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**VOLTCRAFT®**

**User Manual**

**Voltsoft**

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# 1 Introduction

Dear Customer,

Welcome to Voltcraft®. Thank you for purchasing this product and we are sure you have made a very good decision.

Voltcraft® - in the field of measuring, charging and network technology, this name represents high quality products which perform superbly and which are created by experts employing continuous innovation and improvement. From ambitious hobby electronics enthusiast to professional user, products from Voltcraft® brand family provide the optimum solution even for the most demanding tasks. Voltcraft® products also offer an almost unbeatable price-performance ratio. This is why we are absolutely certain: With our Voltcraft® product line, we have created the foundation for a long, prosperous and successful customer partnership.

We wish you have a great deal of enjoyment from your new Voltcraft® product!

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## 2 Using this Manual

The Voltsoft System (Voltsoft) is integrated control software for controlling different Voltcraft® electronic products. By using Voltsoft, you can manage your Voltcraft® products using only a single piece of software.

This manual will explain the usage and workflow of different components of Voltsoft, and also discuss how Voltsoft can control different hardware models.

There are many terms and abbreviations in this manual that may be unfamiliar to you if you are new to web hosting. You can find information on these terms and abbreviations in the glossary of this manual or by searching them using an Internet search engine such as Google.

## 3 Installation

### 3.1 *System Requirements*

To install Voltsoft, your computer should contain:

- Pentium 233-megahertz (MHz) processor or faster
- At least 1GB of RAM
- At least 2GB of available space on the hard disk
- USB 2.0 / 3.0 Port(s)

Voltsoft only supports the following operating systems:

- Microsoft Windows XP Service Pack 2 or above
- Microsoft Windows Vista Service Pack 2 or above
- Microsoft Windows 7
- Microsoft Windows 8

If your Windows does not contain the corresponding service pack version, please perform a Windows update first.

.NET framework library version:

- .NET framework 2.0 SP2

If your Windows does not contain the corresponding .NET framework, Voltsoft setup will help you to download it from the Internet. However, it is recommended upgrading first before installation.

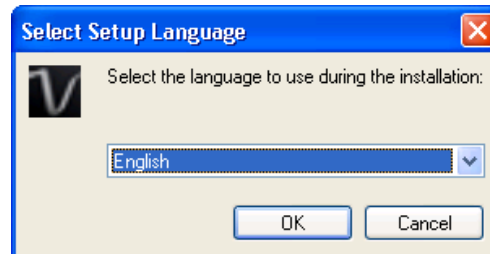
Some device may not work if connecting via USB Hubs, included:

- DL101T / DL121TH / DL161S / DL180THP / DL111K

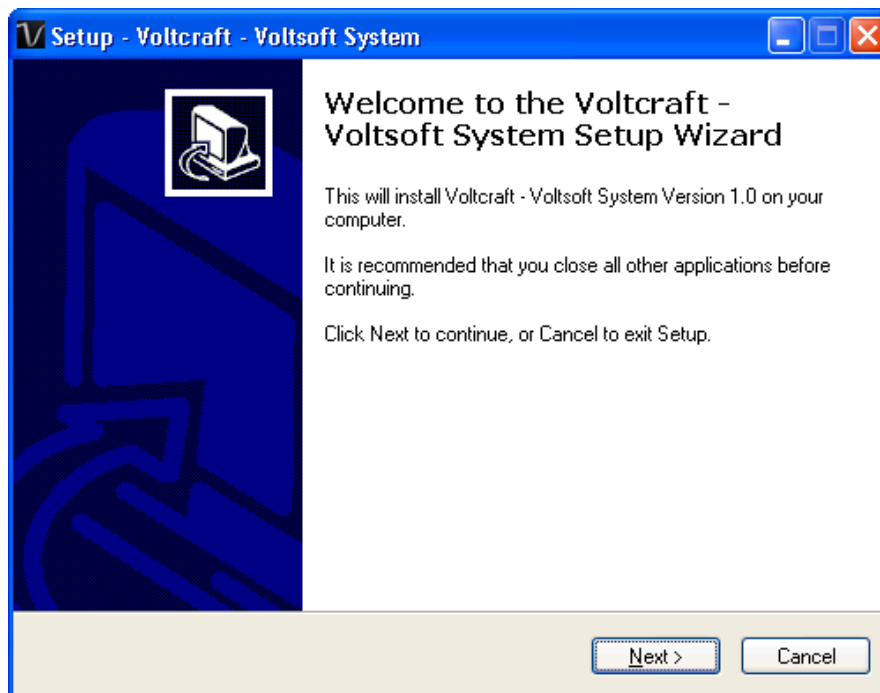
## 3.2 Install Voltsoft

1. Insert the installation CD-ROM in your drive.
2. The menu will be opened automatically (if installation doesn't start, double-click autorun.exe in your CD-ROM directory). Follow the on-screen instructions.

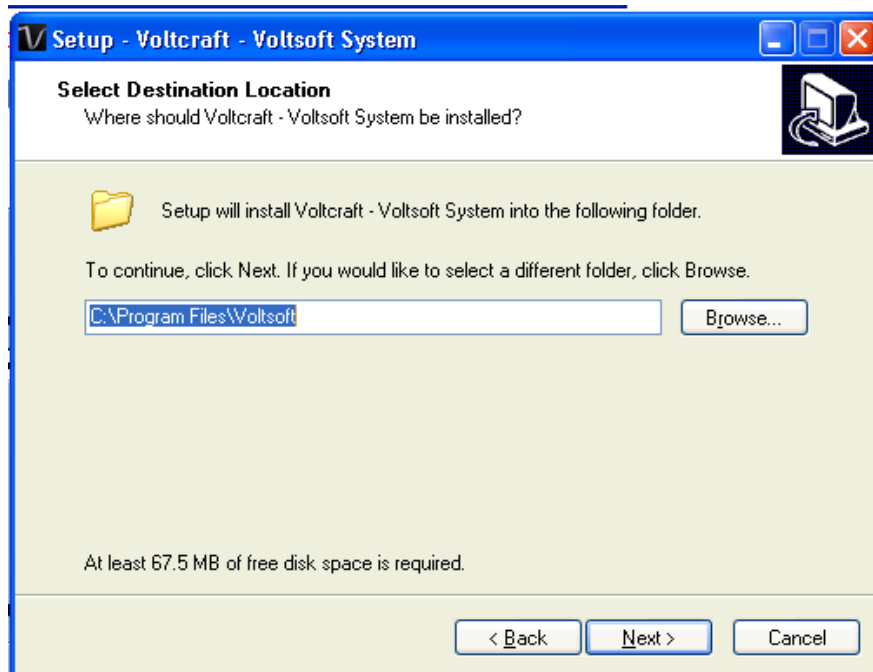
Step 1: Select the installation language



