Temperature Datalogger

Users Manual

USB Datalogger

IP 54 Water Proof

TABLE OF CONTENTS

1 FEATURES 4

2 SPECIFICATIONS 4

3 APPLICATIONS 5

4 START UP AND GENERAL OPERATION 6

5 TURN ON TEMPERATURE DATA LOGGER 7

6 SWITCH BETWEEN ℃ OR ℉ 8

7 RECORDING DATA 9

8 SAMPLING RATE 11

9 TEMPERATURE CALIBRATION 12

10 SOFTWARE INSTALLATION 14

11 USING PC SOFTWARE 15

12 CONNECTION STATUS 16

13 SETUP SCREEN 18

14 DOWNLOAD RECORDS 19

15 GRAPHIC & CHART ANALYSIS 21

16 DATA IN LISTING FORMAT 23

17 DATA LISTING FORMAT 24

18 DATA EXPORT 25

1 FEATURES

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

2 Specifications

Temperature

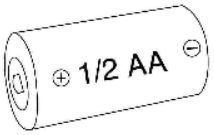
Type	Thermistor
Measurement Range	-40 to 85℃(-40~185℉)
Accuracy	±1.2℉(0.6℃) from -4 to 122℉(-20 to 50℃) ±1.8℉(1.0℃) all other ranges
Resolution	0.1℃

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

3 Applications

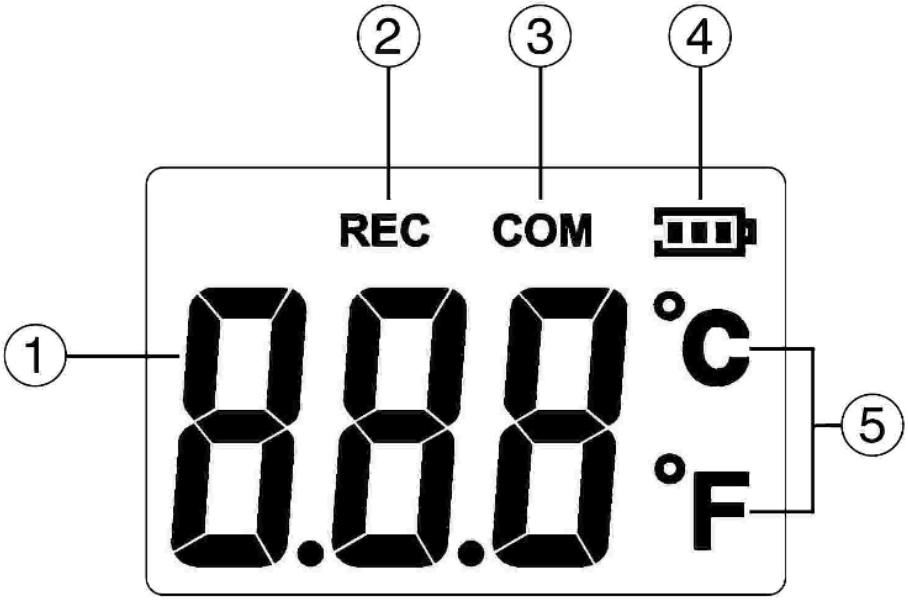
- Building HVAC monitoring.
- Warehouses.
- Refrigerator.
- Clean rooms.
- Freezer.
- Shipping vans.
- Shipping crates.
- Cargo vessels.
- Storage areas.

