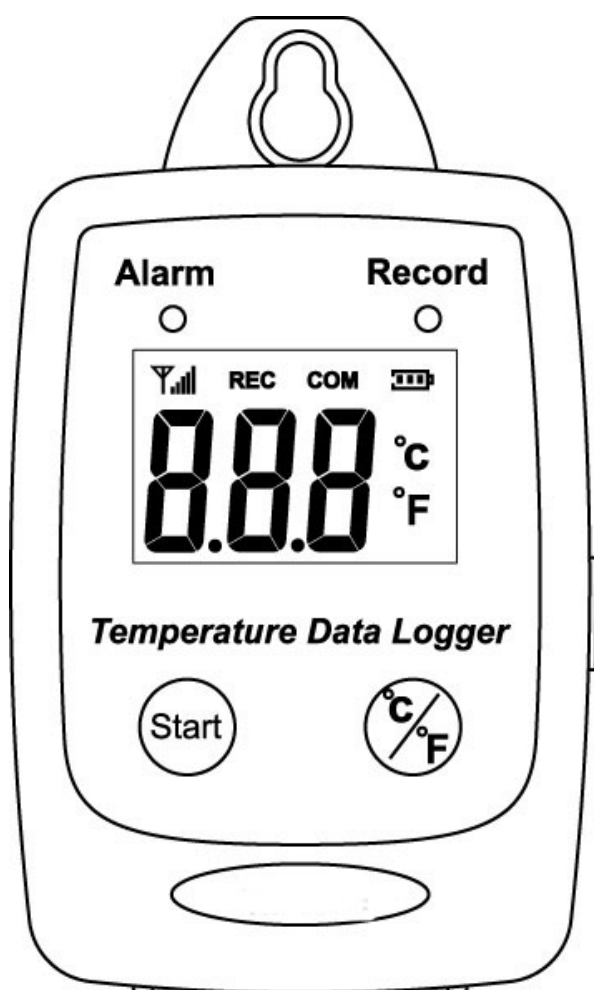


# Temperature Datalogger



Users Manual

## TABLE OF CONTENTS

<b>FEATURES &amp; SPECIFICATIONS .....</b>	<b>3</b>
<b>APPLICATIONS .....</b>	<b>4</b>
<b>START UP AND GENERAL OPERATION .....</b>	<b>5</b>
LCD Display.....	5
Turn On Temperature Data Logger .....	6
Switch between °C or °F.....	7
Recording Data.....	8
<b>TEMPERATURE CALIBRATION .....</b>	<b>11</b>
<b>PC SOFTWARE INSTALLATION.....</b>	<b>13</b>
<b>USING PC SOFTWARE .....</b>	<b>14</b>
Setup Screen.....	17
Download Records .....	19
Graphic & Chart Analysis .....	23
Data in Listing Format .....	25
Data Export.....	27

## **FEATURES & SPECIFICATIONS**

### **Features**

- Measure °C/°F Temperature
- Datalogging- 50,000 records
- Fast USB download
- Easy- to-Use PC software for parameter settings and data analysis
- Internal Temperature alarm

### **Specifications**

#### **Temperature**



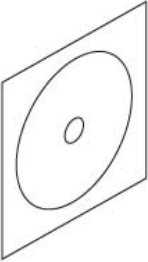
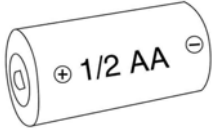
Type	Thermistor
Measurement Range	-40 to 85°C(-40~185°F)
Accuracy	±1.2°F(0.6°C) from -4 to 122°F(-20 to 50°C) ±1.8°F(1.0°C) all other ranges
Resolution	0.1°C

- Display : 3 digit LCD.
- LED status: red LED of Alarm, green LED of Record.
- Sampling rate: 1 times/3 second.
- Battery : One 3.6V ½ AA lithium battery
- Battery Life :1 year.
- External Power Supply: 5 VDC with 0.5A.
- Operating temperature and humidity : -40 to 85°C(-40~185°F), 0-95%,RH,non-condensing.
- Instrument dimensions :83(L)\*60(W)\*24(H) mm.
- Weight : About 77g.

## Applications

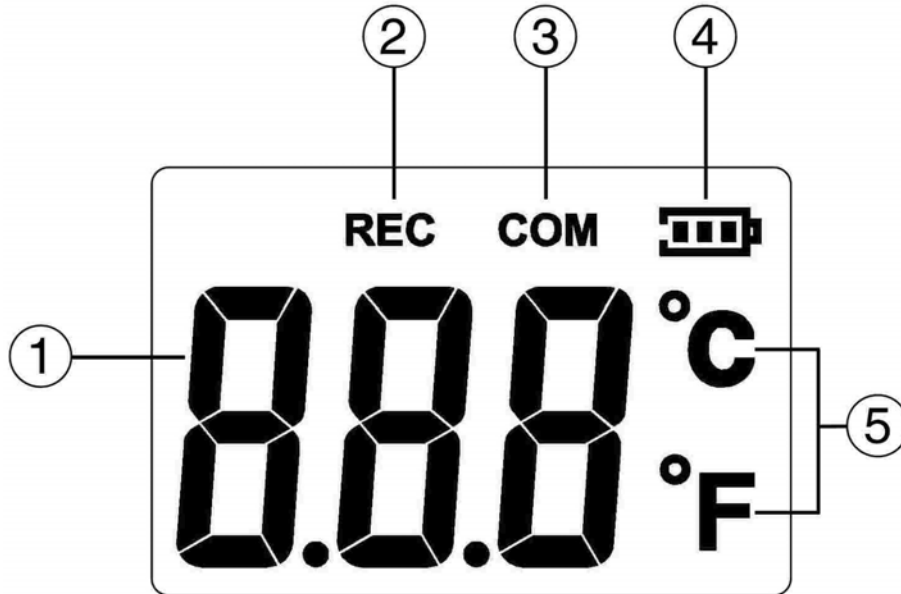
- Building HVAC monitoring.
- Warehouses.
- Refrigerator.
- Clean rooms.
- Freezer.
- Shipping vans.
- Shipping crates.
- Cargo vessels.
- Storage areas.

## WHAT'S IN THE BOX

 A handheld temperature data logger with a digital display showing '888'. The display also shows '°C' and '°F' indicators. Above the display are 'Alarm' and 'Record' indicators. Below the display are 'Start' and 'C/F' buttons. The device has a carrying loop at the top.	 A standard USB-A to USB-B cable, coiled.	 A CD-ROM disc shown at an angle.
1. Main Unit	2. USB Cable	3. Installation Disk
 A standard AA battery with a '+' sign on the left end and a '-' sign on the right end.		
4. 1/2 AA Battery		

