

Temp101

Specifications of Temp101

- Temperature Range: -40 to + 80°C
- Temperature Resolution: 0.1°C
- Calibrated Accuracy: $\pm 0.5^{\circ}\text{C}$ (0 to +50°C)
- Memory: 32,767 Readings
- Reading Interval: 1 reading every 2 seconds to 1 every 12 hours

Specifications of Temp101

- At a 2 second reading rate, the memory will fill up in 18 hours, 12 minutes, and 16 seconds
- At a 12 hour reading rate, the memory will fill up in 16,384 days
- User Replaceable Battery: 1 year typical battery life
- Operating Environment: -40 to +80°C; 0 to 95%RH non-condensing

Starting the Data Recorder

- Configure the Baud rate, 2400 for Temp101 and COM port.
- Click the Device Menu: Start Device.
- Select Start Now or Delay Start; up to 6 months in advance
- Enter a 6-character device ID if needed & select reading rate.
- Click Start Device.
- The software will alert the user when the device is started.

Start Device

Start Method

- Start Now
- Delay Start
- Pushbutton Start

Start Parameters

Device Type: **Temp101**

Serial Number: **M39180**

Device ID: XXXXXX

Extended ID:

Reading Rate: **2 Seconds**

Wrap Around

Log Time

Days:	0	Days
Hours:	18	Hours
Minutes:	12	Minutes
Seconds:	16	Seconds

WARNING

The device you are using contains a battery. Refer to the datasheet, product manual, or quick start guide for proper usage and handling, or call the phone number below. Specific warranty and remedy limitations apply to this product. Call (603) 456-2011 for details.

Alarm Settings...
Cancel
Start Device

Batch Start

for starting multiple Temp101's

- Batch Start is a feature in the software for starting multiple data recorders with the same parameters.
- To Batch Start, click the Device Menu: Batch Start. The following box will appear:

Batch Start

Device Parameters | Configuration

Start Method

- Start Now
- Delay Start
- Pushbutton Start

Start Parameters

Device Type: **Temp101**

Serial Number: **M39180**

Device ID: **XXXXXX**

Extended ID:

Reading Rate: **2 Seconds**

Wrap Around

Log Time

Days:	0	Days
Hours:	18	Hours
Minutes:	12	Minutes
Seconds:	16	Seconds

WARNING

The device you are using contains a battery. Refer to the datasheet, product manual, or quick start guide for proper usage and handling, or call the phone number below. Specific warranty and remedy limitations apply to this product. Call (603) 456-2011 for details.