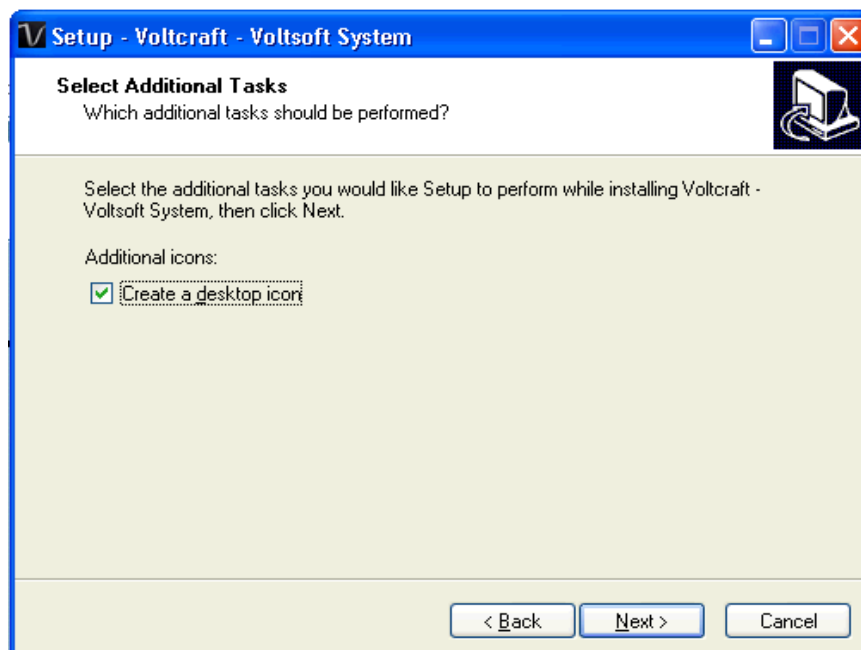
Step 2: Click "Next" for all the following steps



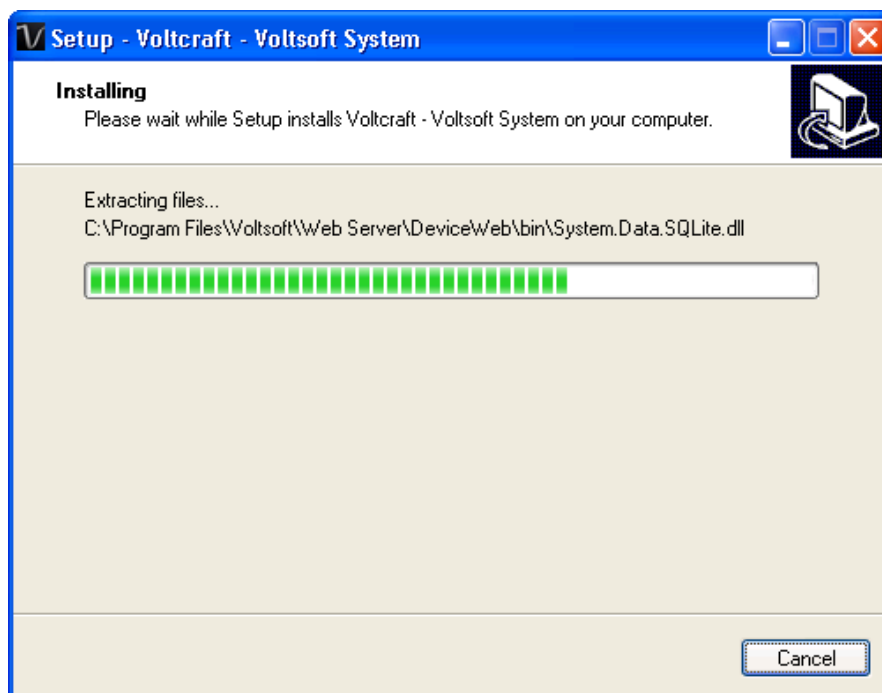
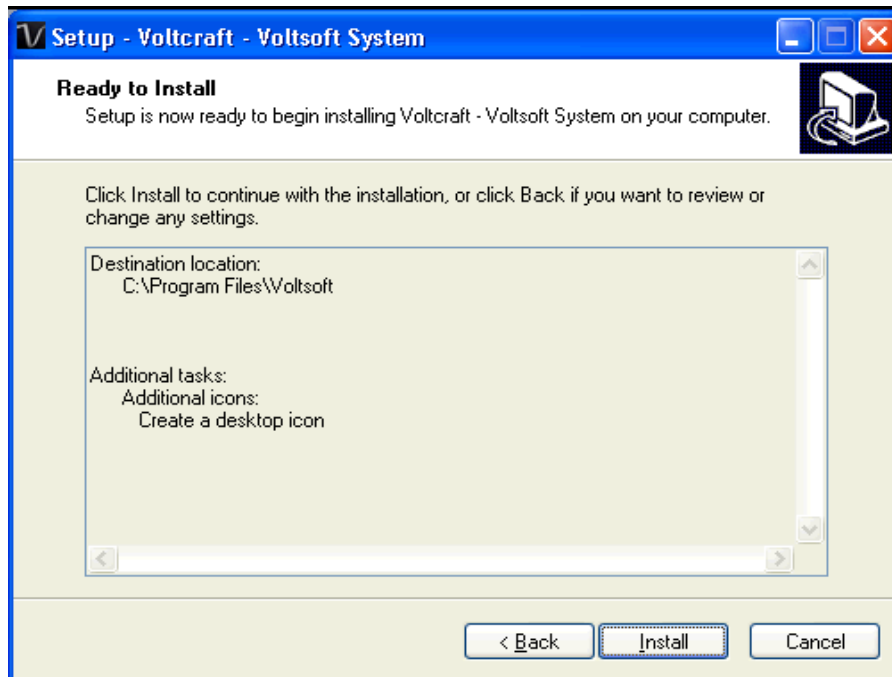
## Step 3: Select Destination Location



## Step 4: Tick the checkbox to create desktop icon for Voltsoft

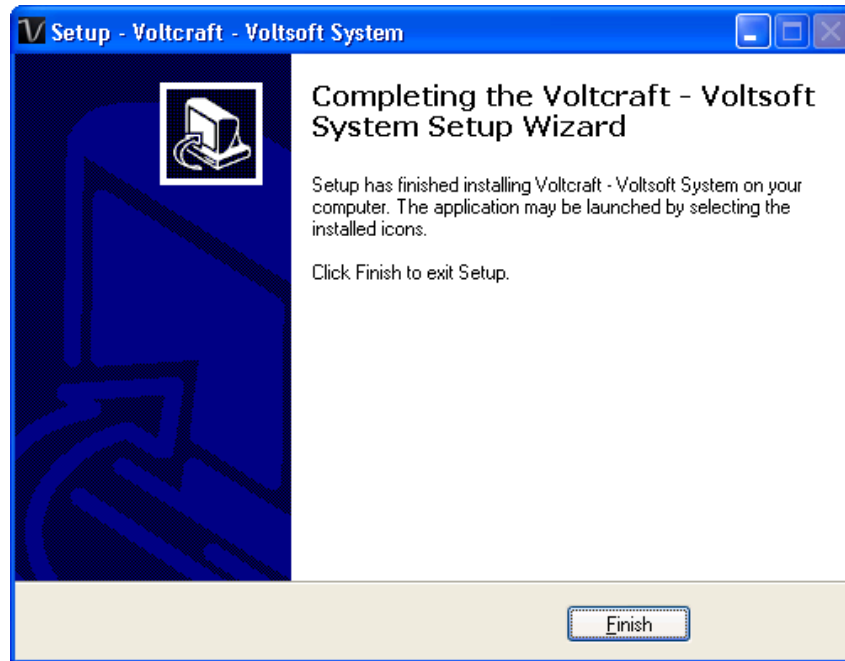


Step 5: Click "Install". Installation will begin.