# START UP AND GENERAL OPERATION

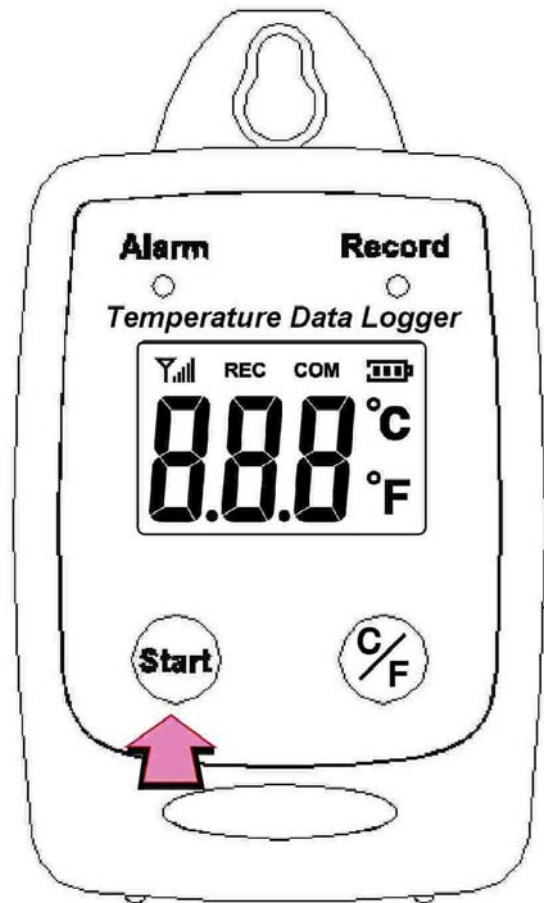
## LCD Display



1.	Temperature Display	4.	Battery Level Indicator
2.	Recording	5.	Unit of Measurement
3.	USB Communication		

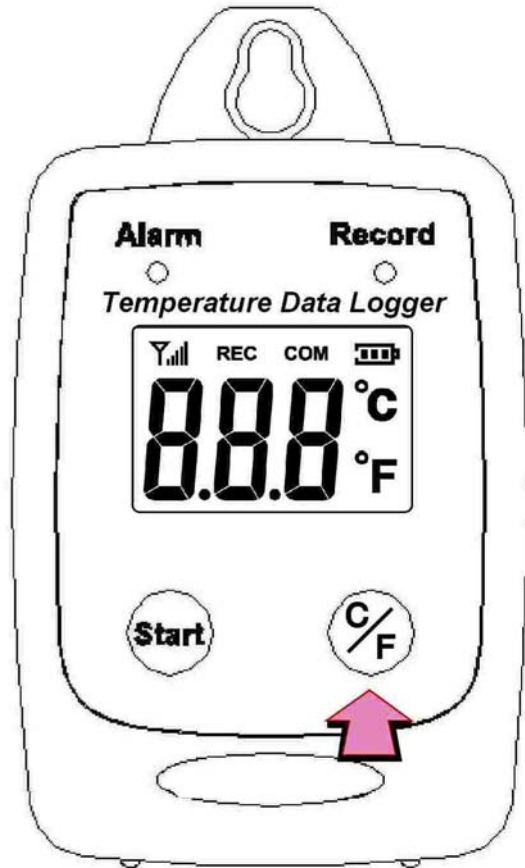
## Turn On Temperature Data Logger

- Press the Start button for 2 seconds to turn on the Temperature Data Logger.
- The unit is ready to use.



Switch between °C or °F

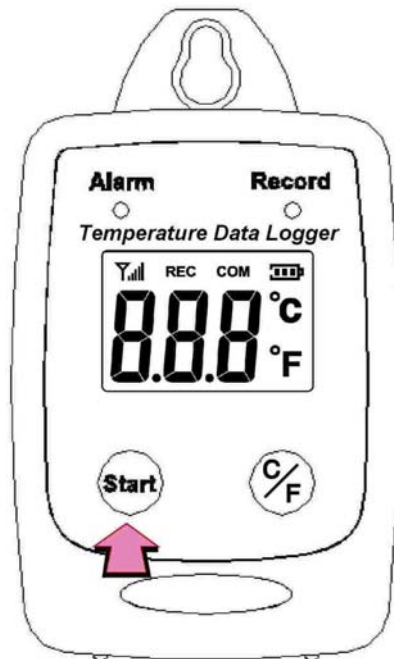
- Press °C/°F to switch between °C or °F



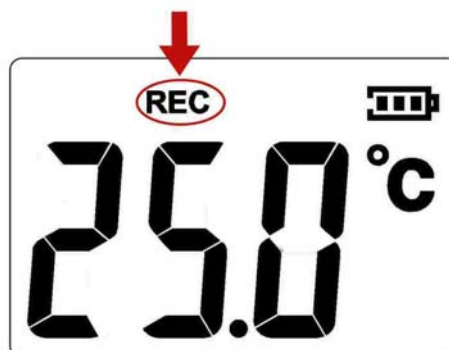
A digital display showing "25.0" with "°C" to the right. A red arrow points to the "°C" symbol. A battery icon is in the top right corner.	A digital display showing "25.0" with "°F" to the right. A red arrow points to the "°F" symbol. A battery icon is in the top right corner.
Display current Temperature(°C)	Display current Temperature.( °F)

## Recording Data

- Press the Start button to start data recording.

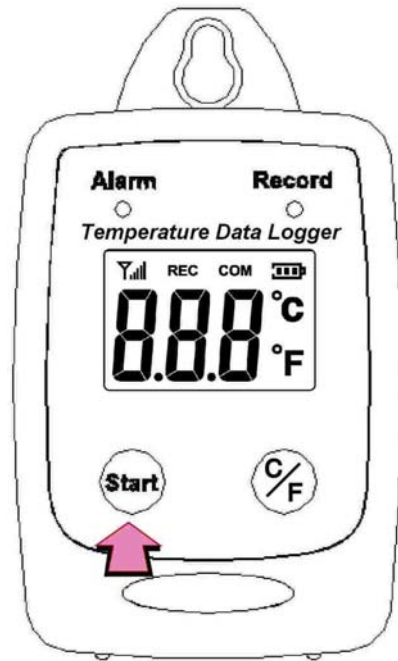


- The LCD display will display REC and the LED green light twinkle when the **Temperature Data Logger** is recording.

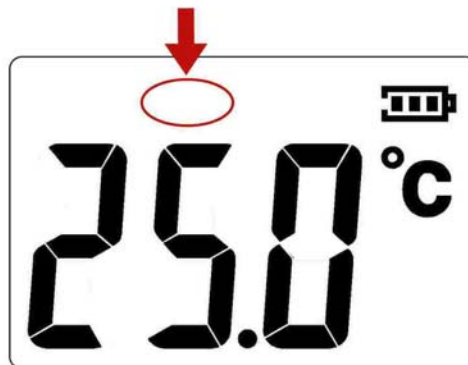




- Press the Start button again to stop recording.



- When recording stopped, the REC will disappear.