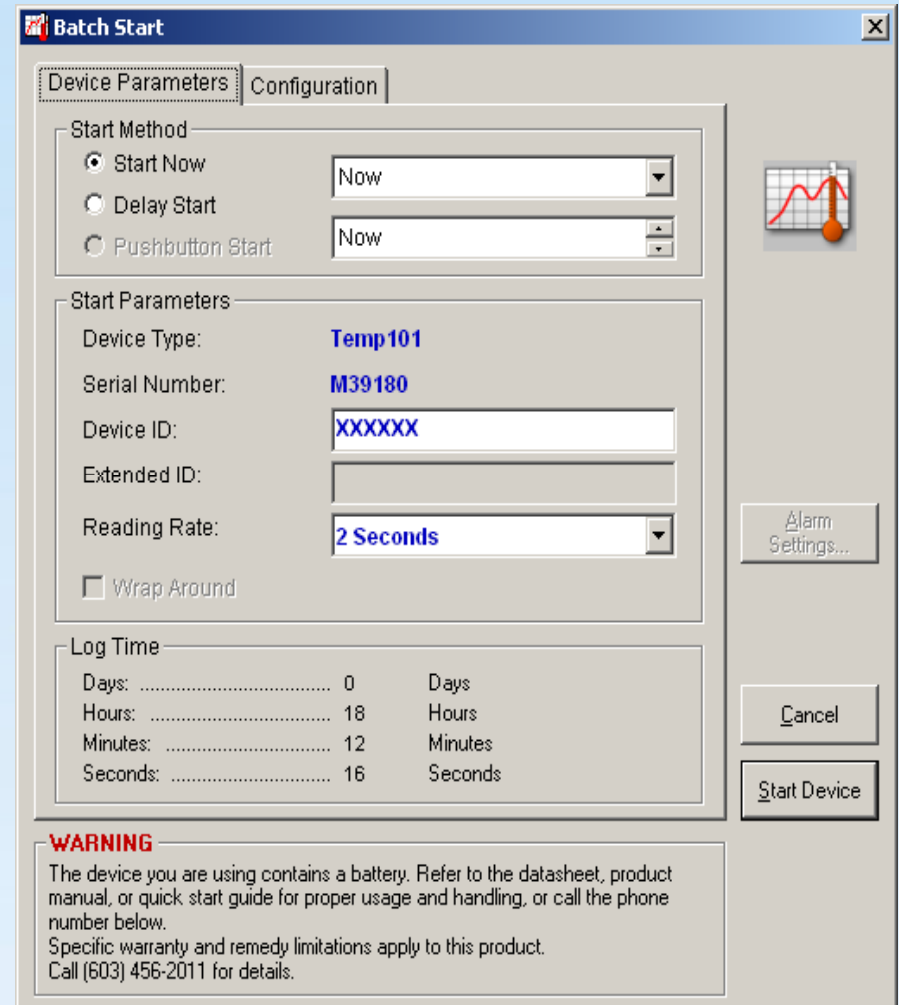
Alarm Settings...

Cancel

Start Device

Device Parameters

- The Device Parameters tab is similar to the Start Device tab.
- The user chooses the desired settings that will be programmed into each data recorder throughout the batch start.
- Choose which options to configure from the Configurations Tab.



The screenshot shows the 'Batch Start' software interface with the 'Device Parameters' tab selected. The interface is divided into several sections:

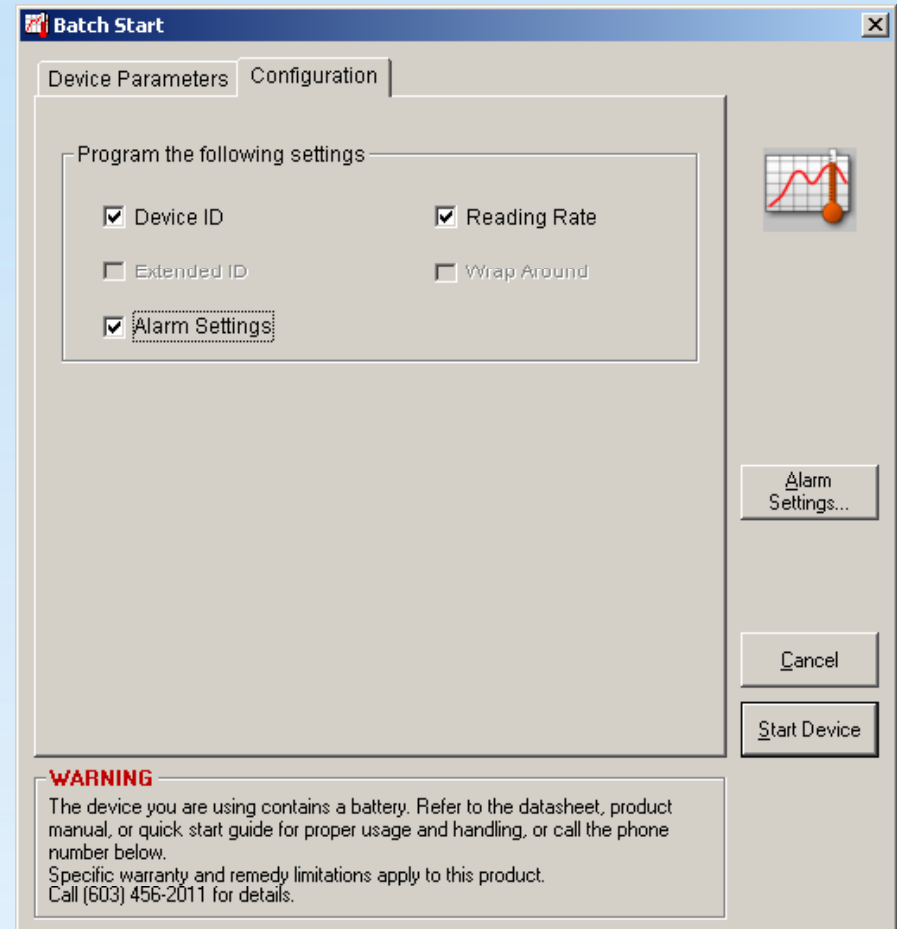
- Start Method:** Three radio buttons are present: 'Start Now' (selected), 'Delay Start', and 'Pushbutton Start'. Each has a corresponding dropdown menu set to 'Now'.
- Start Parameters:** A section containing:
 - Device Type: Temp101
 - Serial Number: M39180
 - Device ID: XXXXXX
 - Extended ID: (empty field)
 - Reading Rate: 2 Seconds
 - Wrap Around: (unchecked checkbox)
- Log Time:** A section with a table of time settings:

Days:	0	Days
Hours:	18	Hours
Minutes:	12	Minutes
Seconds:	16	Seconds
- WARNING:** A red warning box at the bottom states: "The device you are using contains a battery. Refer to the datasheet, product manual, or quick start guide for proper usage and handling, or call the phone number below. Specific warranty and remedy limitations apply to this product. Call (603) 456-2011 for details."

On the right side of the window, there is a 'Batch Start' icon (a graph with a red line and a blue dot), an 'Alarm Settings...' button, a 'Cancel' button, and a 'Start Device' button.

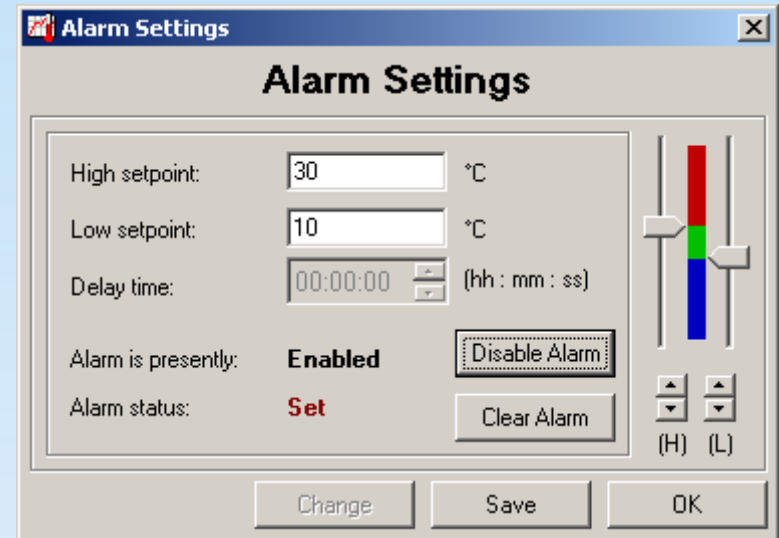
Configuration Tab

- The Configuration Tab shows 5 options with checkboxes
 - Device ID
 - Reading Rate
 - Extended ID
 - Wrap Around
 - Alarm Settings
- The Temp101 does not support features in red above.