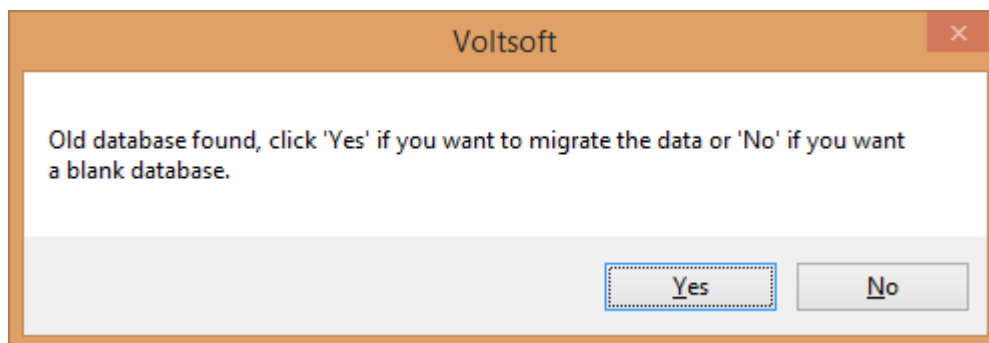


Step 6: Click "Finish" to complete the installation



### 3.3 *Migrate existing data*

If you have an old version of Votsoft installed, following dialog will be prompt. Click "Yes" if you want to keep existing data or "No" if you want to have an empty database.



### 3.4 Register Voltsoft

Voltsoft has two different versions: Standard and Professional. The professional version contains more features than the standard edition.

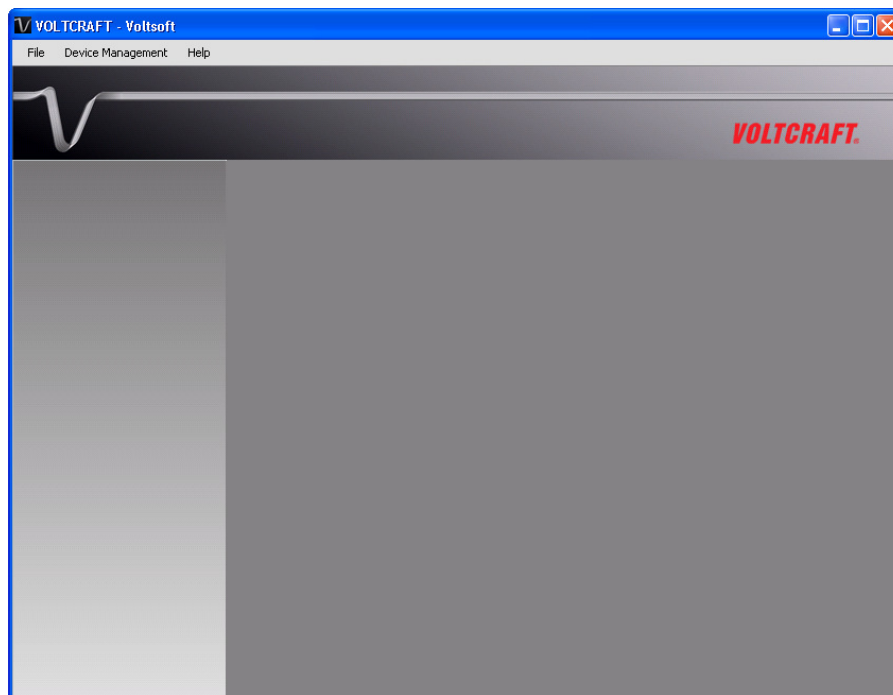
#### Standard vs. Professional

	Standard	Professional
User Management		✓
Email Management		✓
General Settings	✓	✓
Language Preference	✓	✓
Email Template		✓
Device Management (Add / Remove)	✓	✓
Custom Graph		✓
Email Alert		✓
Web Interface		✓

Voltsoft will be installed by default as the standard version. In order to enable the professional features, you have to purchase a software package (VoltSoft Data Logger, BN: 101333) and enter a valid license key (which is attached on CD) to register.

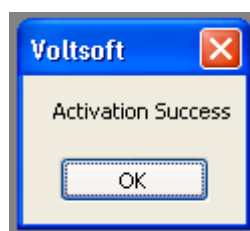
To register:

1. Launch the Voltsoft Windows client



## 2. Click Help -> Online Activation

3. Enter a valid license key and the registration information.
4. Enter the proxy server settings if your computer accesses the Internet through a proxy server.
5. Please read and accept our privacy policy and license agreement.
6. Click the "Activate" button to perform online activation.
7. If activation is successful the following message will be displayed:



If there is any problem during online activation, user can activate via offline activation.