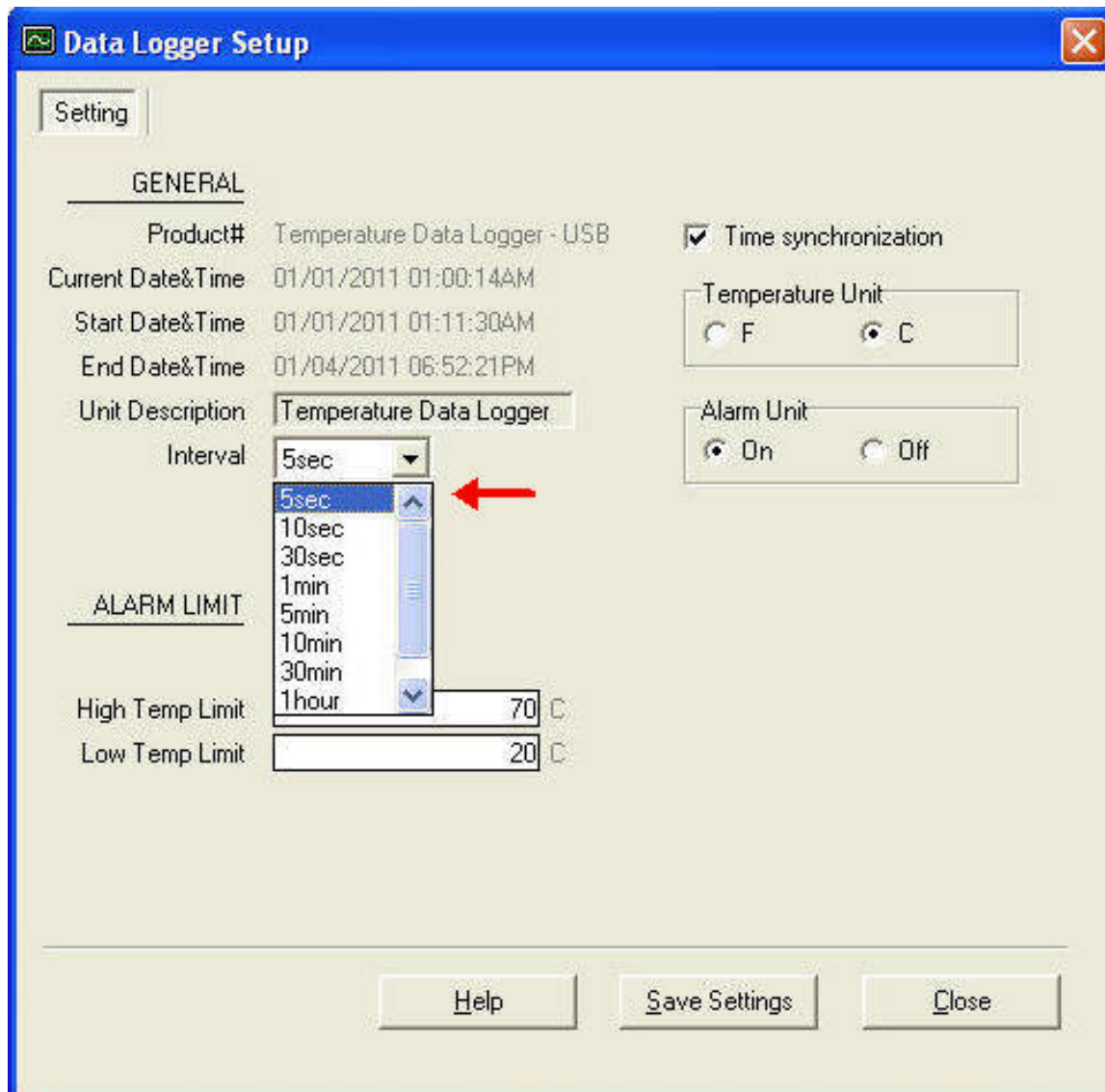
## Sampling rate

(5sec / 10sec / 1min / 5min / 10min / 30min / 1 hour)

Data sampling rate can only be set from PC setup screen.

Select the time interval from the drop-down menu.

Click “Save Settings” to save the setting.

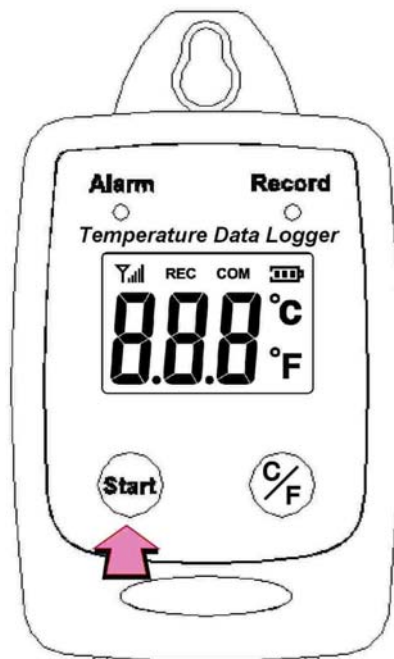


## Temperature Calibration

1. The preparation 25°C calibrator chamber.
2. Press and hold “C/°F” button first, then press and hold “Start” button for 2 seconds to enter the calibration mode.



3. Press “Start” button to start the calibration.



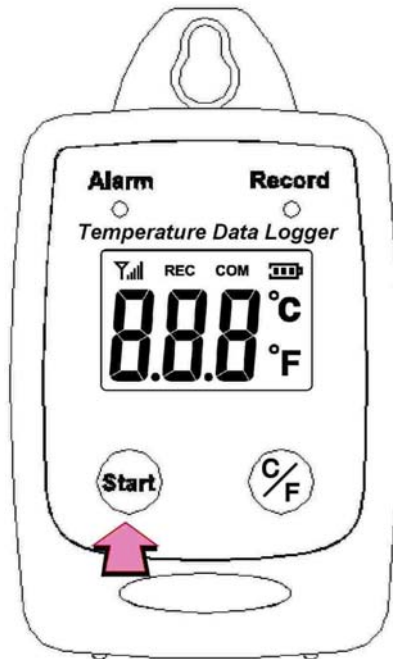
4. During the calibration, the LCD will display the antenna sign.



5. The datalogger will start 25°C calibration 20 minutes after the Start button is pressed.
6. When the calibration is completed, the COM will show up.



- Press and hold the Start button for two seconds to turn off and restart the unit



## PC SOFTWARE INSTALLATION

### Installation Requirements:

Minimum system requirements for the software:

-Pentium III - 500 MHz processor or equivalent with 128 megabytes of RAM.

Optimal Performance:

-Pentium 4 - 2.8 gigahertz processor or equivalent with 256 megabytes or RAM.

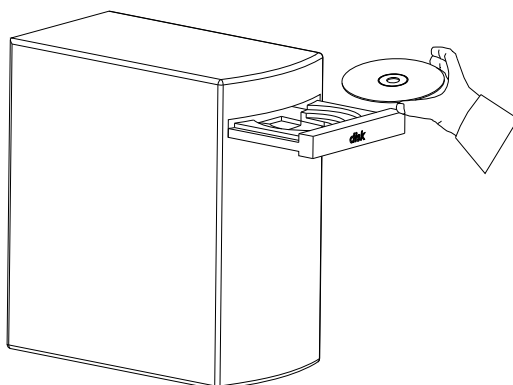
Operating System Requirements:

-Windows 2000

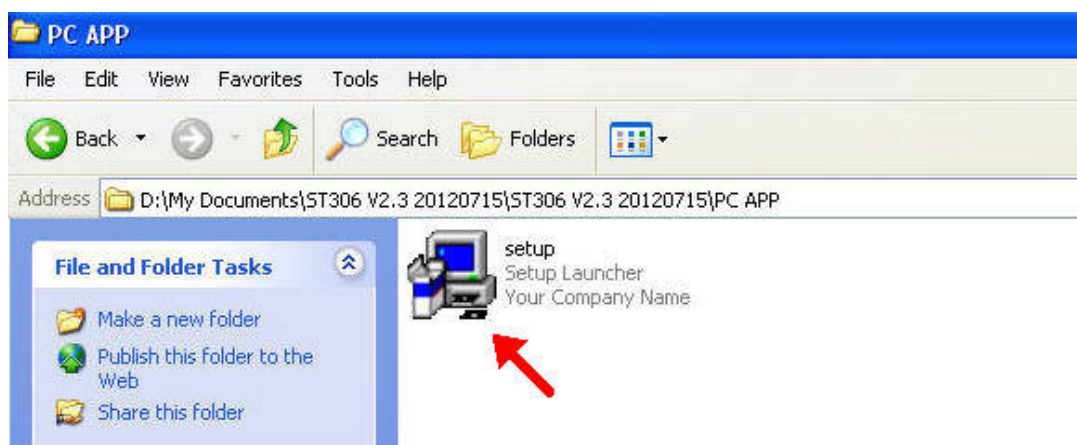
-Windows XP

-Window 7

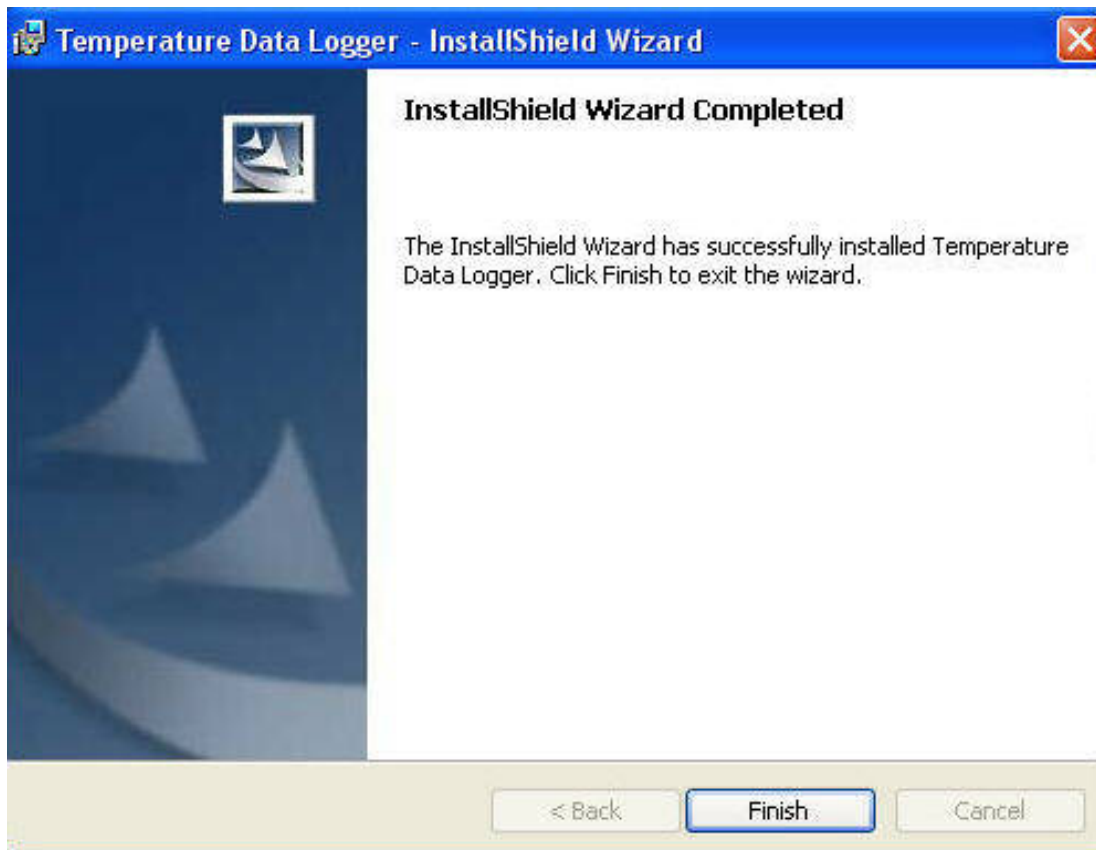
- Insert the CD into the disk drive.



- Click Setup to start installation.



Follow the steps on the Installation Shield Wizard and click Finish to complete the installation.

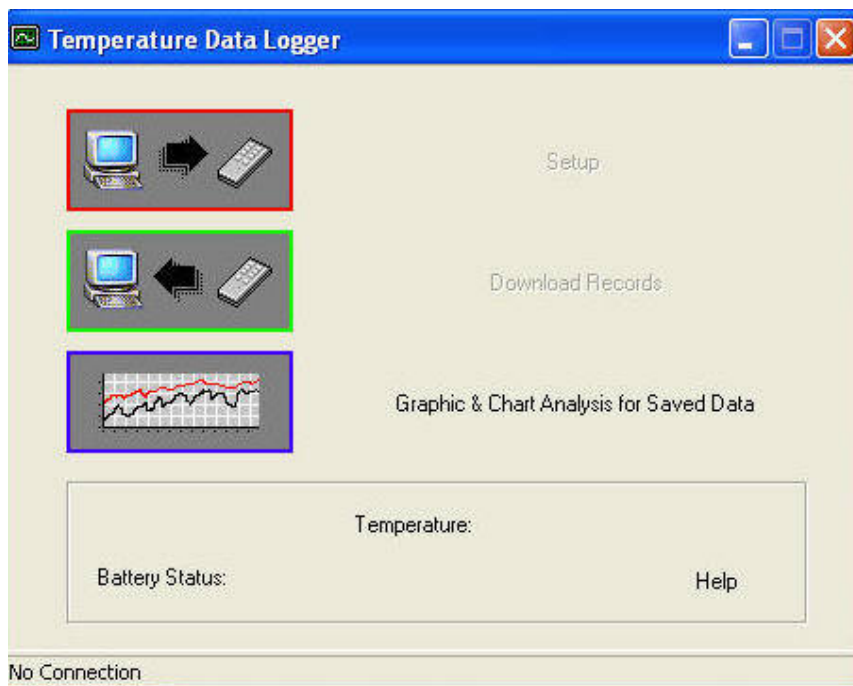


## USING PC SOFTWARE

- Start Window PC software.
- Click on All programs, Click on "Temperature Data Logger"
- Click on STLogger to start the datalogger program.