WHAT'S IN THE BOX

		
1.Main Unit	2. USB Cable	3. 1/2 AA Battery

4 START UP AND GENERAL OPERATION

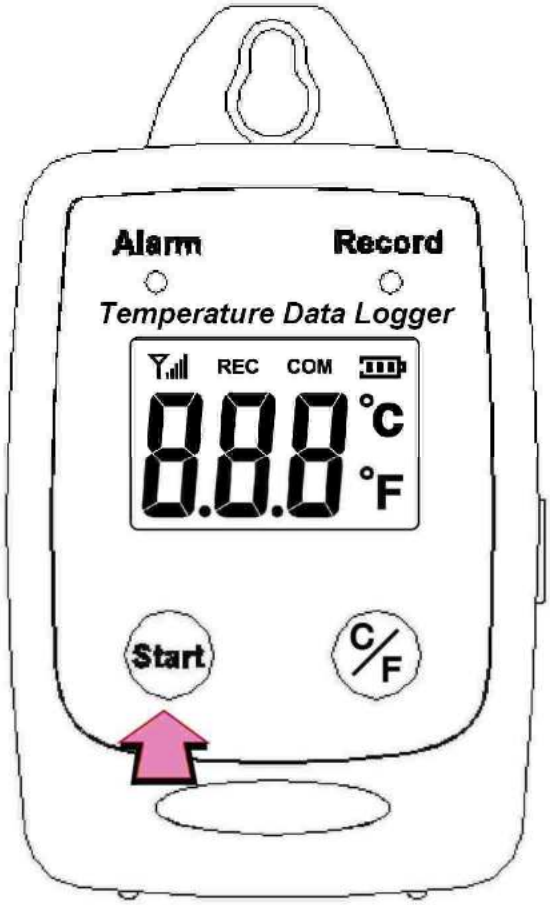
● LCD Display



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

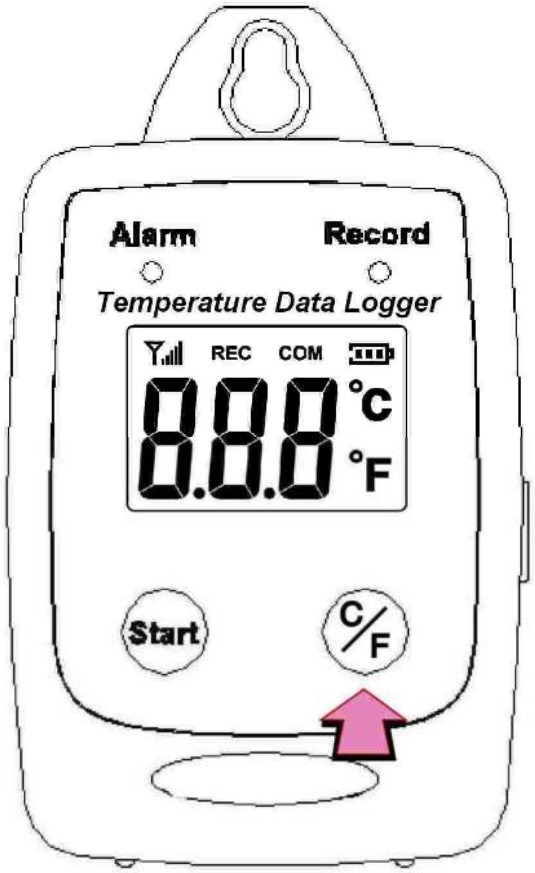
5 Turn On Temperature Data Logger

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



6 Switch between ℃ or ℉

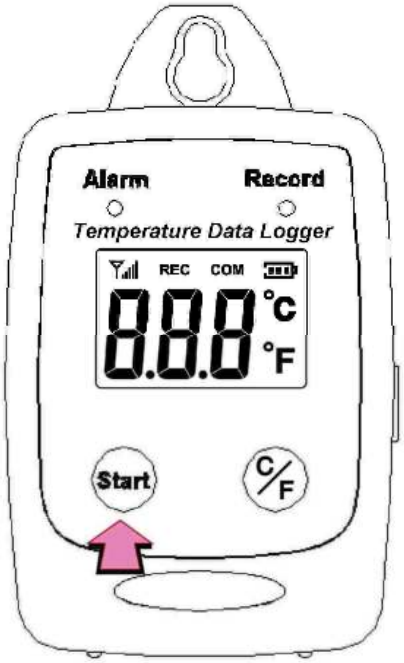
- Press ℃/℉ to switch between ℃ or ℉



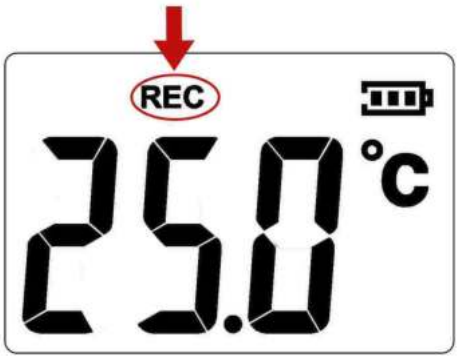
Display current Temperature(℃)	Display current Temperature.(℉)

7 Recording Data

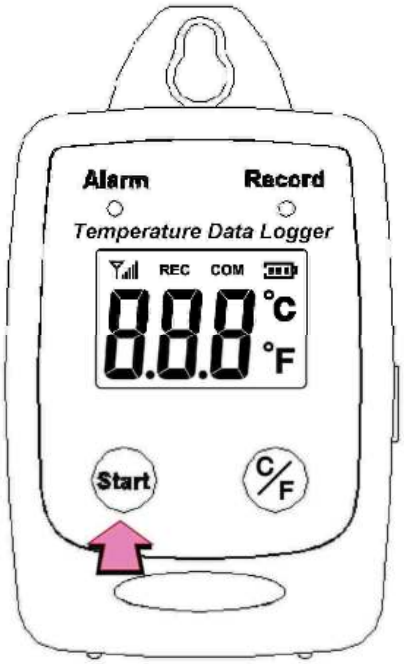
- Press the Start button to start data recording.



- 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.

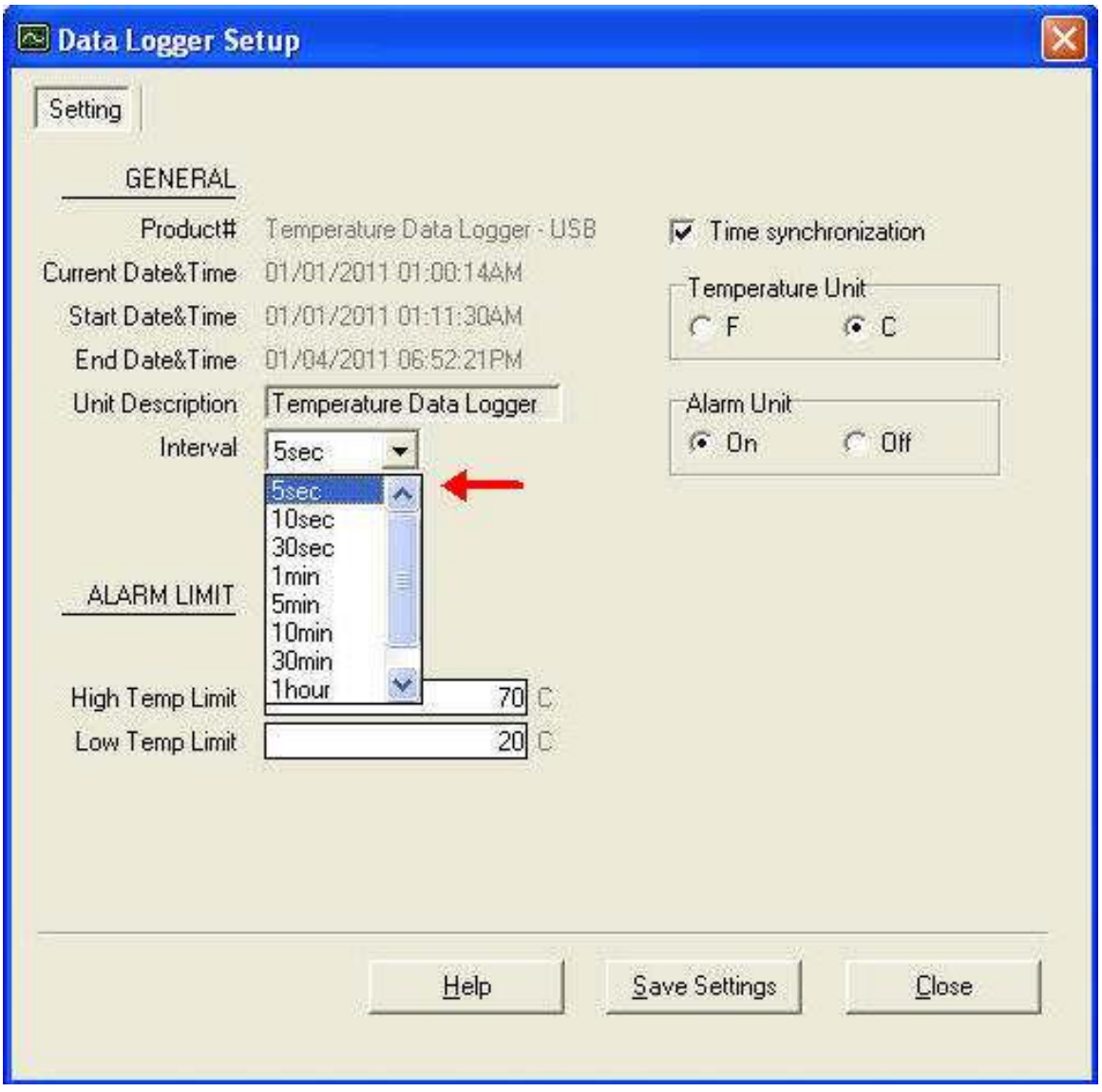
8 Sampling rate

(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.