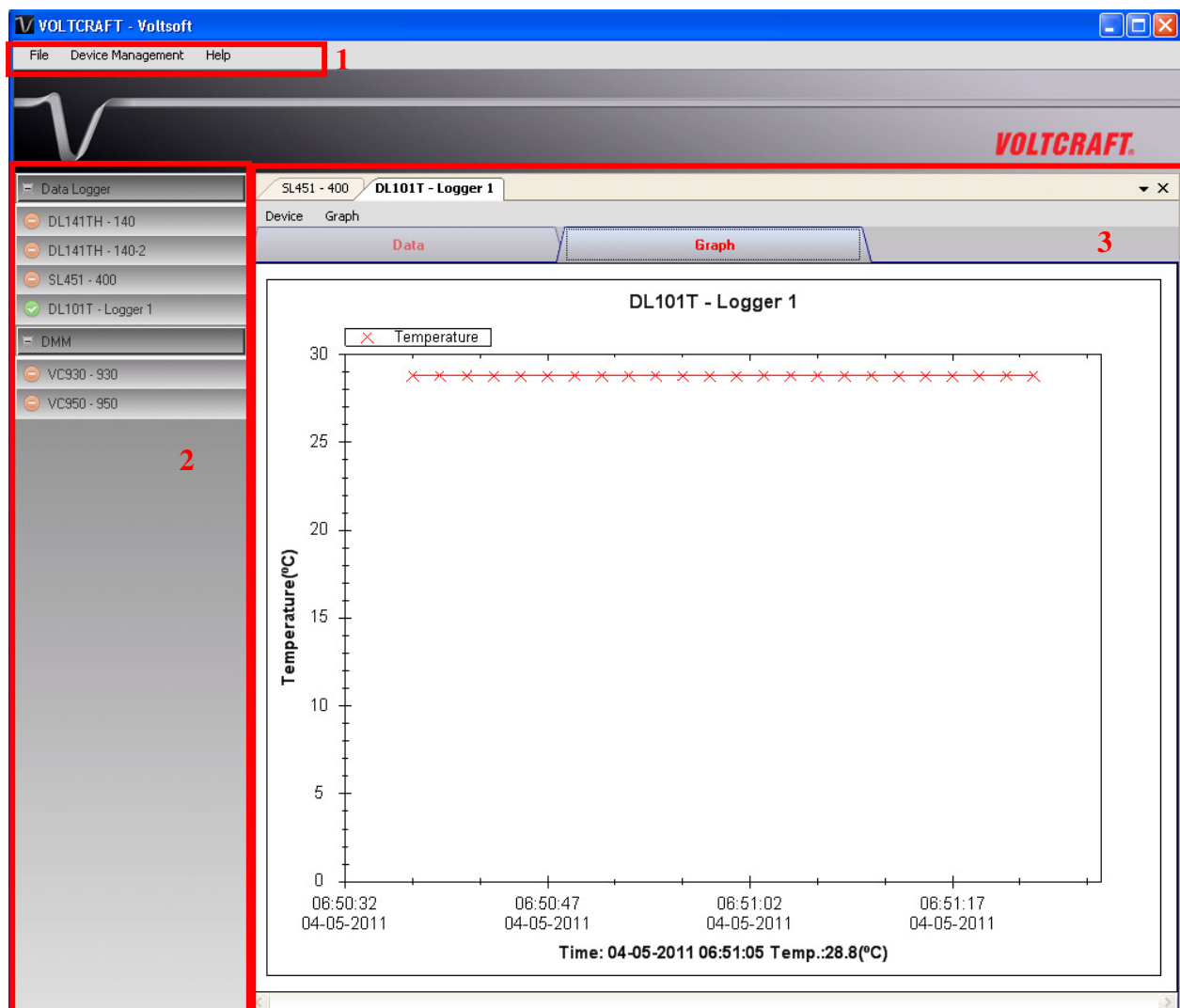
1. Click the Offline Activation button and select the location for saving the activation file (Voltsoft.config)
2. Send the Voltsoft.config to our customer service, email [kundenservice@conrad.de](mailto:kundenservice@conrad.de)
3. Our customer service will return the license file (dms.config) to you.
4. Copy it to the install directory (e.g. C:\Program Files (x86)\Voltsoft)
5. Start Voltsoft again.

## 4 Standard Version

### 4.1 Launch the Voltsoft Windows Client

To start the application, please go to Start Menu -> All Programs -> Voltcraft -> Voltsoft Client

Main screen of the Voltsoft client is as follows:



1	Main Menu Area	Users can access different functions through the main menu.
2	Device List Area	Contains the list of devices which are already registered in the system. Green icon – Indicates that the device is currently connected to the computer Red icon - Indicates that the device is currently not available. Clicking on the icon can open that device in the device control panel area.
3	Device Control Panel	The opened device will be displayed in this area.

## 4.2 General Settings

To launch this module, please click File->Settings.

**General Settings**

**Unit Preference** 1

Temperature: Celsius

Air Pressure: hPa

**Data Storage** 2

Remove records after: 60 Day(s)

**Download Data** 3

☐ Overwrite data with duplicate download time

**Email Settings** 4

Email Sender: no-reply@cei.com

SMTP Server: smtp.hkbn.net Port: 25

Login ID: Password:

☐ Enable SSL

**Web Server Setting** 5

Maximum Number of Login: 2

Welcome message: Welcome message

Port Number: 80

URL: http://192.168.1.130/

6

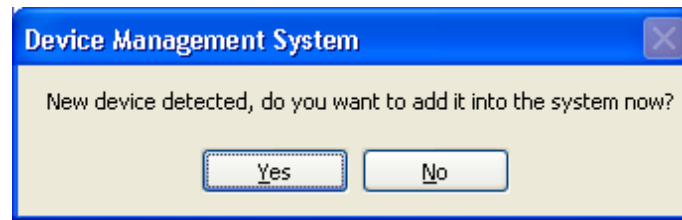
Restart Voltsoft Server Save Close

1	Unit Preference	Select the measurement unit used in Voltsoft.
2	Data Storage	In order to prevent data overload, the system will delete old data automatically. User can specify the number of days to keep the device readings.
3	Download Data	If this option was checked and the system is downloading new data with measurement time, which already existed in the database, then existing data will be overwritten.
4	Email Settings	<p>This area configures the outgoing email settings.</p> <p>Email Sender – This will be the email sender of the alert email.</p> <p>SMTP Server and Port – The outgoing SMTP server name and port number. (for Gmail, port number is 465)</p> <p>Login ID and Password – The SMTP server login and password (if required).</p> <p>Enable SSL – Check this checkbox if your SMTP server requires SSL encryption (i.e. Gmail)</p>

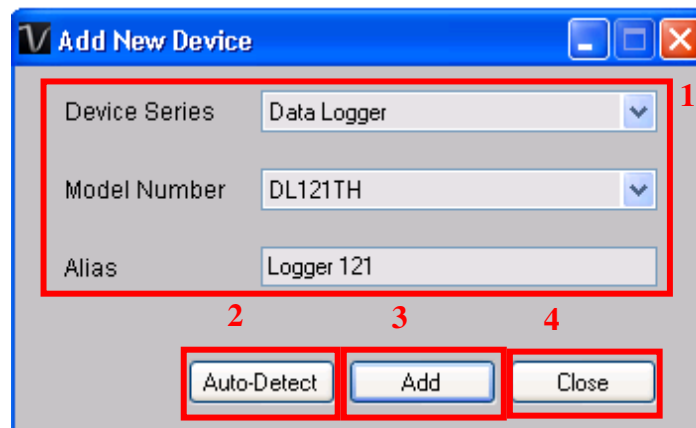
		This setting is available in the professional version only.
5	Web Server Setting	<p>Configure the web server port number for the web-based version of Votsoft.</p> <p>The local IP address will also be displayed, however, if you have more than one network card, then only the first IP address detected will be shown here.</p> <p>The maximum number of logins controls the maximum number of concurrent logins.</p>
6	Restart Votsoft Server	Restart the Votsoft Server.
	Save	Save and quit this module.
	Close	Quit this module without saving.

### 4.3 Add New Device

This module should automatically pop up when the user plugs a new device into the computer.



However, to launch this module manually, click Device Management->Add New Device.



1	Select Device	To add a new device: 1. Select the device series (only Data Logger available in the current version). 2. Select model number. 3. Enter a unique alias.
2	Auto-detect	Click this button to let the system detect if there is any device connected but not yet registered.
3	Add	Click the Add button to confirm the addition.
4	Close	Click the Close button to close this module.

#### 4.4 Remove Existing Device

This module allows the user to remove devices which are no longer in use. To launch this module, click Device Management->Remove Existing Device.