Features - Alarm Settings

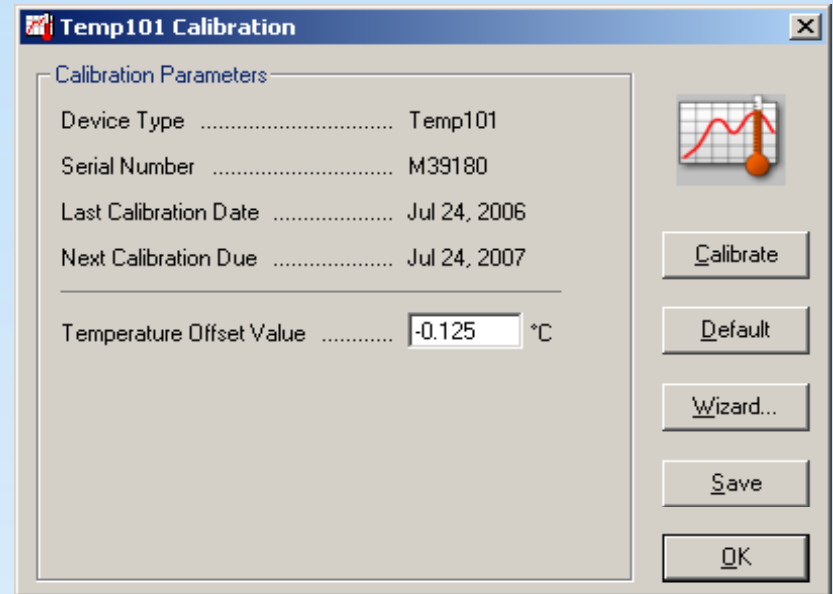
- From the Device Menu, choose Alarm Settings.
- This command allows the high and low temperature points to be set, this will trigger a visual alarm (flashing LED).
- These points will be set in the units indicated, °C is shown in the example.
- To edit these alarm values, select the Change button:



- Click Disable Alarm to enable and disable the alarm settings.
- Click Save to save any changes.

Features – Calibration

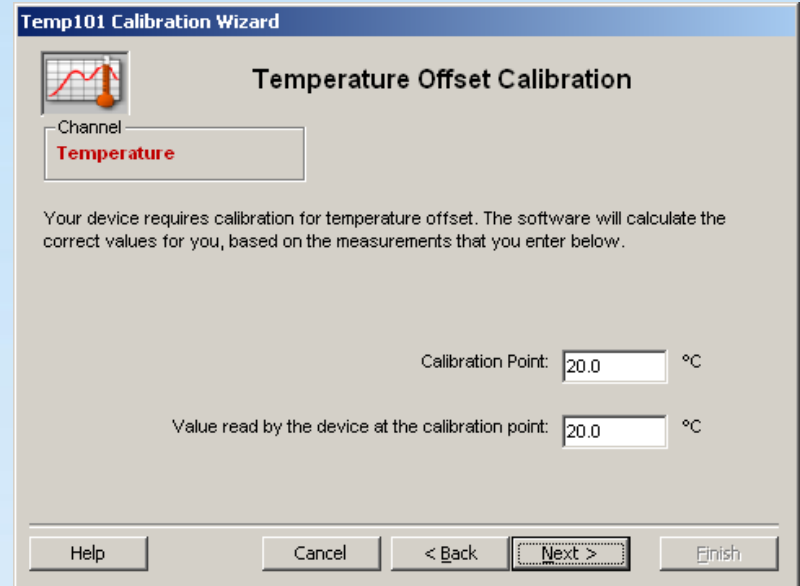
- The Temp101's are calibrated when they leave the facility.
- Annual re-calibration is recommended.
- If calibration is required, the user can calibrate the Temp101 manually through the software or by using the Calibration Wizard.



- By clicking Default, any calibration values that may have been programmed into the device will be removed.

Calibration Wizard

- The Temp101 is calibrated based on a one point calibration.
- Place it in a known temperature environment.
- Download the readings and determine what the data recorder read.
- Enter the data into the Calibration Wizard to have it automatically calibrate the Temp101.