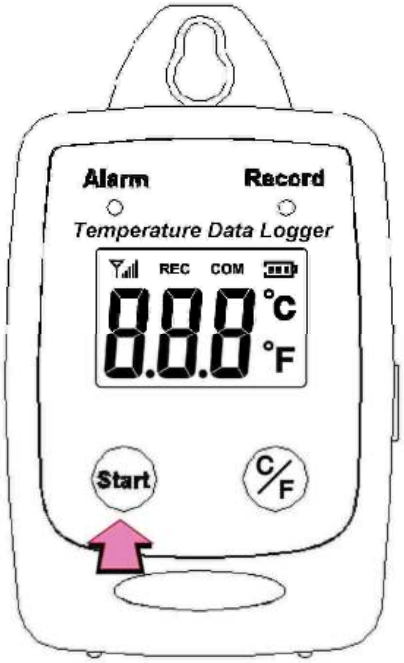
Click “Save Settings” to save the setting.



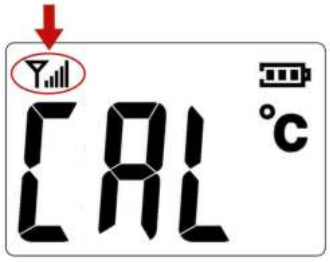
9 Temperature Calibration

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

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

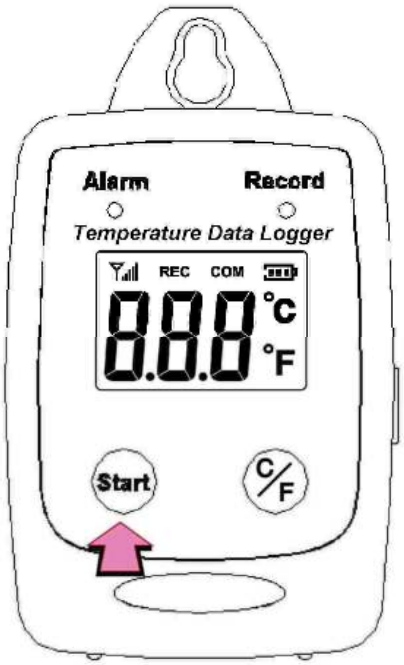


4. During the calibration, the LCD will display the antenna sign.



5. The datalogger will start 25℃ 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



10 Software Installation

1.Link website https://www.tenmars.com/

or scan below QR code:

2.Search TM-306U.

3.Click on the TM-306U photo.

4.Click File Download, then select Software Download.

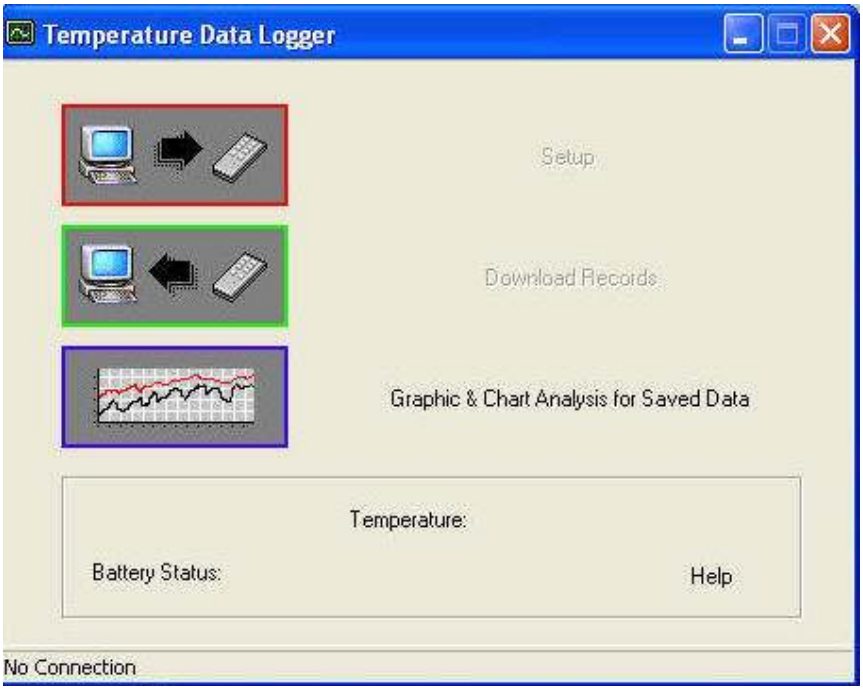
5.Download and unzip the software.

6. For the latest software information and installation procedures, please refer to the **software installation guide**.

11 USING PC SOFTWARE

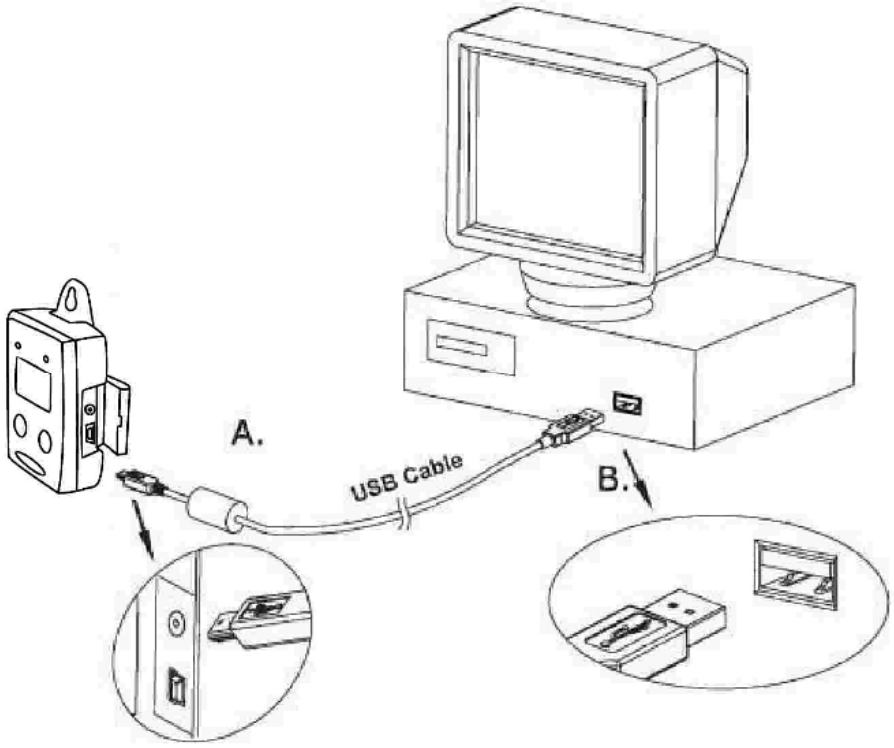
- Start Window PC software.
- Click on All programs, Click on “Temperature Data Logger”
- Click on STLogger to start the datalogger program.