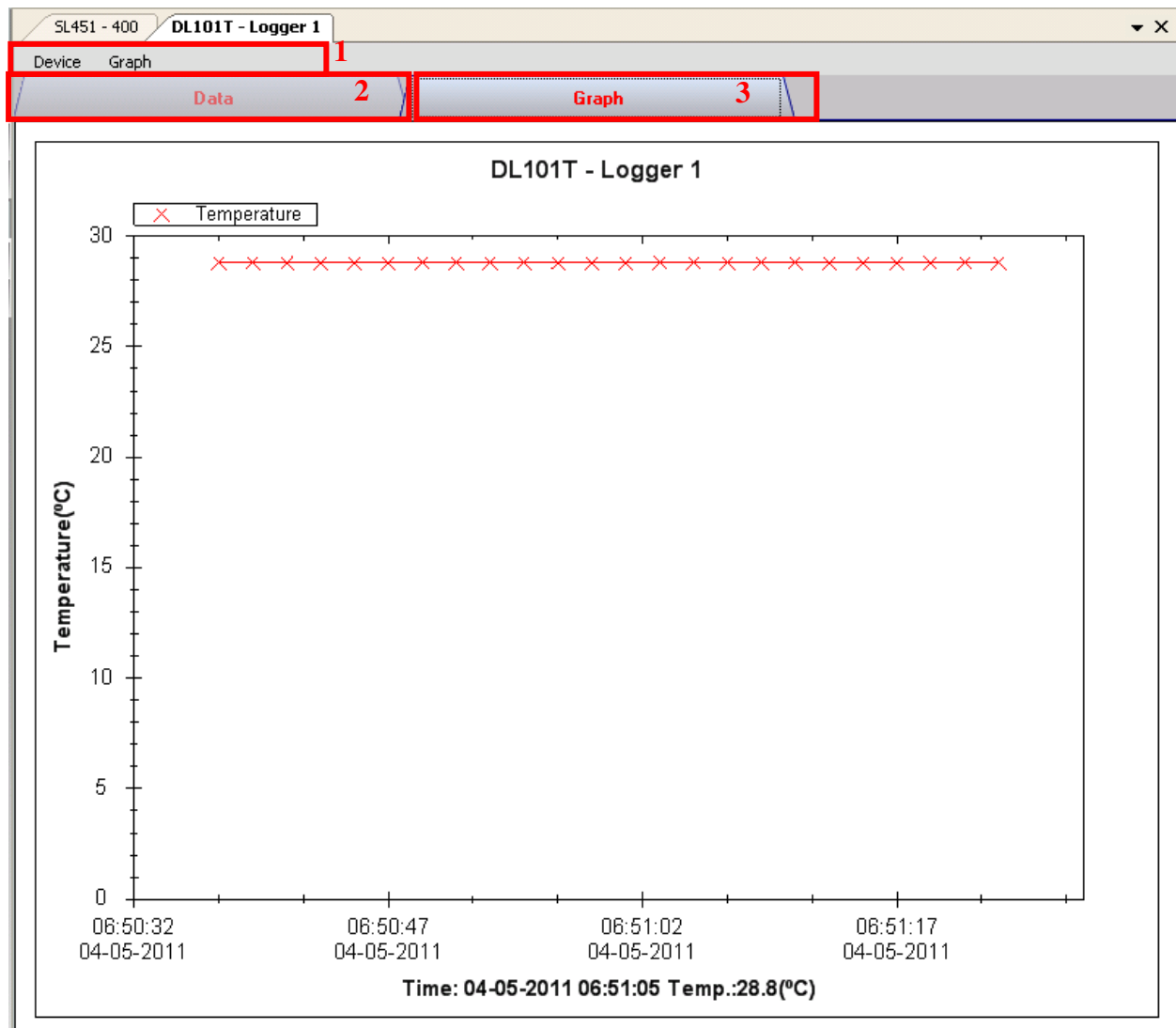


To remove a device, click the device in the list and click the "Remove" button. Click "Remove All" button to remove all devices at the same time.



## 4.5 Device Control Panel

The opened device will be displayed in the device control panel area in tab format. Each tab will contain information for one single device.



Each device tab contains:

1	Device Menu Area	Each device will contain its own menu, which will be explained in an upcoming section.
2	Data Tab	Display the selected data in list form.
3	Graph Tab	Display the selected data in a graphical format.

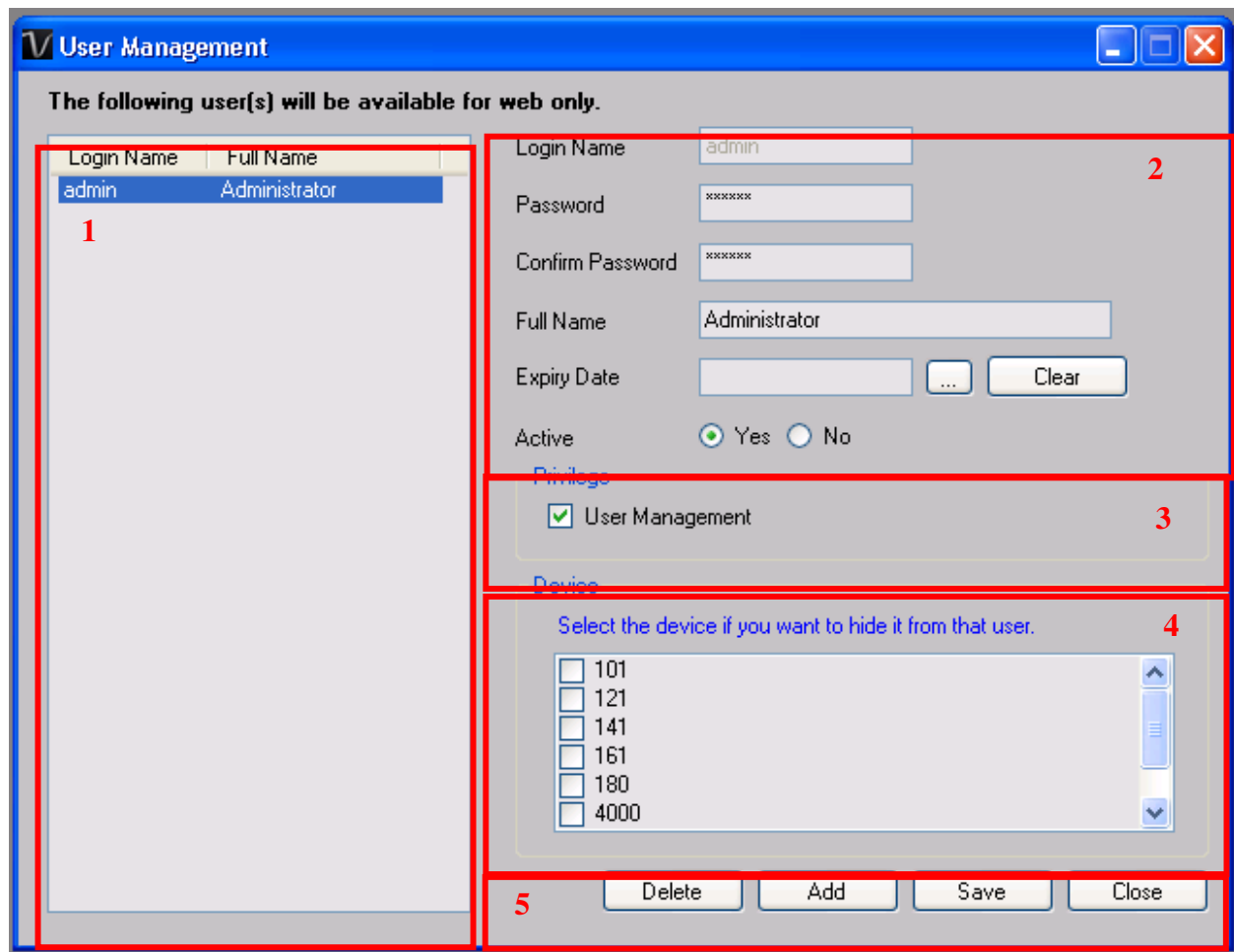
The function of the modules may be different for different devices, therefore, they will be discussed in individual device section.

