Temperature Guard DCP Manual
Data Capture Program – Ethernet Connectivity

Installation and Users Guide
Version 4.0.4

General Description

The Data Capture Program downloads, organizes, stores, and clearly displays the data collected by any number of DCP-E equipped Temperature Guard monitors located anywhere in the world.

DCP will send email alarm messages whenever a sensor goes out of programmed limits.

DCP stores each sensor's data in individual files that can be analyzed and graphed at a later time.

Software Requirements

Windows 98/ME/XP

Installation

Double click on setup.exe
Follow the directions on the screen.

Configuring Data Capture

After installing Data Capture, you must configure network and email parameters. From the main screen click on the **Setup** menu item and select **Configure Data Capture**, the Data Capture Configuration screen will be displayed.

Network Tab

The first parameter on this tab is the "Network Communication time out". This value is the amount of time the software will wait for a response from the Server. Valid times are from two (2) to nine (9) seconds. If you are having difficulty in establishing communications with a Temperature Guard Server, try increasing this parameter. This parameter directly affects the response time of the program.

Enter the maximum amount of time to wait to for a response from a Temperature Guard Server, in seconds. The default is 2 seconds which should be adequate for most networks.

The second parameter is the "Number of times to try to communicate with a Temperature Guard Server".

Enter the number of times to attempt to establish communications with a Temperature Guard Server before generating an alarm and sending out an email alert message stating that the Server is off-line. The default value is one time.

The third parameter is the "Update Rate". This parameter, programmed in seconds, specifies how often Data Capture collects data from Temperature Guard servers. The fastest update rate is five seconds.

Alarm Email Setup

This tab has all of the parameters to configure the email account information. These values **must** be entered to enable any alarm emails. You can also enter an email address that is used to notify someone if a Temperature Guard Server fails to respond.

1. Enter the SMTP mail server parameters as necessary.
2. Enter a return email address.
3. Enter an email address to send an alarm if a Server does not respond.
4. Click on the Test this email address button. DCP will attempt to send an email to this address. DCP will display a message indicating whether it was successful or not. If necessary enter a user name and password for your mail server.
5. Click on the **Advanced** button to access additional email server options. We recommend that you contact your network administrator for assistance with these settings.

Organization Info

The information you enter here is included in all alarm emails sent by the DCP.

1. Click on the Apply button to save this information.
2. Click on the Close button to return to the main screen.

Trending

1. To enable data trending, click on the **Setup** menu item.
2. Click on the **Setup Data** Capture menu item.
3. Click on the **Trending** tab.
4. Check the Enable data trending check box.

To view historical temperature data, click on the Trending tab. The trending chart updates at the programmed "Update Rate". The chart is capable of displaying six hours of data at a programmed "Update Rate" of one minute.

Setting up a Data Collection System

When setting up a DCP system, the first thing that must be done is to obtain a static IP address and then set the Temperature Guard Server to this address. To set the IP address, run the **IP Setup Program** found in the Temperature Guard program group under the Start menu. Instructions for the IP Setup Program can be found in this program group.

Once the Temperature Guard Server has its static IP address, the next step is to add this unit to the list of Temperature Guard Servers that the DCP will collect data from.

Adding a Temperature Guard Server to the DCP system

1. From the main screen, click on the **Setup** menu item and select **Temperature Guard Servers and Sensors**.
2. Click on the "**Add New Server**" menu item. This will bring up a screen to enter the server parameters.
3. Type in a unique name for the Server. The maximum length of this name is 20 characters.
4. Type in the IP address for the Server.
5. Click the Test Communications button.
   This will test that the IP address is a valid IP address.
   Data Capture will also communicate with the device to determine the appropriate model and any current name that may be programmed in to the device.
6. Type in notes on the Server, such as where it is located. These notes will be included in alarm emails.
7. Verify that the Temperature Guard is powered up, and then click the **Test Communications** button.
   DCP will attempt to communicate with this server and will display a message indicating success or failure. If DCP fails to communicate with the server, verify the IP address and that the server is powered up.
8. To have DCP start logging data from this server, check the **Enable this Server** check box.
9. Click on the **Alarm Email Addresses** button to add email addresses to send alarm emails to. Detailed instructions on how to add email addresses follows.