12 Connection Status

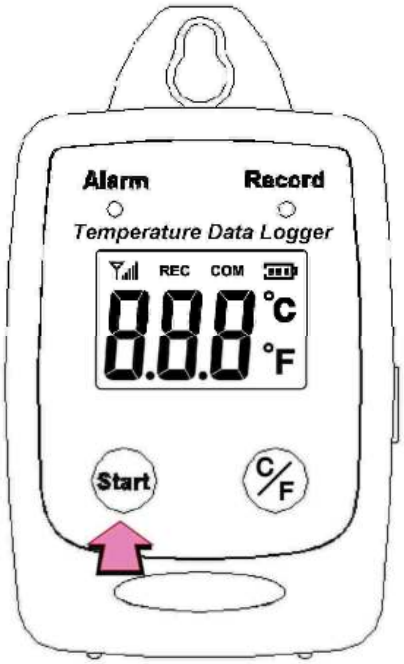


No Connection Screen

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

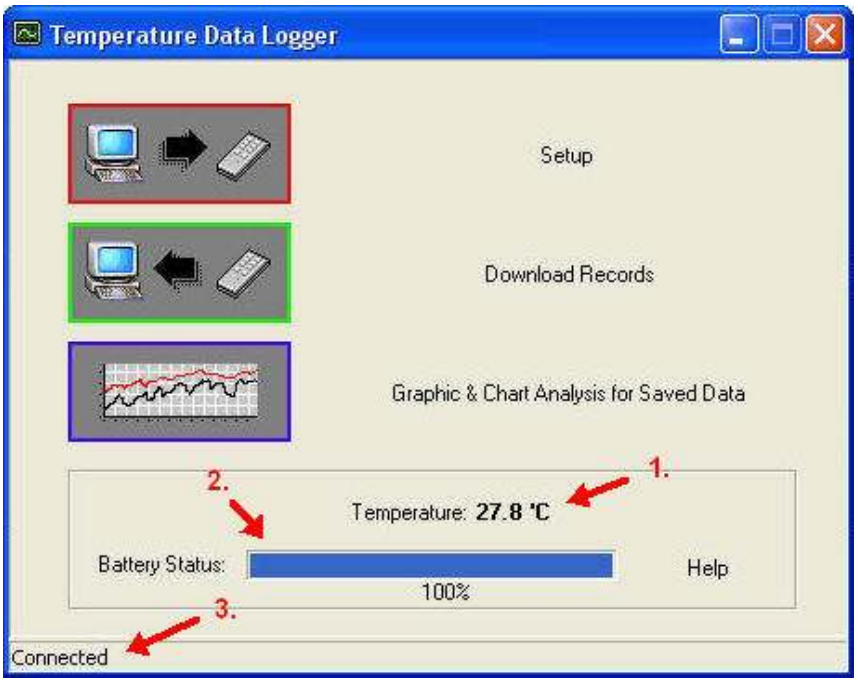


- Press Start for 2 seconds to turn on Temperature Data Logger. **Temperature Data Logger** is now connected to the PC.



- If the datalogger is properly connected, these three values will show up.

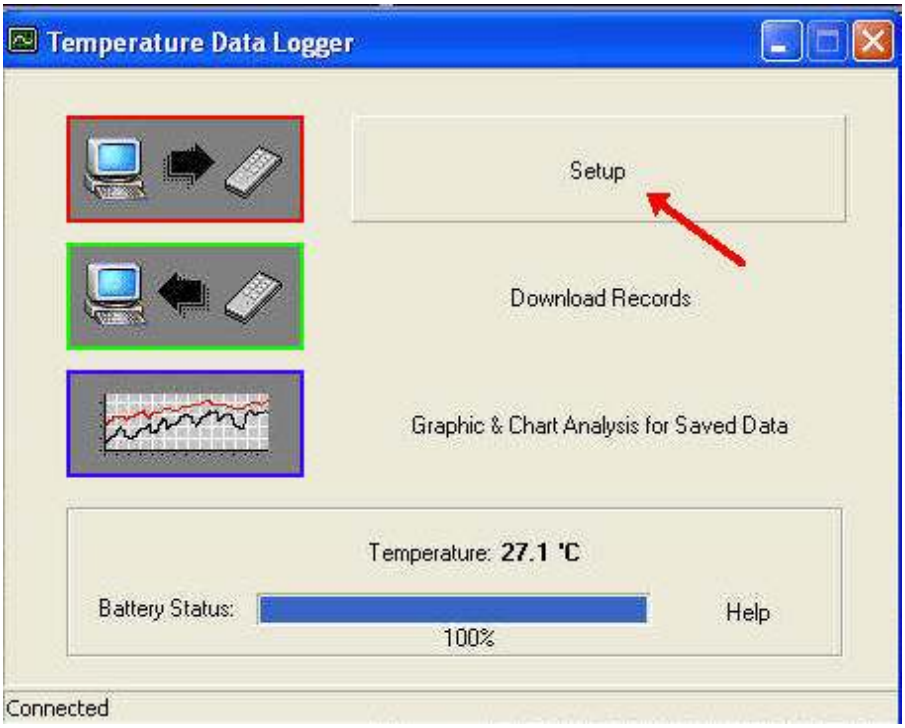
1. Temperature Reading
2. Battery Status
3. Display “Connected”