## 5 Professional Version

All features of the standard version and some advanced features are included in the professional version. The following features will be available after online activation of the professional version.

## 5.1 User Management

To launch the user management module, click on File->User Management on the main menu. The user management of this module is only for the web-based version.

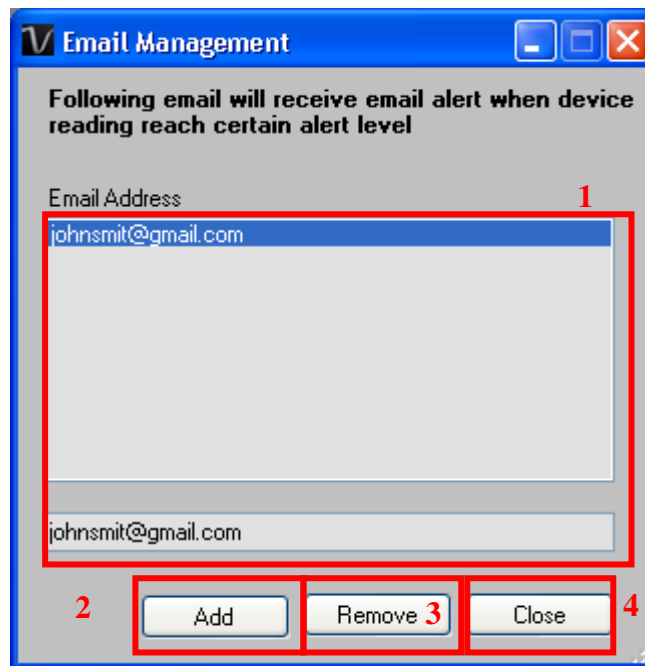


1	User List	Display the list of users in Voltsoft.
2	User Details	Clicking on the user name will display the user's details in this area. Users can: <ul style="list-style-type: none"> <li>- Modify their password</li> <li>- Assign an expiry date for that user</li> <li>- Modify the active status for that user.</li> </ul>
3	User Privileges	Control whether the user can access the user management module or not in the web-based version.
4	Device List	Control which devices are available for the selected user in the web-based version.
5	Delete	Click on a user in the user list and then the Delete button to delete an existing user.
	Add	Click on the Add button to create a new user.
	Save	Save the current user's information.
	Close	Close this module.

N.B. Voltsoft only allowed max. three user exist in the system.

## 5.2 Email Management

This module allows the user to manage the email addresses of those who will receive email alerts. To launch this module, click File->Email Management in the main menu.



1	Email Address	The email address is configured within Voltsoft.
2	Add New Email	Input a new email address and click the Add button to add a new email into the system.
3	Remove Email	Click on an email in the email address list and click the Remove button to remove the email from the system.
4	Close	Close this module.

### 5.3 Email Template

To launch this module, click Preference->Email Template.

**Language** English

**Subject** Voltsoft Data Alert

**Maximum Alert**

Dear Sir/Madam,

The device {DEVICE} has reached the max. alert level on column {COLUMN} at {TIME}, current reading value {READING}

Please perform any necessary action.

Regards,  
Voltsoft

**Minimum Alert**

Dear Sir/Madam,

The device {DEVICE} has reached the min. alert level on column {COLUMN} at {TIME}, current reading value {READING}

Please perform any necessary action.

Regards,  
Voltsoft

**Reset**

Dear Sir/Madam,

The device {DEVICE} reached alert level but had been reset on column {COLUMN} at {TIME}, current reading value {READING}

Please perform any necessary action.

Regards,  
Voltsoft

Save Close

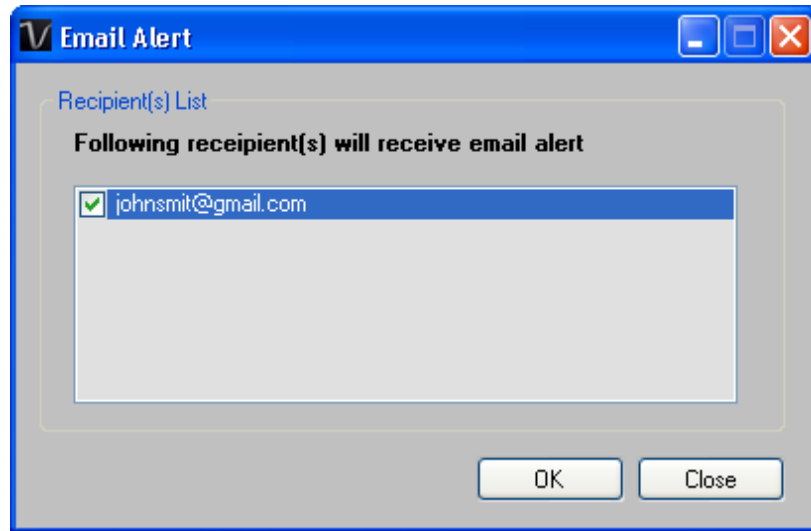
1	Language	Select the language of the email template.
2	Message Content	<p>Fill in the title and content for the email template which will be sent in the different cases:</p> <p><b>Case 1: Maximum Alert</b> This email will be sent when a reading is higher than the maximum alarm level.</p> <p><b>Case 2: Minimum Alert</b> This email will be sent when a reading is lower than the minimum alarm level.</p> <p><b>Case 3: Reset Level</b> This email will be sent when a reading was previously at a max/min alarm level but has returned to a normal level.</p>
3	Save	Click the Save button to save the template.
4	Close	Click the Close button to close the module.

## Variable

The following labels are defined as variables and will be replaced when sending out.

1	{DEVICE}	The device alias
2	{COLUMN}	The device reading name
3	{READING}	The device reading value
4	{TIME}	The time the event happened

## 5.4 Email Alert



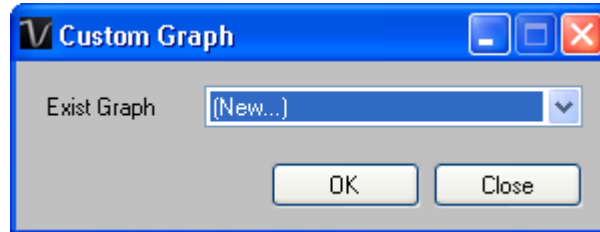
Voltsoft has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level.