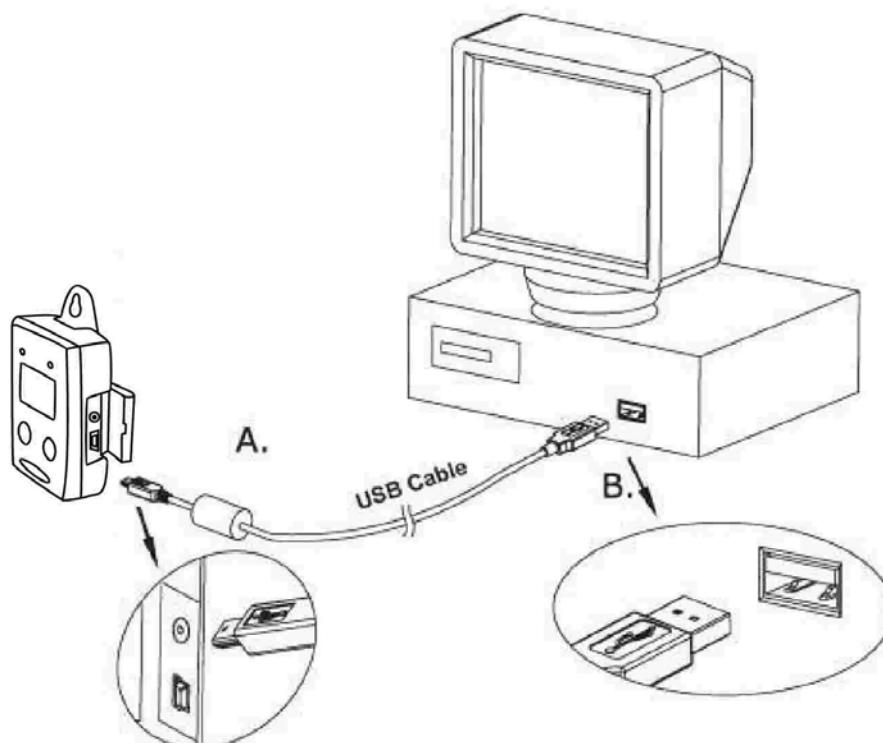


## Connection Status

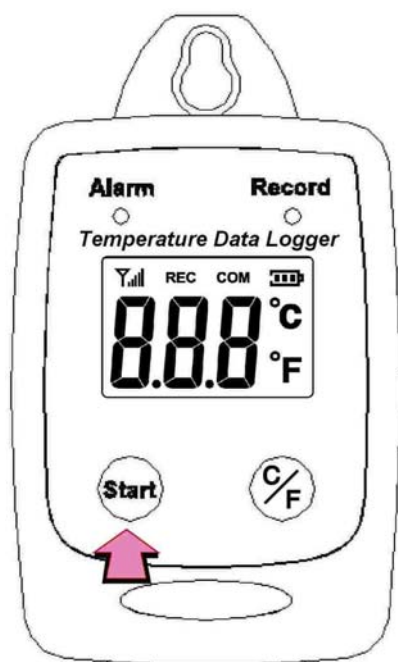


No Connection Screen

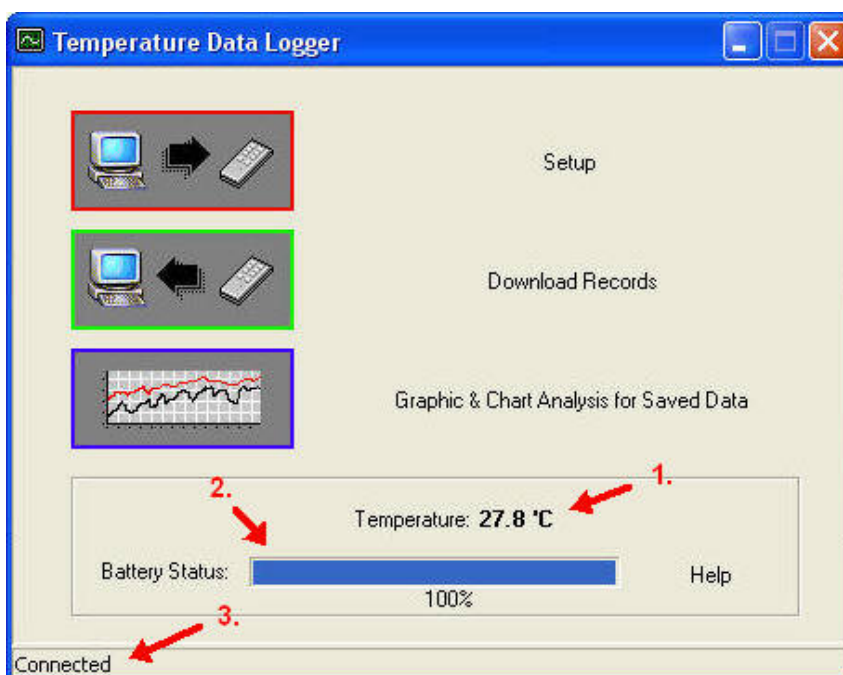
- Connect **Temperature Data Logger** to the PC with a USB cable.



- Press Start for 2 seconds to turn on Temperature Data Logger. **Temperature Data Logger** is now connected to the PC.



- If the datalogger is properly connected, these three values will show up.
  1. Temperature Reading
  2. Battery Status
  3. Display "Connected"

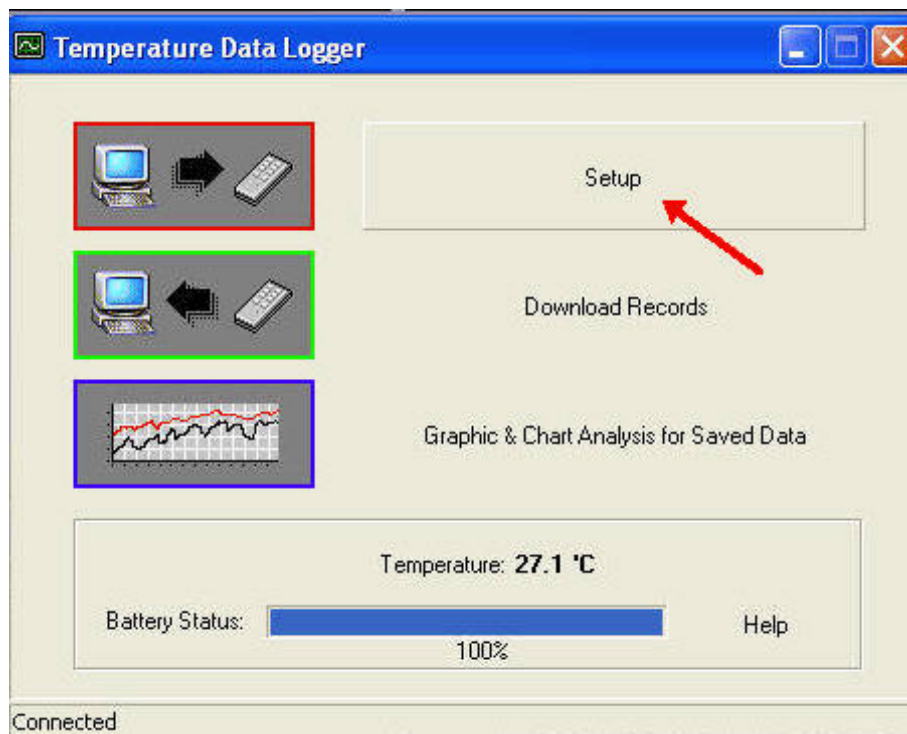


Connected Screen



## Setup Screen

Click "Setup" to enter the Setup screen.



- The values in the white area can be changed by the user.
- The value in the grey area can not be changed by the user.
- Click “Save Settings” to save the values to the datalogger.

The screenshot shows a window titled "Data Logger Setup" with a blue title bar and a close button in the top right corner. The window contains a "Setting" tab and two main sections: "GENERAL" and "ALARM LIMIT".

**GENERAL**

Product#	Temperature Data Logger - USB	<input checked="" type="checkbox"/> Time synchronization
Current Date&Time	01/01/2011 01:06:56AM	Temperature Unit
Start Date&Time	01/01/2011 01:11:30AM	<input type="radio"/> F <input checked="" type="radio"/> C
End Date&Time	01/04/2011 06:52:21PM	Alarm Unit
Unit Description	Temperature Data Logger	<input checked="" type="radio"/> On <input type="radio"/> Off
Interval	5sec	