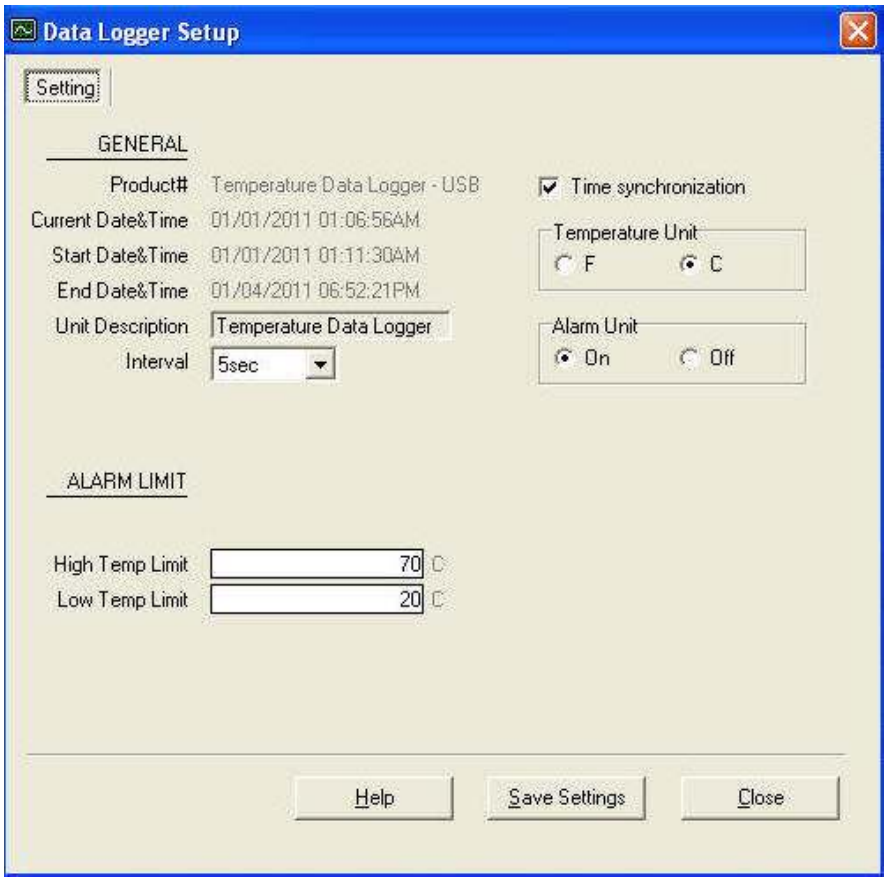
Connected Screen

13 Setup Screen

- Click “Setup” to enter the Setup screen.

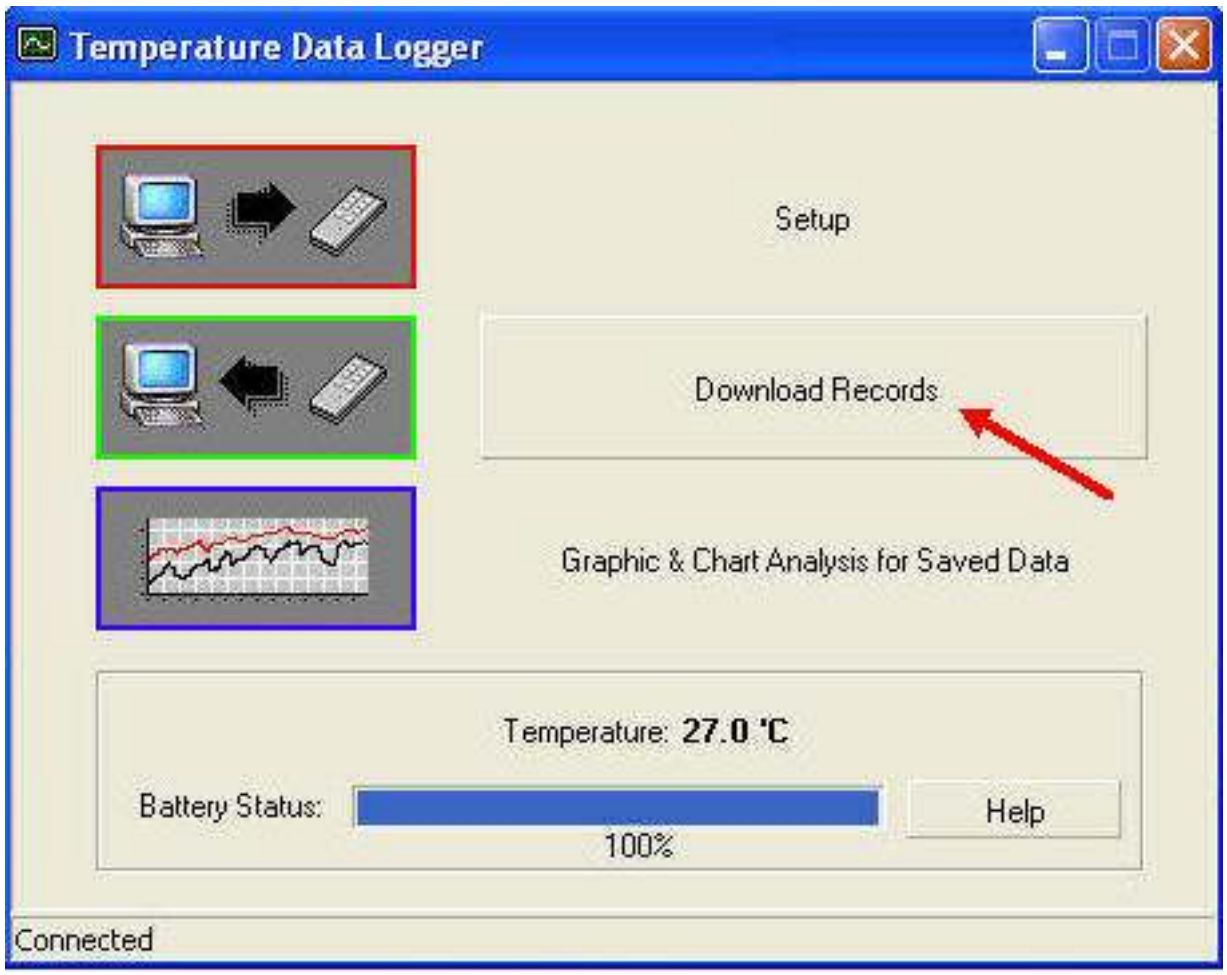


- he values in the white area can be changed by the user.
- The value in the grey area can not be changed by the user.
- Click “Save Settings” to save the values to the datalogger.

