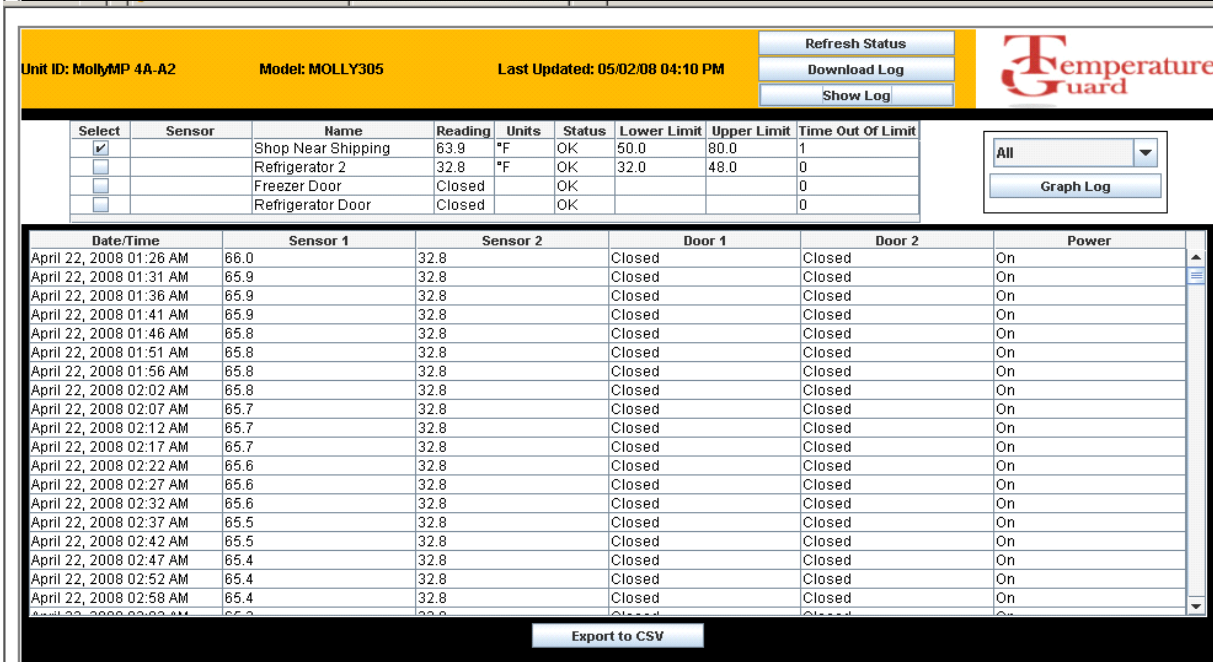
Security

IEEE 802.11i - PSK with AES-CCMP Encryption
WPA - PSK
TKIP Encryption
64/128-bit WEP

Ambient Operating Conditions:	32ºF to 125ºF

Download current temperature status and the internal log file and generate a graph with any browser





Wiring Diagram **(side view of enclosure)**