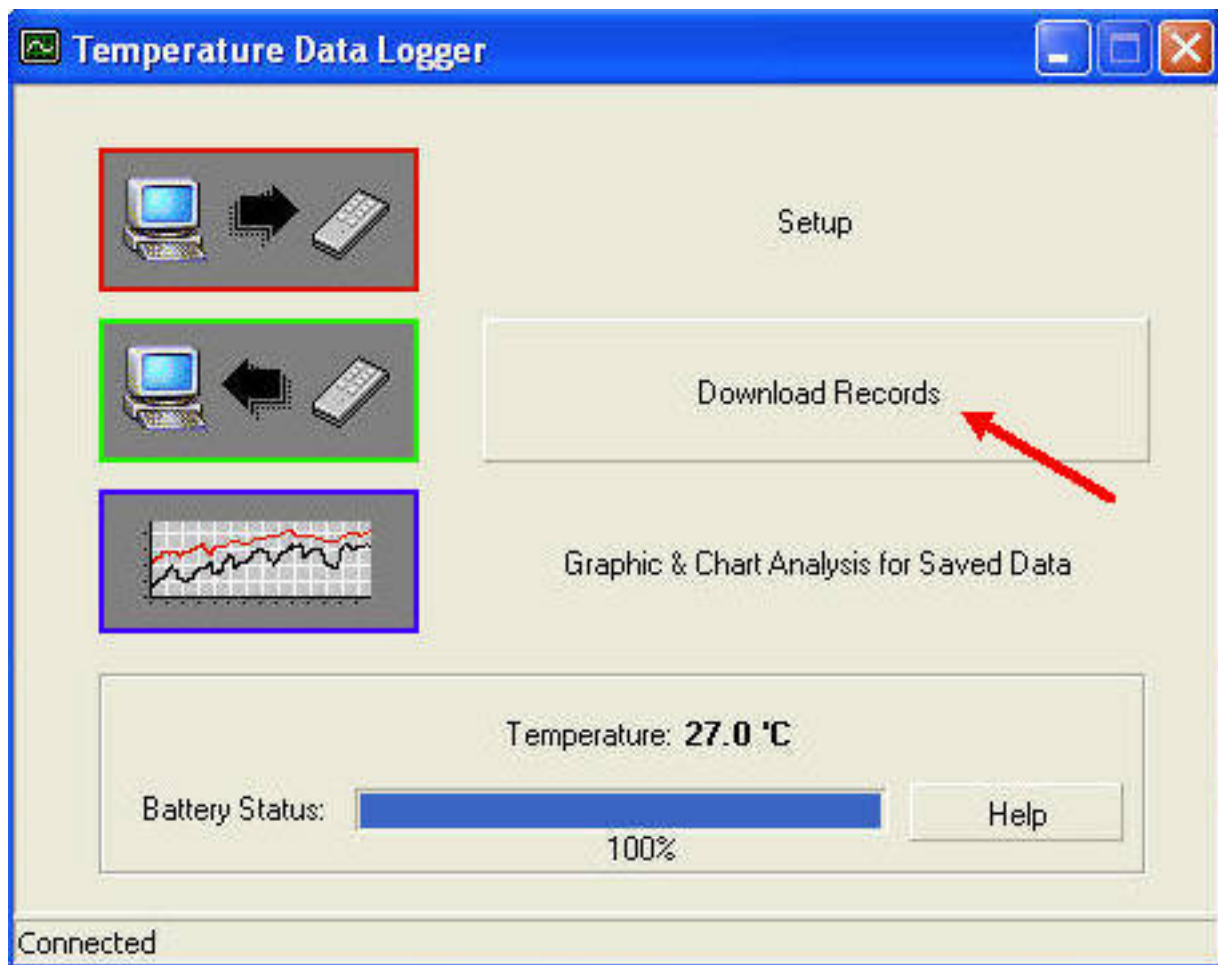
**ALARM LIMIT**

High Temp Limit	<input type="text" value="70"/>	C
Low Temp Limit	<input type="text" value="20"/>	C

At the bottom of the window, there are three buttons: "Help", "Save Settings", and "Close".

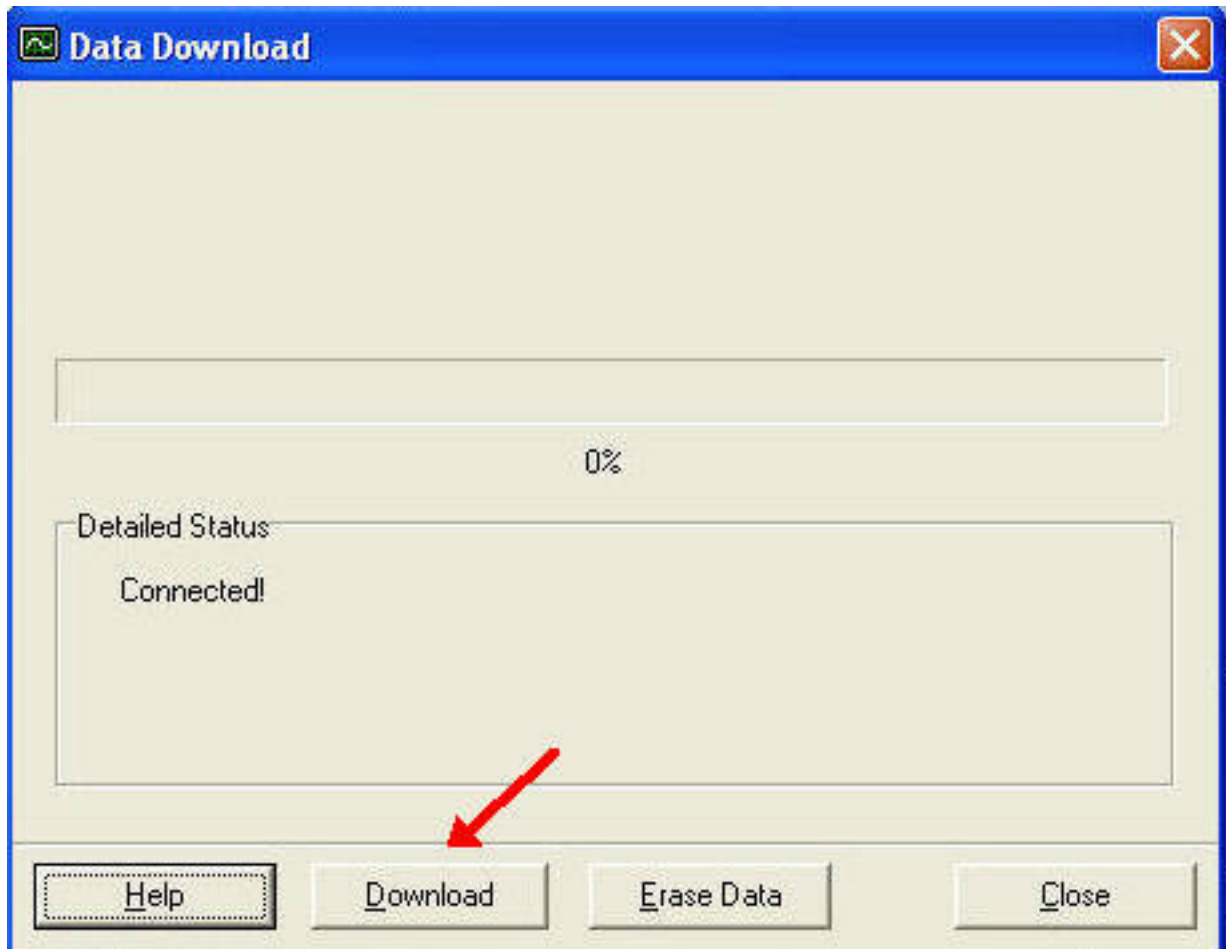
## Download Records

- Click Download to download the stored data.