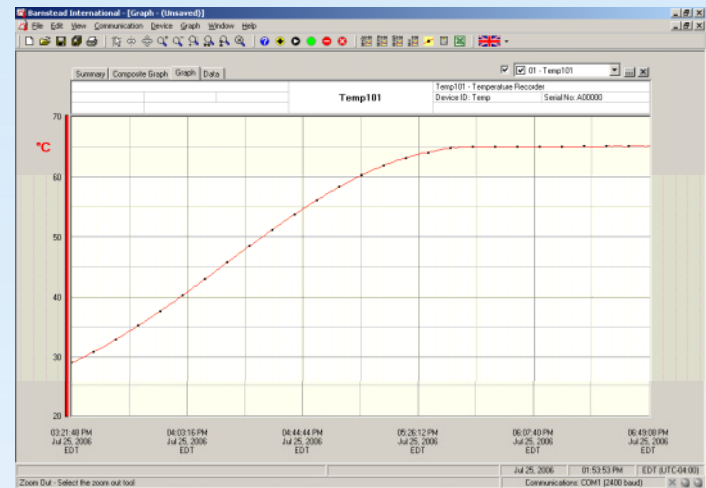
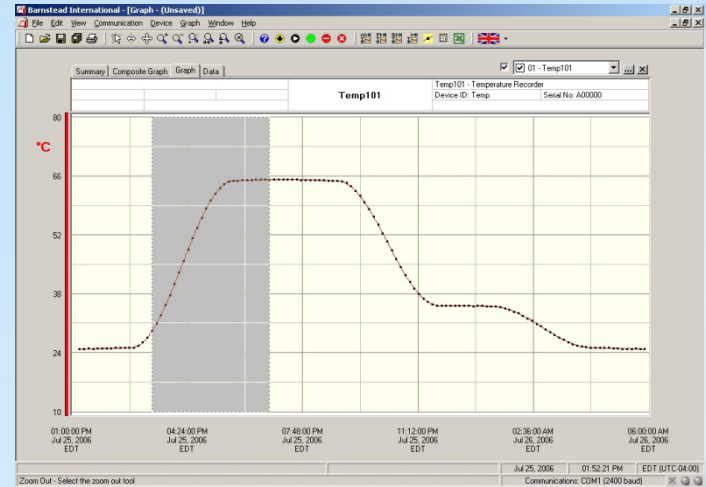
The screenshot shows the 'Temp101 Calibration Wizard' window. The title bar reads 'Temp101 Calibration Wizard'. The main window has a light beige background. At the top left is a small icon of a graph with a red line and a blue vertical bar. To the right of the icon, the text 'Temperature Offset Calibration' is displayed. Below the icon is a 'Channel' label and a text box containing the word 'Temperature' in red. A paragraph of text reads: 'Your device requires calibration for temperature offset. The software will calculate the correct values for you, based on the measurements that you enter below.' Below this text are two input fields. The first is labeled 'Calibration Point:' and contains the value '20.0' followed by a degree Celsius symbol. The second is labeled 'Value read by the device at the calibration point:' and also contains the value '20.0' followed by a degree Celsius symbol. At the bottom of the window are five buttons: 'Help', 'Cancel', '< Back', 'Next >', and 'Finish'. The 'Next >' button is highlighted with a dashed border.

Features – Graph Tools

- The software features numerous “magnifying tools” to view different areas of the collected data.
- To access the tools, select the Graph Menu; Select Graph Tool or use the Toolbar.
- In the Select Graph Tool drop down box, there are the following options:
 - Cursor
 - Time Cursor
 - Scroll
 - Zoom In
 - Zoom Out
 - Box Zoom
 - Horizontal Zoom
 - Vertical Zoom
 - Cancel Zoom

Features – Horizontal Zoom

- Select Horizontal Zoom mode, click and drag on the graph to draw a horizontal rectangle.
- Release the mouse button, the graph will Zoom In to a close-up view of the selected area.

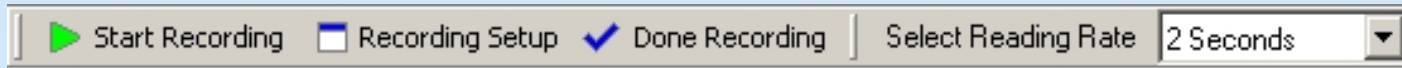


Features – Export Data

- Select Export Data from the File Menu to export a copy of the data in a format that is designed for easy import into programs such as Excel® .
- Data can be read in the same units displayed on the screen.
- The three file types are *.dat, *.txt, and *.csv.