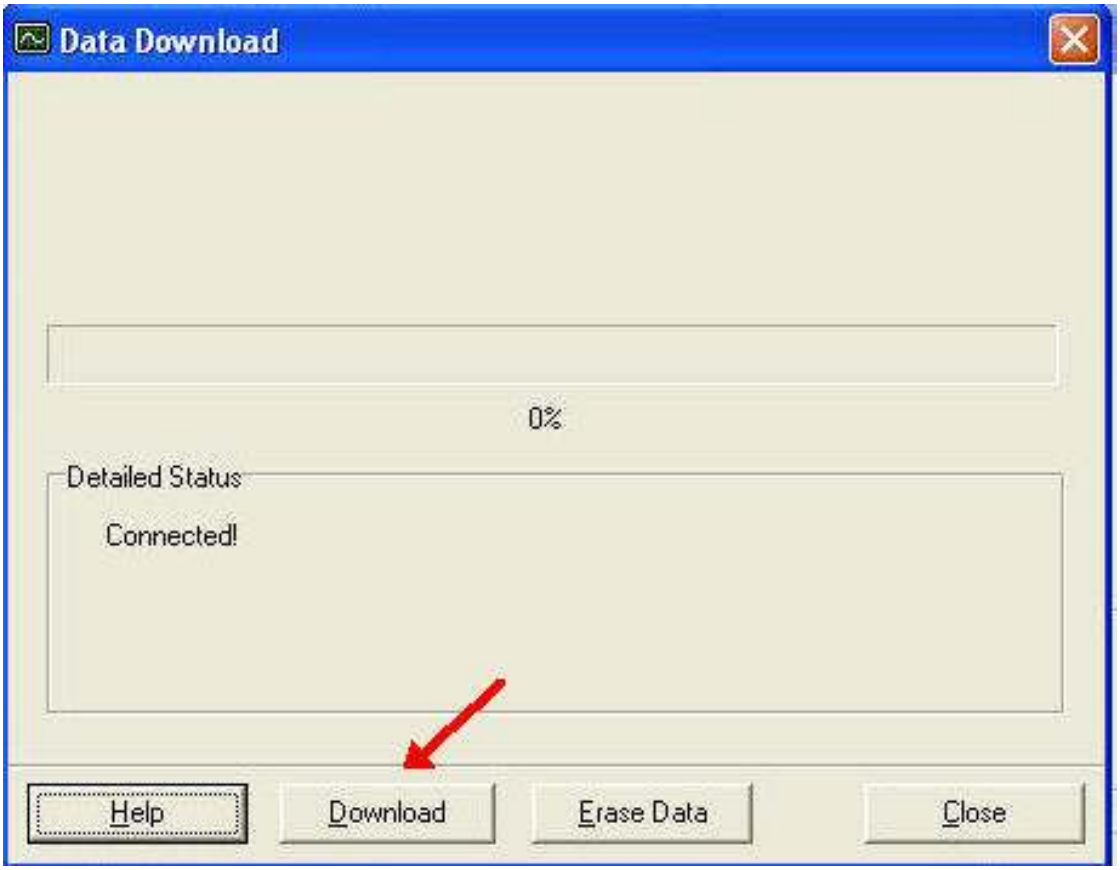


14 Download Records

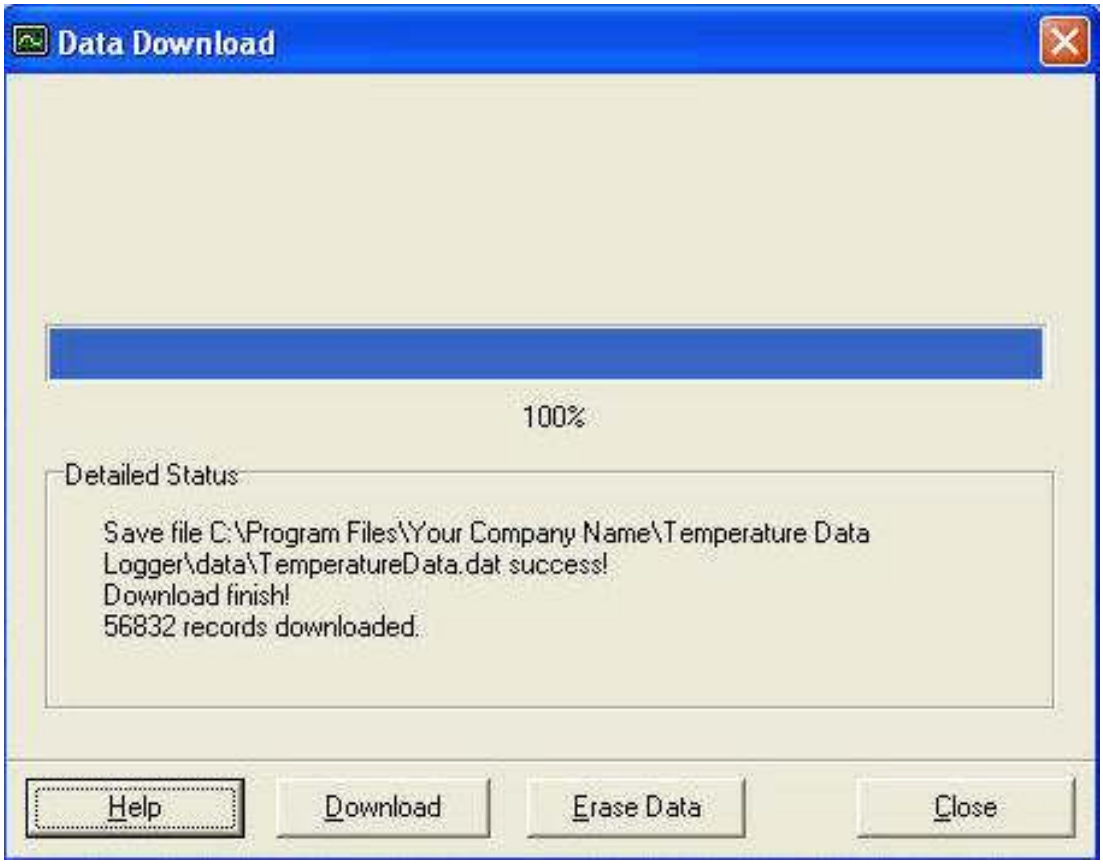
- Click Download to download the stored data.



- Click “Download” to start the download.