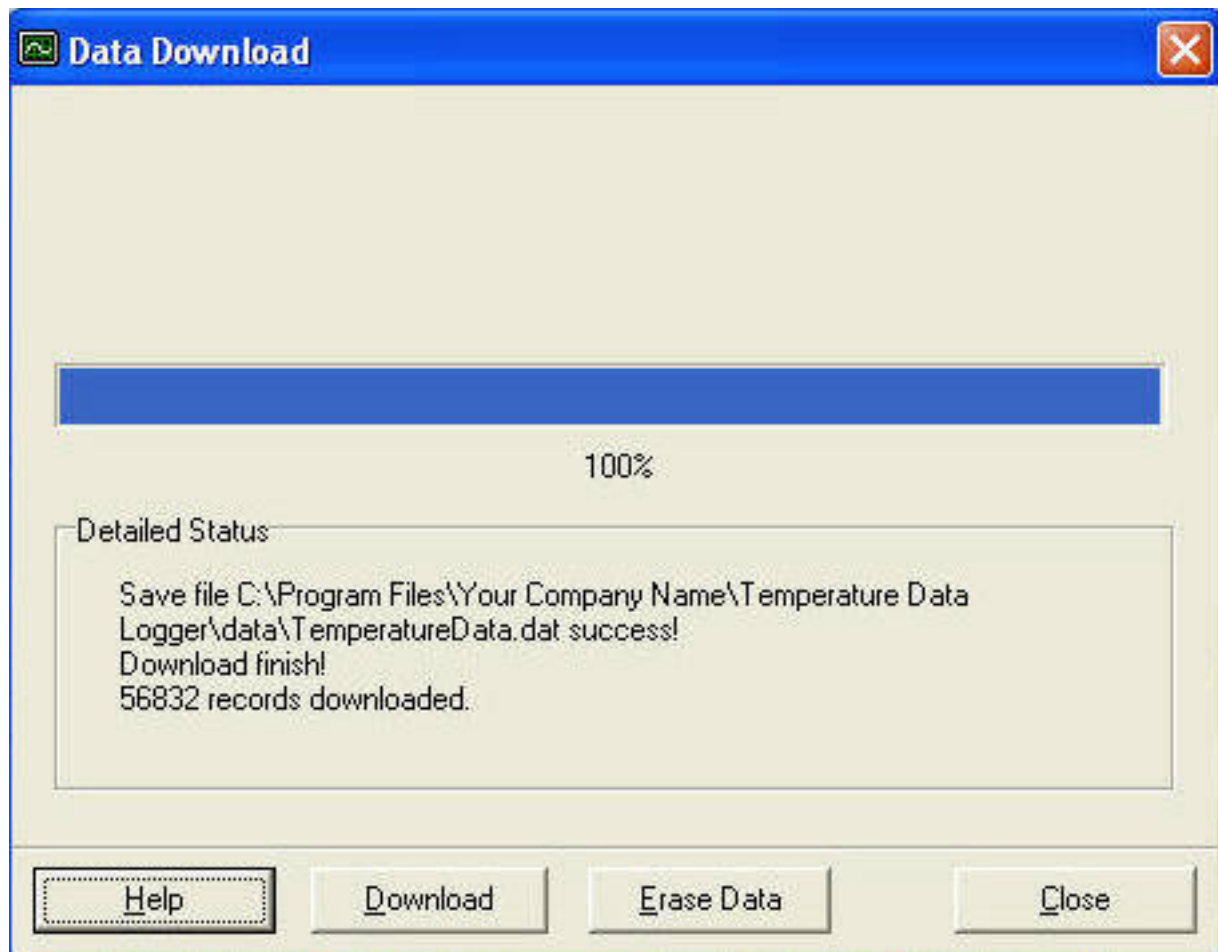




- Click “Download” to start the download.

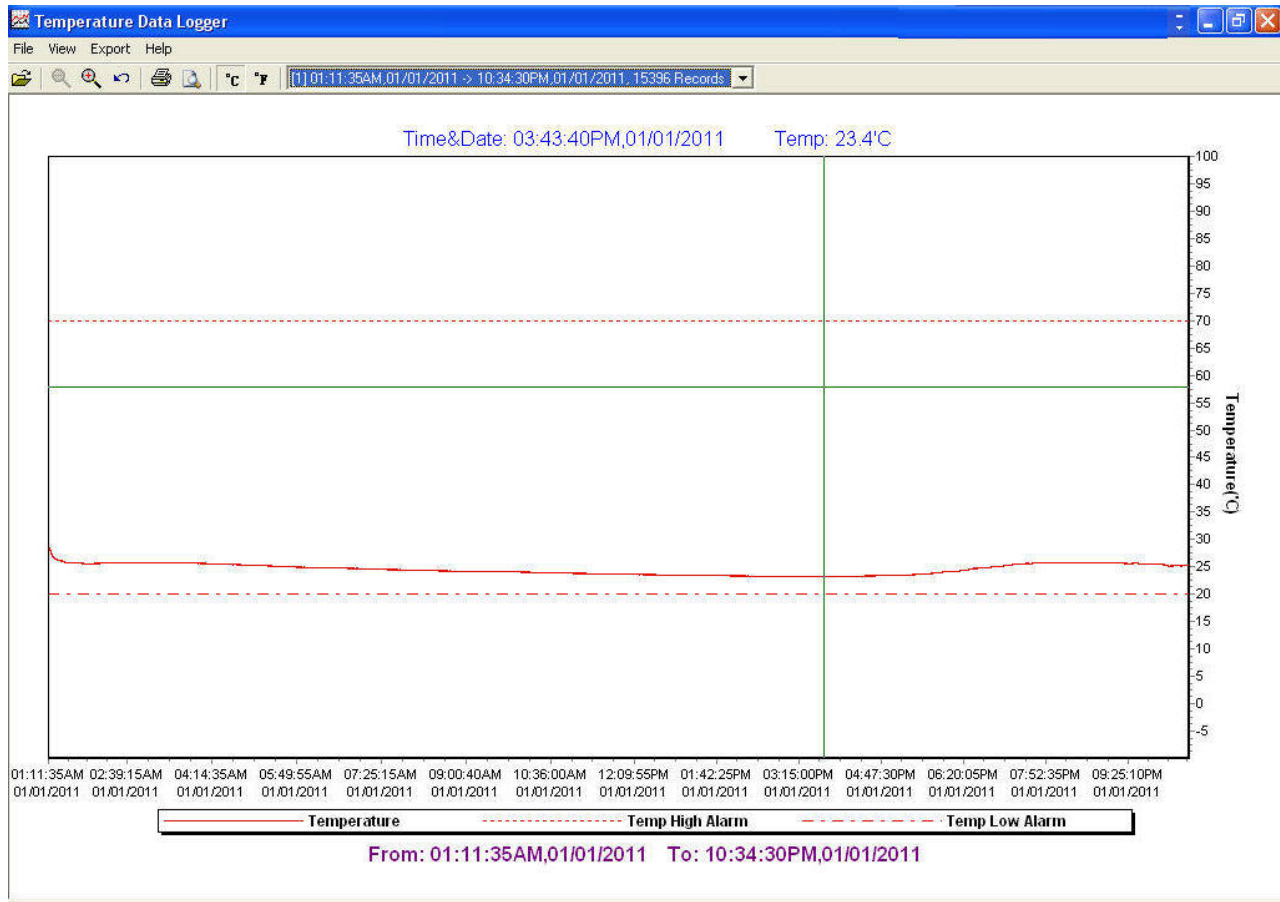


- Download Completed

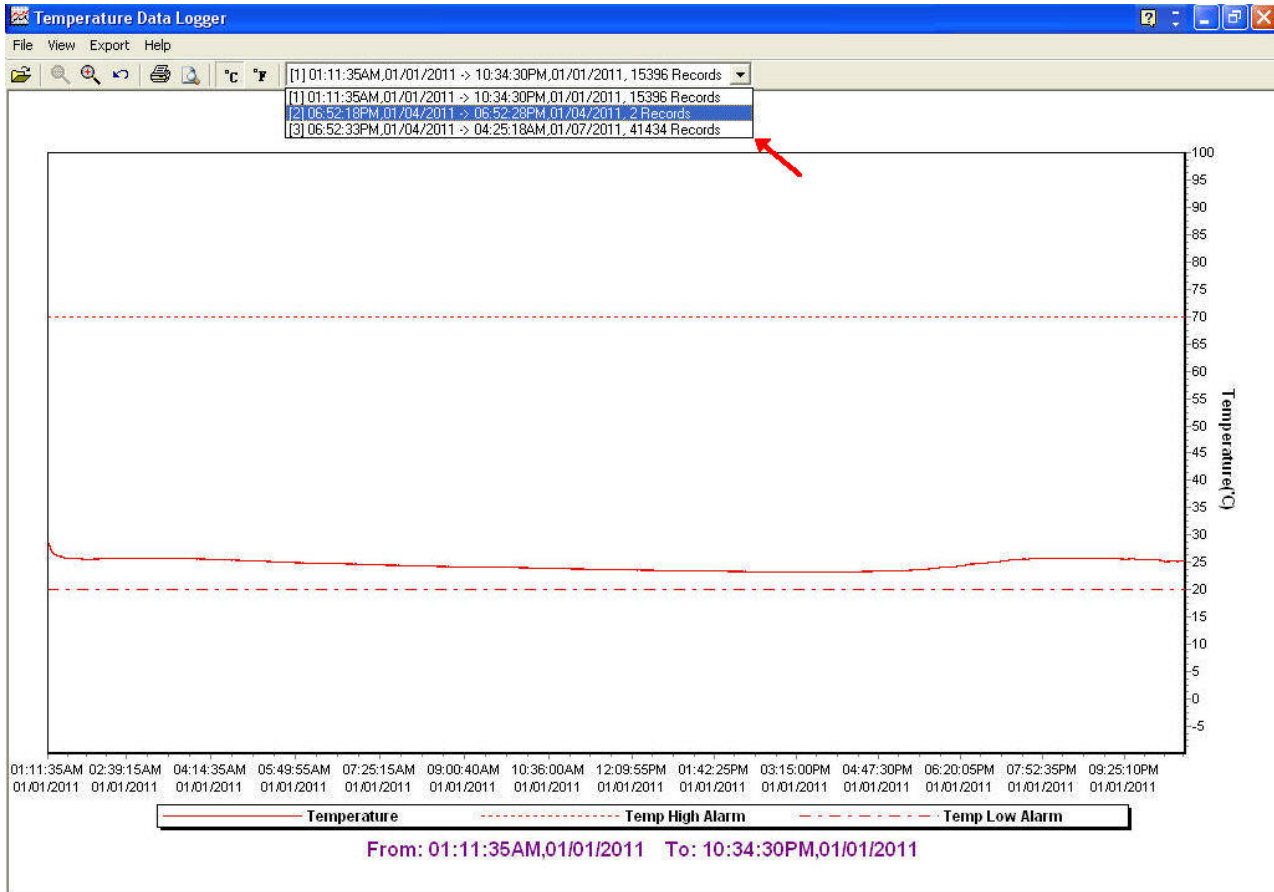
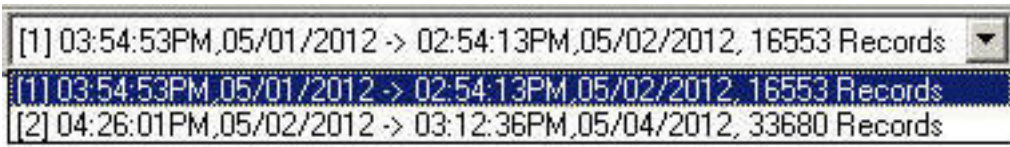