The user can use this module to select who will receive the email for the specific device.

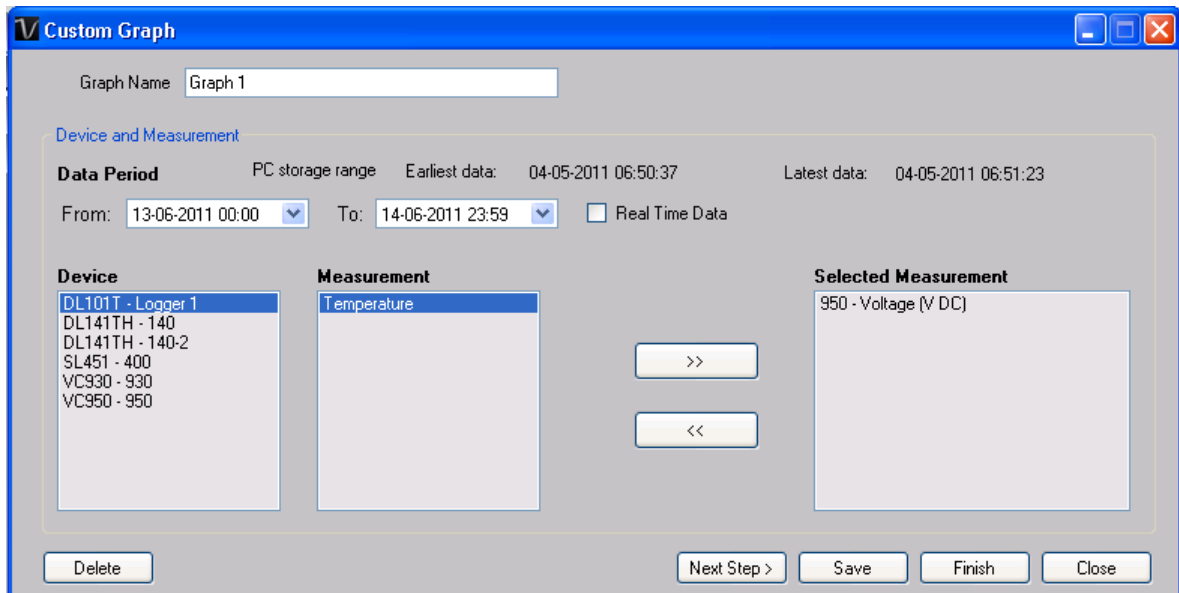
## 5.5 Custom Graph

Custom Graph allows the user to graph the measurement readings from more than one device. To create a custom graph:

1. Select Device Management->Custom Graph in main menu.



2. Select New to create a new graph or select the previous saved graph. Click OK to continue.
3. The Custom Graph detailed interface will be displayed:



4. Then the user needs to:
  - I. Select the data period or real-time data (only specific devices support real-time reading).
  - II. Select the device and measurement column.
  - III. Click Next Step> to continue.

**Custom Graph**

Graph Name:

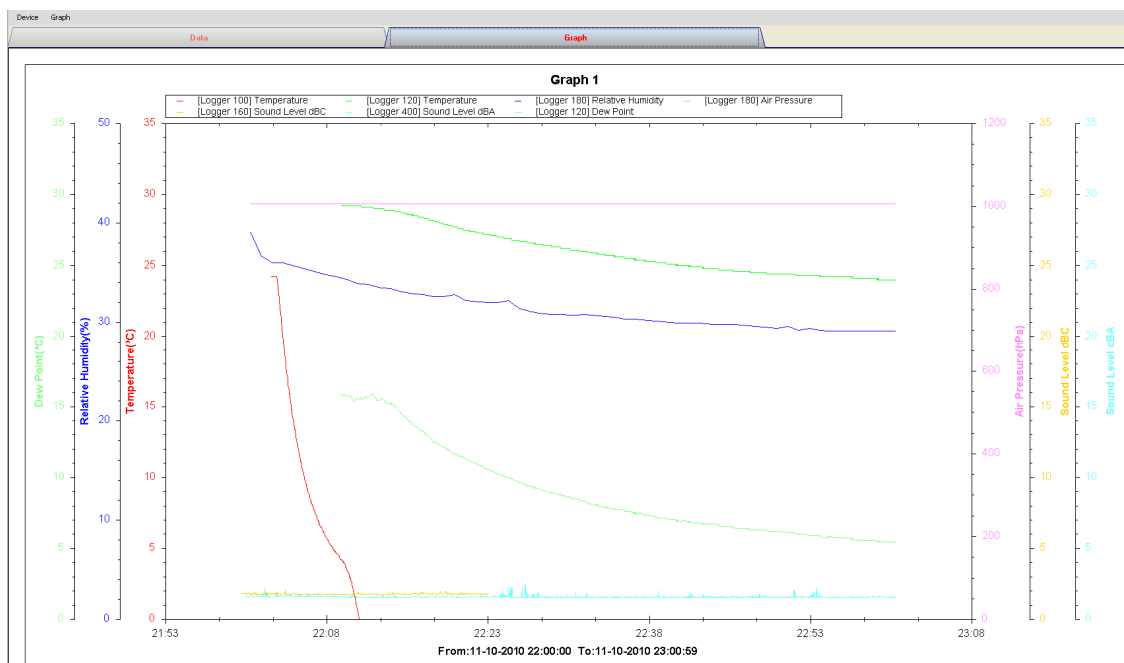
Measurement Setting

**Selected Measurement**

Device	Measurement	Data Max.	Data Min.	Axis	Axis Max.	Axis Min.	Align Zero
950	Voltage (V DC)	0	0	Y1	--	--	N
140	Temperature	0	0	Y1	--	--	N
140	Dew Point	0	0	Y1	--	--	N

Axis: ☒ Y1 ☐ Y2    Axis Max.     Axis Min.     Colour ☒ ☐ Align Zero

- IV. For each column, the system will show the data maximum and minimum values for the selected period.
- V. For each column, the user can specify whether it is drawn in Y1 or Y2, specify the Y-axis maximum and minimum values, the corresponding colour of the line or align the Zero level to the same level or not.
- VI. Click Finish to generate the graph.



## 5.6 Web Interface

### 5.6.1 Using the Voltsoft System (Web)

Voltsoft also provides a web-based interface for the user to control the device through Internet Explorer (version 7 or 8).

To access the Voltsoft Web interface, please open Internet Explorer (I.E.) on your local computer and input <http://127.0.0.1> or <http://localhost>. If you change the port number in General Settings to another port number, then you are required to enter the port number too, e.g. <http://127.0.0.1:8080>.