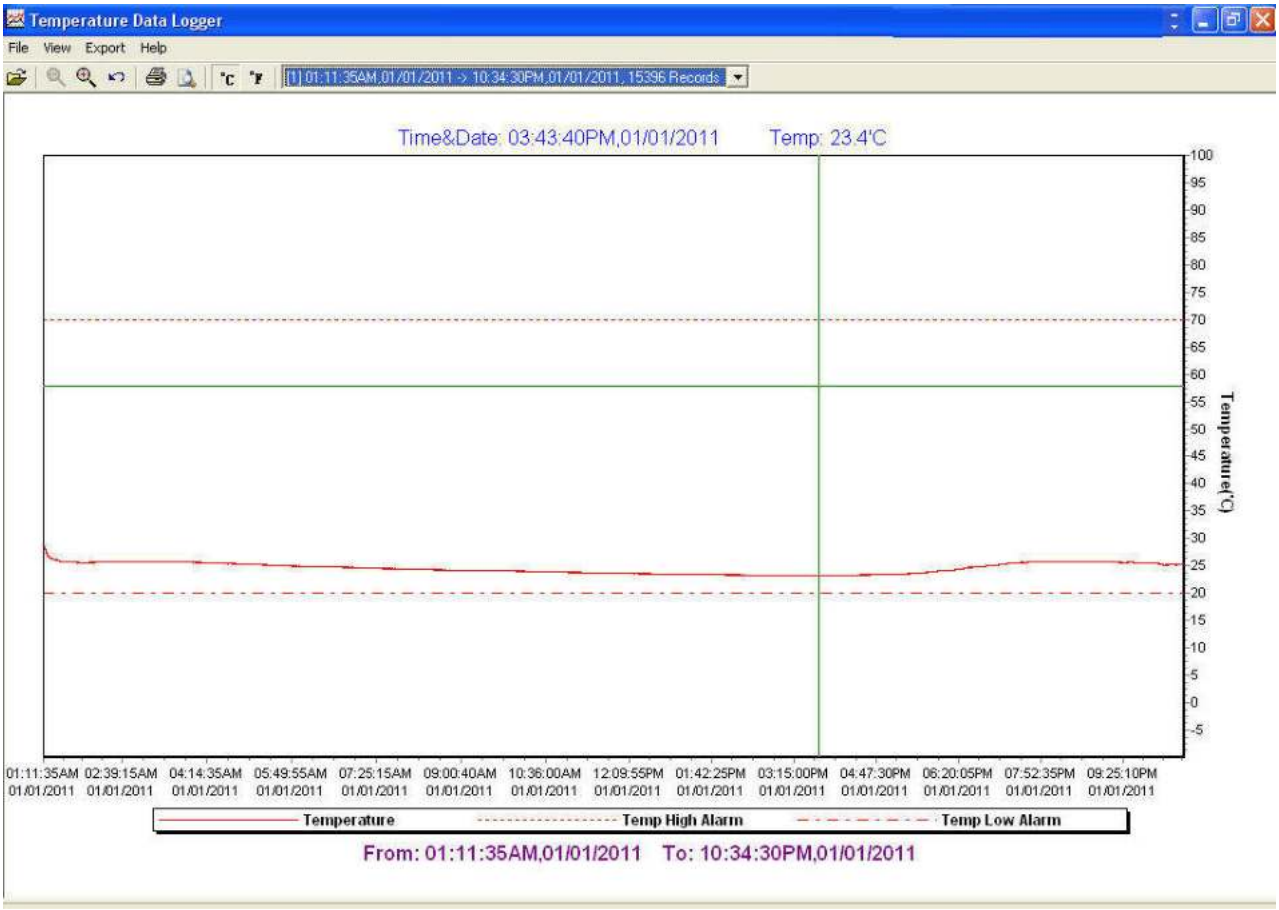


- Download Completed

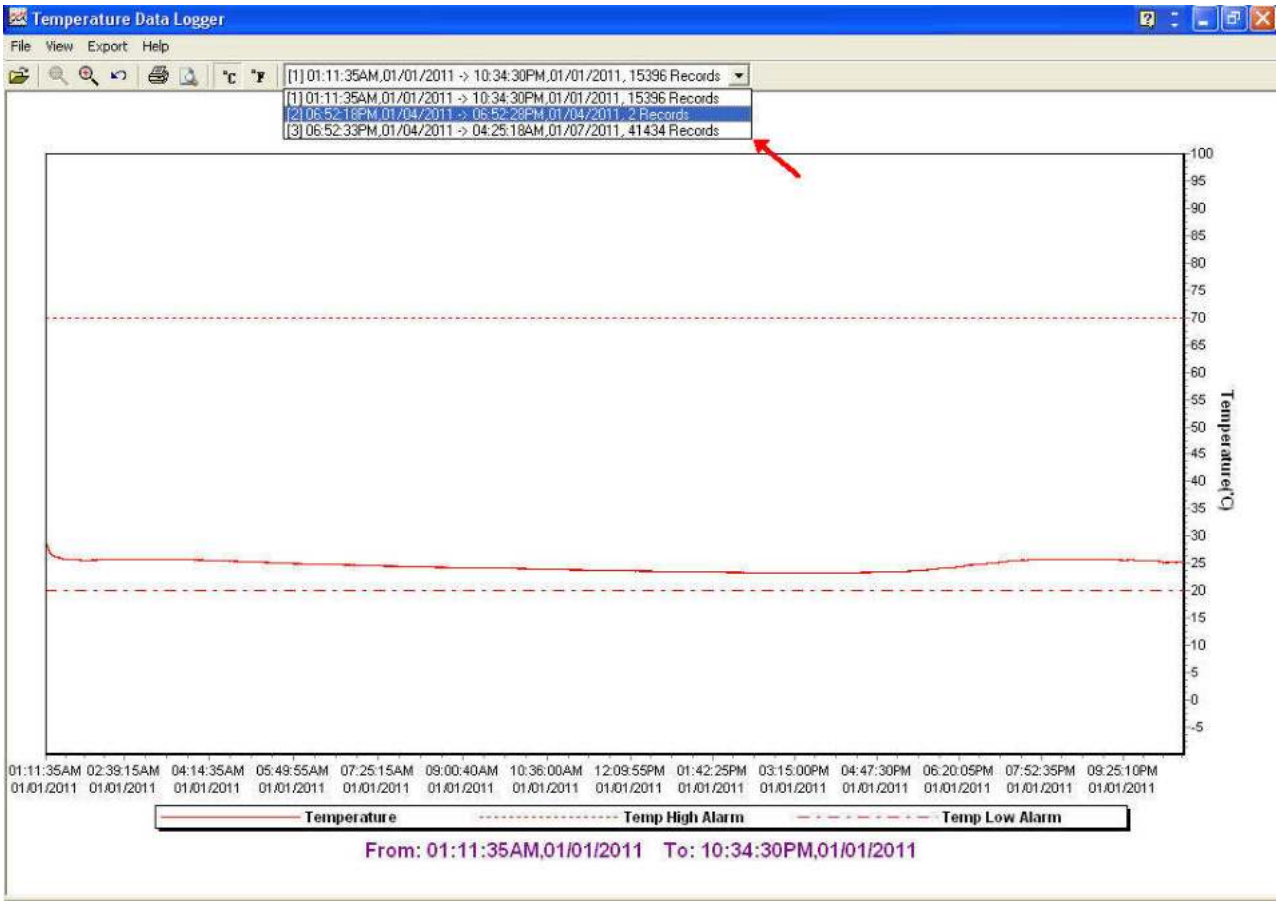


15 Graphic & Chart Analysis

Downloaded data will first be displayed in graph format.