## Graphic & Chart Analysis

Downloaded data will first be displayed in graph format.



Each data groups are listed according to the date of the sampling. Lowest group number represents earliest sampling date.

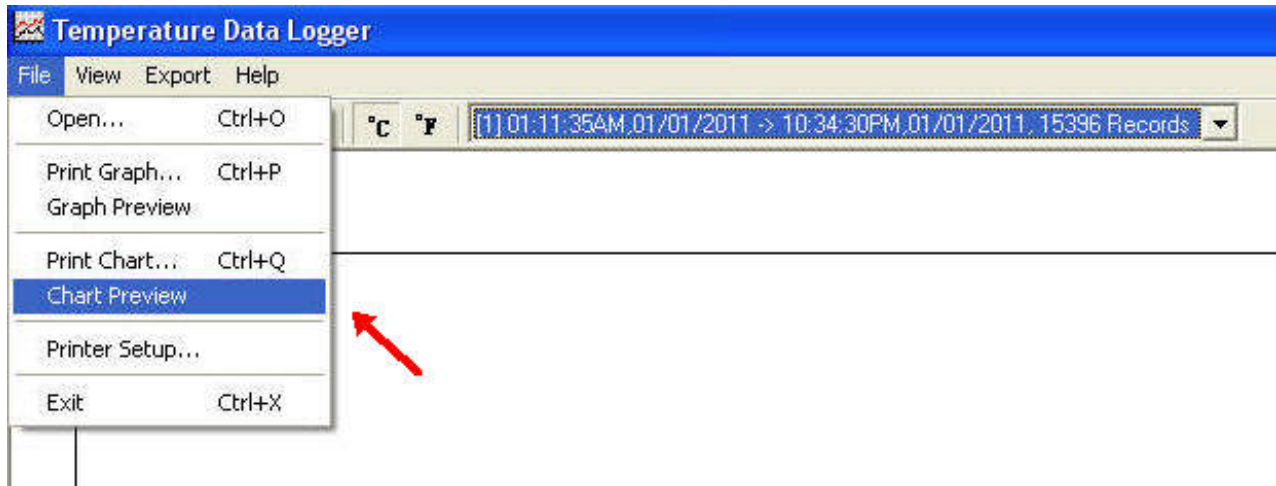




## Data in Listing Format

To display data in Listing format:

- Click File
- Click Chart Preview



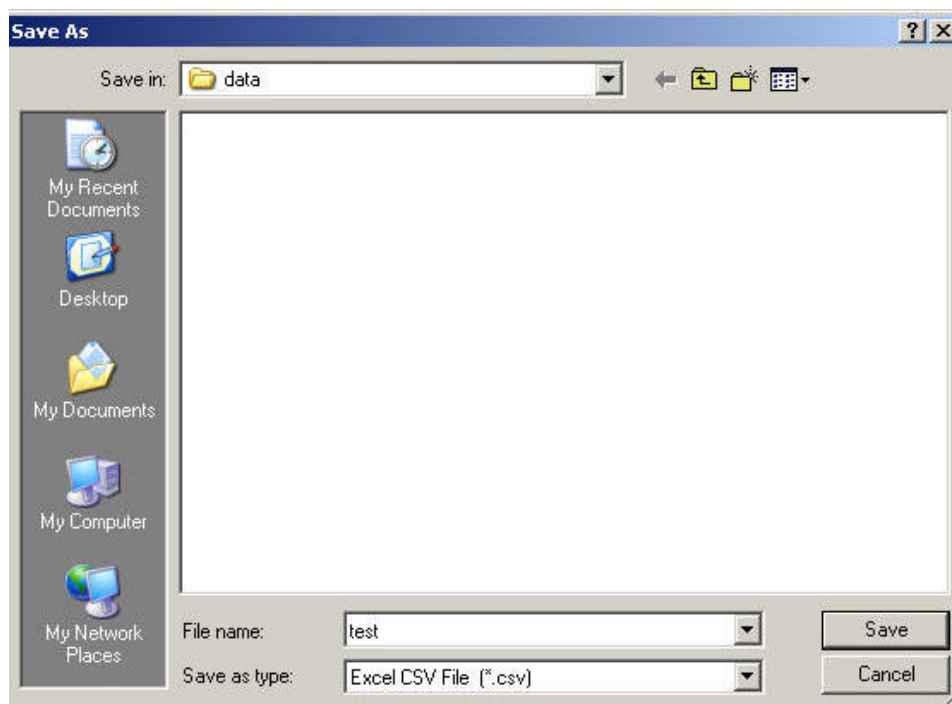
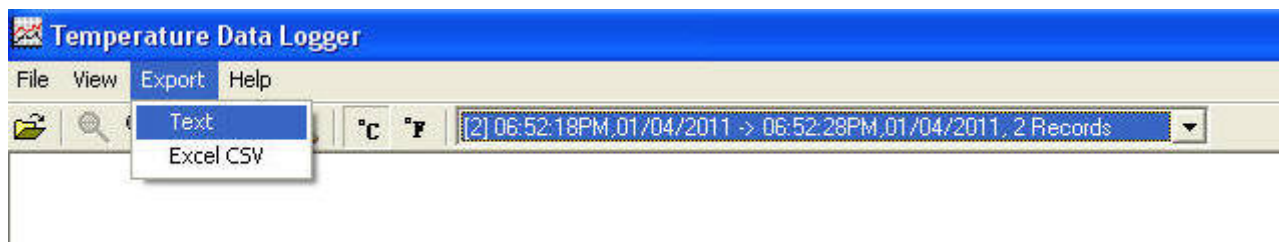
## Data Listing Format

Product Name: Temperature Data Logger  
Description: STLogger Record Data  
Start Data&Time: 06:52:18PM,01/04/2011  
End Data&Time: 06:52:28PM,01/04/2011  
Interval: 10 seconds  
Record Count: 2  
Temp Alarm High: 70.0 'C  
Temp Alarm Low: 20.0 'C

<u>No.</u>	<u>Time</u>	<u>Date</u>	<u>Temp('C)</u>	<u>Alarm</u>
1	06:52:18PM	01/04/2011	33.2	
2	06:52:28PM	01/04/2011	33.5	

## Data Export

Select export data type: Text or Excel CSV.



Click Save to save the file in .CSV/Text format.



File Saved.