10. Click on the **Save** button. DCP-E will upload the data to the Temperature Guard Server. If it is

    successful, the Temperature Guard Logo will be displayed. If it is not successful, the symbol will be displayed and the **Enable this Server** will be unchecked. If this occurs, try clicking the **Save** button again.
11. Once the data is successfully uploaded, it is time to add the sensors that will be connected to the Temperature Guard Server.

MOLLY303 Refrigerator/Freezer netGuard Model

The Molly303 automatically logs a date/time stamp and temperature data to the onboard memory chip. In the event of a power failure, the 303 will continue to run off of the internal battery backup and continue to log data. This data can then be downloaded to the PC for graphing or exported to Excel for analysis.

For a new installation, enter a value for the Log Update Rate from 1 to 60 minutes and then click on the Store Date Time button to upload the PC's current date and time and update rate.

To download the log file, click on the Get Log File button. To clear log file after the download, check the Clear log file after download check box.

Adding Alarm Email Addresses

You can create a list of "alarm" email addresses for each Temperature Guard Server. Whenever a sensor connected to this Temperature Guard Server goes out of limits, everyone on this list will receive an email. The email will state the sensor that is out of limits and how long it has been out of limits.

1. From the main menu click on the Setup menu item.
2. Click on the Temperature Guard Server you want to add email address for.
3. Click on the **Edit Server** button.
4. Click on the **Alarm Email Address** button.
5. Type the email address in the text box and click the **Add** button.
6. To test the email address, click on the **Test** button. DCP will send a test message to the selected address.

Adding Sensors

Now that you have added a Temperature Guard Server to the list, it is time to add the sensors that you will be connecting to the Temperature Guard Server. You will also be programming the alarm limits for each sensor you add. The sensor name and limits are stored in the server as well as the DCP database.

For temperature sensors, a limit is defined by an upper limit, a lower limit and a time delay (in minutes). When a sensor exceeds a programmed limit for the programmed amount of time, the Temperature Guard Server turns on its buzzer and makes alarm telephone calls and Data Capture will send alarm emails.

For dry contact inputs, only a time delay is required. An alarm is generated after the input is active for the time delay.

For power sensors (model VM540), select from the dropdown list the state of the power (On or Off) and the amount of time the power has to be in this state before generating an alarm.

1. Right click on the Temperature Guard Server and select Edit Sensors.
2. DCP will download and display all sensor parameters.
3. For each sensor, type in a name and the appropriate alarm limits. For Molly303 rev5 and above you can enter limits to one decimal place.

4. Click on the **Notes** button and type in notes will be included in alarm emails. The notes should describe where the sensor is located.
5. Click on the **Save** button to upload the parameters to the server.

Repeat this process for all of the sensors connected to this Temperature Guard Server.

Field Calibration for Molly303 (firmware rev 5 and above)

Molly303 can be field calibrated at a single point.

1. Right click on the Temperature Guard Server and select Edit Sensors.
2. DCP will download and display all sensor parameters.
3. Once the sensor parameters are downloaded, click on the **Cal** button.

Performing Calibration

1. Click on the Reset button to set the correction factors to 0.
2. Enter the actual temperature obtained from a calibrated source.
3. Click on the **Store Correction Factors** button. DCP will upload the correction factors and then refresh the sensor data. The current temperature reading will reflect the new correction factor.

Resetting the correction factor
1. Click on the Reset button to set the correction factors to 0.

Alarm Events and Resolution Entry
To view alarms, click on the **Events** menu item. Alarms are displayed in the large text box in descending order and can be scrolled through using the scroll bar beneath the text box. To add a resolution comment, click on the **Enter Alarm Resolution** button, type in the comment and click **Save.**

Generating Charts with DCP Graphing

You can create and print out charts for any sensor that Data Capture has collected data. The charts are generated from binary data files that can not be altered or tampered. All log files are stored in the Temperature Guard directory.

1. Click on **DCP Graphing** in the Temperature Guard program directory.
2. A drop down list is filled with all of the available log files in the Temperature Guard directory. From the drop down list, select the sensor you want to generate a report for. If the log files are located in a directory other than the Temperature Guard directory, click on the **Browse For Log Files…** to locate them.
3. Select the starting and ending dates on the two calendars.
4. Select whether to generate a graph or export the data to a CSV file.
5. Click on the Go button.