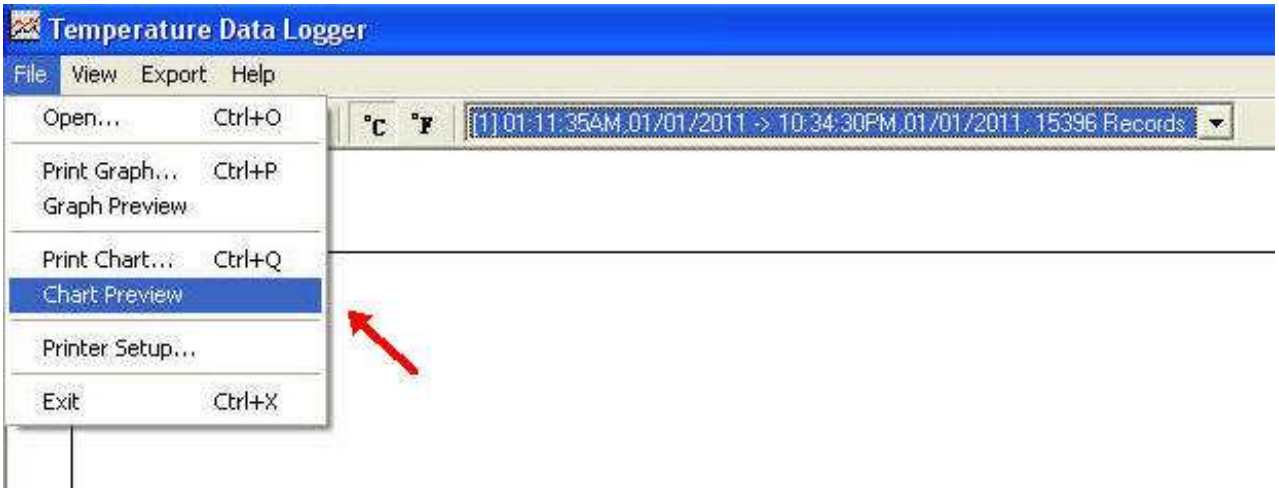
Each data groups are listed according to the date of the sampling. Lowest group number represents earliest sampling date.



16 Data in Listing Format

To display data in Listing format:

- Click File
- Click Chart Preview



17 Data Listing Format

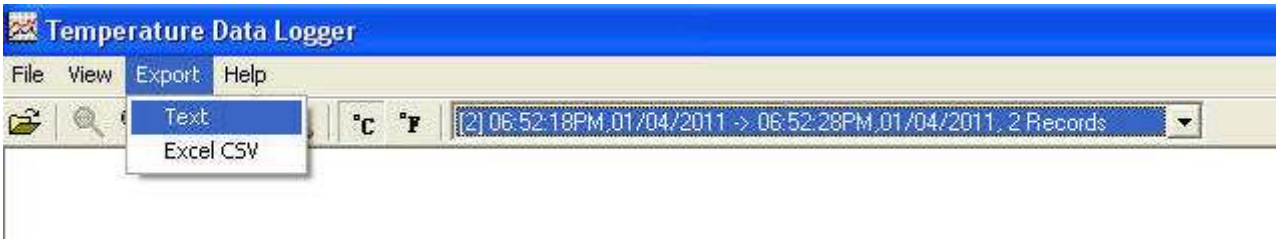
Product Name: Temperature Data Logger
Description: STLogger Record Data
Start Data&Time: 06:52:18PM,01/04/2011
End Data&Time: 06:52:28PM,01/04/2011
Interval: 10 seconds
Record Count: 2
Temp Alarm High: 70.0 'C
Temp Alarm Low: 20.0 'C

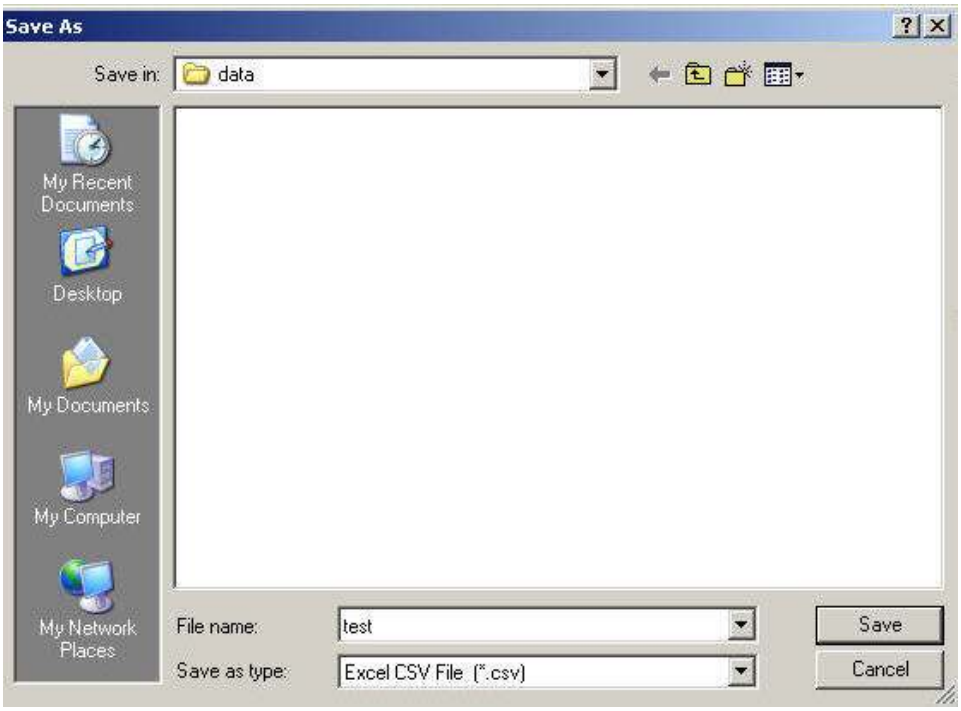
No.	Time	Date	Temp('C)	Alarm
1	06:52:18PM	01/04/2011	33.2	
2	06:52:28PM	01/04/2011	33.5	

Printed 7/24/2012 Page 1 of 1

18 Data Export

Select export data type: Text or Excel CSV.





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

File Saved.