Real Time Recording

- The Real Time Chart Recording command provides a graphical method for acquiring and viewing data in real time. Click the Device Menu: Real Time Chart Recording to access this mode.



- A logger must be connected to the interface cable to select and use the following features: reading rate, setup real time recording parameters, and start and stop the real time graphing.
- Data is not stored internally in the data logger while in Real Time Recording Mode.

Real Time Recording Starting & Stopping



- Select the Reading Rate from the drop down box and click the Start Recording button to begin taking readings.
- The Graph Tab and Data Tab screens will update at the selected reading rate.
- The Pause option will pause the Temp101 from taking readings. Click continue to start the data recorder again.
- Clear Recording will clear all the current recordings from the graph.
- The Stop Recording button will stop the recorder from taking further readings.
- Select the Done Recording button to discontinue recording from the logger.

Real Time Recording Recording Parameters

- Clicking on the Recording Setup button presents a Real Time Setup box. Real Time Setup is broken into four parts:
 - Recording Parameters
 - Alarm Settings
 - Email Information
 - File Settings

Recording Parameters

- In the Recording Parameters tab, the user can:
 - Set the Start Method to Start Now or Delay Start (date & time)
 - Set the End Method to Manual or Select Time (date & time)
 - Select the reading rate

The screenshot shows the 'Real Time Setup' dialog box with the 'Recording Parameters' tab selected. The dialog has a title bar with a close button (X) and a menu bar with 'Recording Parameters', 'Alarm Settings', 'Email Information', 'Phone Information', and 'File Settings'. The main area contains three sections: 'Start Method' with radio buttons for 'Start Now' and 'Delay Start' (selected), and date/time dropdowns; 'End Method' with radio buttons for 'Manual' (selected) and 'Select Time', and corresponding dropdowns; and a 'Reading Rate' dropdown set to '5 Seconds'. At the bottom are 'Cancel' and 'Start Recording' buttons.

Section	Option	Value
Start Method	Start Now	07/25/2006 03:00:00 PM
	Delay Start	07/25/2006 03:00:00 PM
End Method	Manual	Manual Manual
	Select Time	
Reading Rate		5 Seconds

Alarm Settings

The screenshot shows the 'Real Time Setup' dialog box with the 'Alarm Settings' tab selected. The dialog has four tabs: 'Recording Parameters', 'Alarm Settings', 'Email Information', 'Phone Information', and 'File Settings'. The 'Alarm Settings' tab contains three sections: 'Notification Types', 'Notification Settings', and 'Channel Settings'. In 'Notification Types', 'Screen Alarm', 'Email Alarm', and 'Phone Alarm' are all checked. In 'Notification Settings', 'Notify every' is selected with a frequency of 00:00:00. In 'Channel Settings', 'Channel 1 - Temperature' is selected, units are set to '°C', and both 'Low Alarm' (10) and 'High Alarm' (30) are checked. At the bottom are 'Cancel' and 'Start Recording' buttons.

Real Time Setup

Recording Parameters Alarm Settings Email Information Phone Information File Settings

Notification Types

Screen Alarm Email Alarm Phone Alarm

Notification Settings

No Notification

Notify on every out of range reading

Notify only on initial out-of-range reading

Notify every 00 : 00 : 00 while reading is out of range
(H) (M) (S)

Channel Settings

Channel 1 - Temperature Units: °C

Low Alarm: 10 High Alarm: 30

Cancel Start Recording

- In the Alarm Settings tab, the user can:
 - Setup a notification type: screen, email or phone
 - Set when the alarm will alert
 - Set the specific channel for the alarm settings. The Temp101 will always be set for the temperature channel.

Email Information

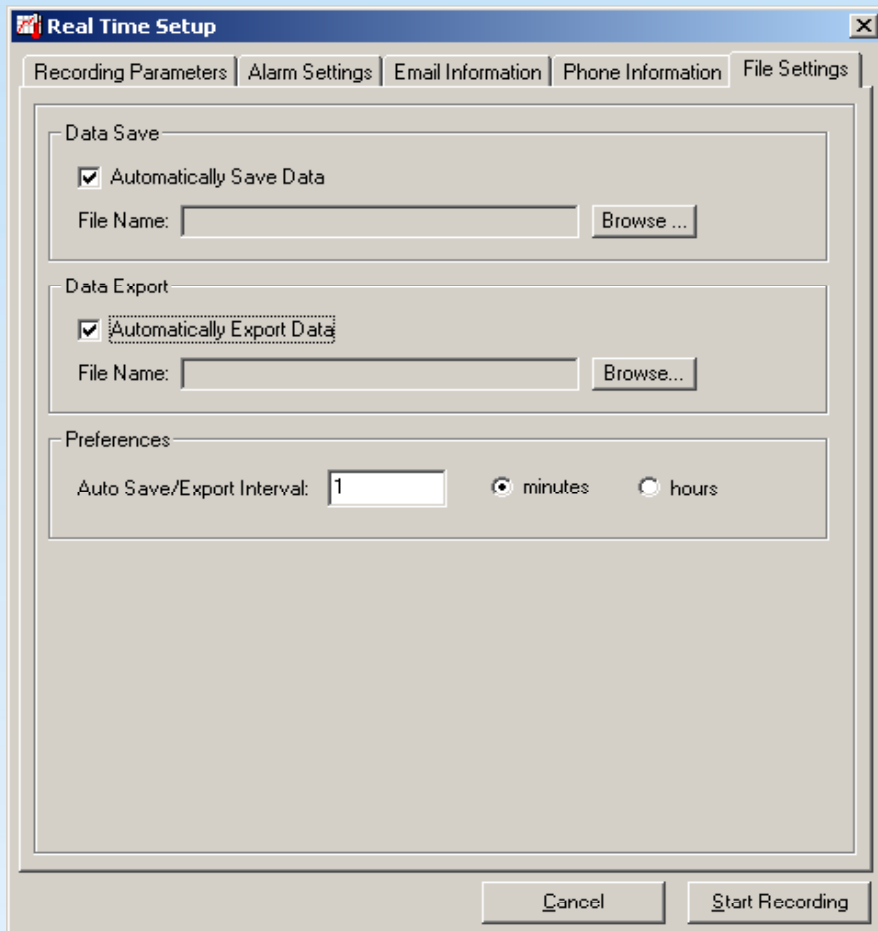
- In the Email Information tab, the user can input the required information to notify them by email. Contact the company's IT personnel for proper configurations.

The screenshot shows the 'Real Time Setup' dialog box with the 'Email Information' tab selected. The dialog has a title bar with a close button and a tabbed interface with the following tabs: 'Recording Parameters', 'Alarm Settings', 'Email Information', 'Phone Information', and 'File Settings'. The 'Email Information' tab contains the following sections:

- Server Information:** Includes fields for '* Server Address:', '* Port Number:' (with '25' entered), a checkbox for 'My outgoing server (SMTP) requires authentication', 'User Name:', and 'Password:'.
- Sender Information:** Includes fields for 'Name:' and '* E-mail Address:'.
- Recipient Information:** Includes fields for 'Name:' and '* E-mail Address:'. A note below states: 'Note: Use the semicolon (;) as a delimiter for multiple recipients'.
- Message Options:** Includes radio buttons for 'Short Text Format' and 'Long Text Format' (selected), and a checkbox for 'Use Proportional Font'.

At the bottom right of the dialog, there is a note: 'Note: Required settings are marked with an asterisk (*)' and a 'Test Account Settings' button. At the very bottom of the dialog are 'Cancel' and 'Start Recording' buttons.

File Settings



- Real-Time data can be set to be saved or exported automatically to a file on the hard drive.
- Click the Data Save or Data Export checkbox to enable the option.
- Click the Browse button to create a file.
- The Preferences option allows the save and export features to occur automatically at a set time interval.

Contact MadgeTech

- Monday through Friday
8:00 am to 5:00 pm
- Phone: 603-456-2011
- Fax: 603-456-2012
- Email:
support@madgetech.com