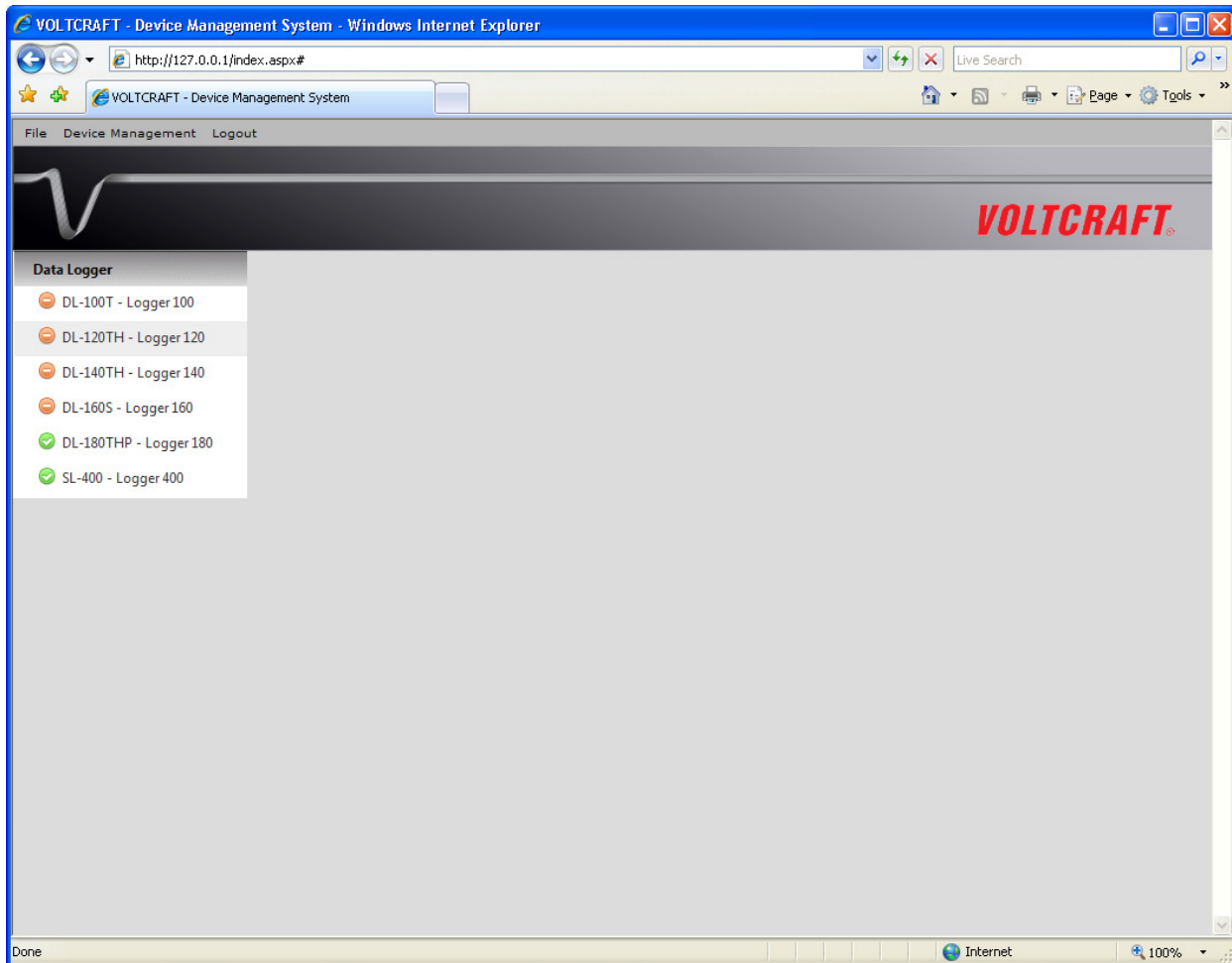
If it is successful the login page will be displayed.



Enter the valid user login created in the user management module.



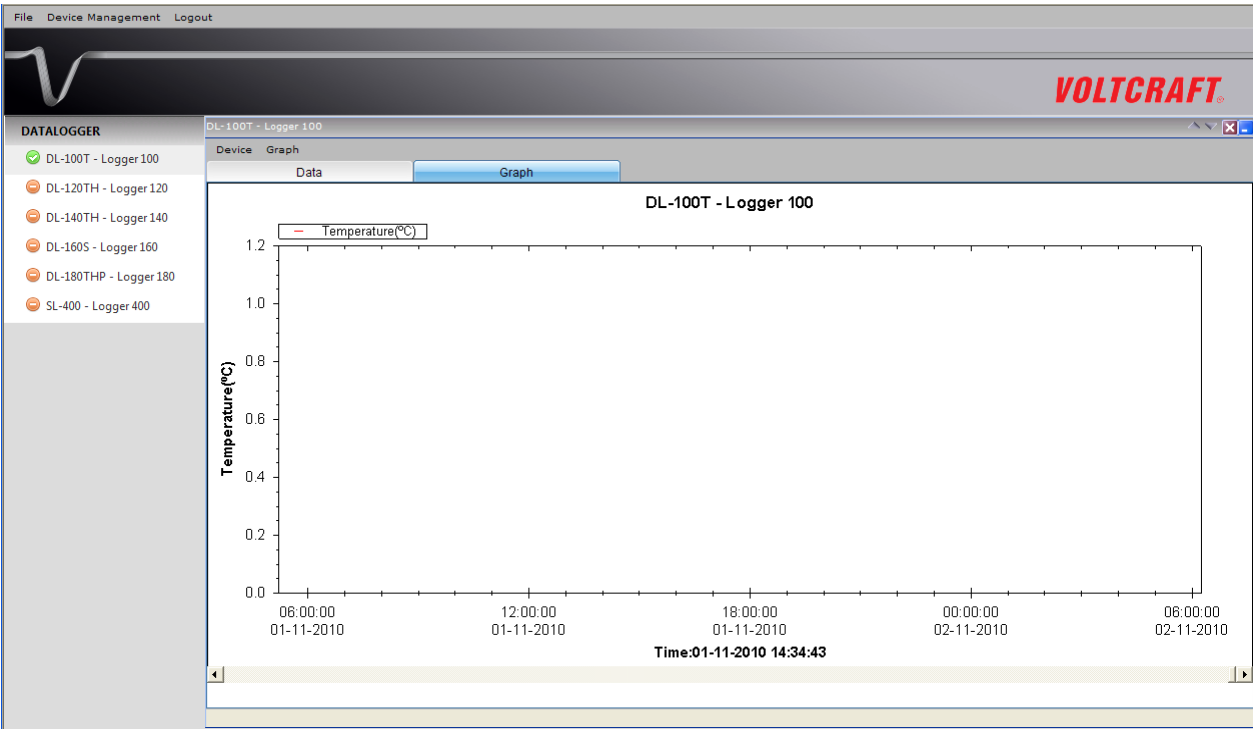
After login, you will see a main screen similar to the Windows client.



Click on the device entry and you will be prompted to install an ActiveX control issued by CEI Conrad Electronic International (HK) Ltd. Please click Install to install it.



After the installation, the chart control should be displayed like this:

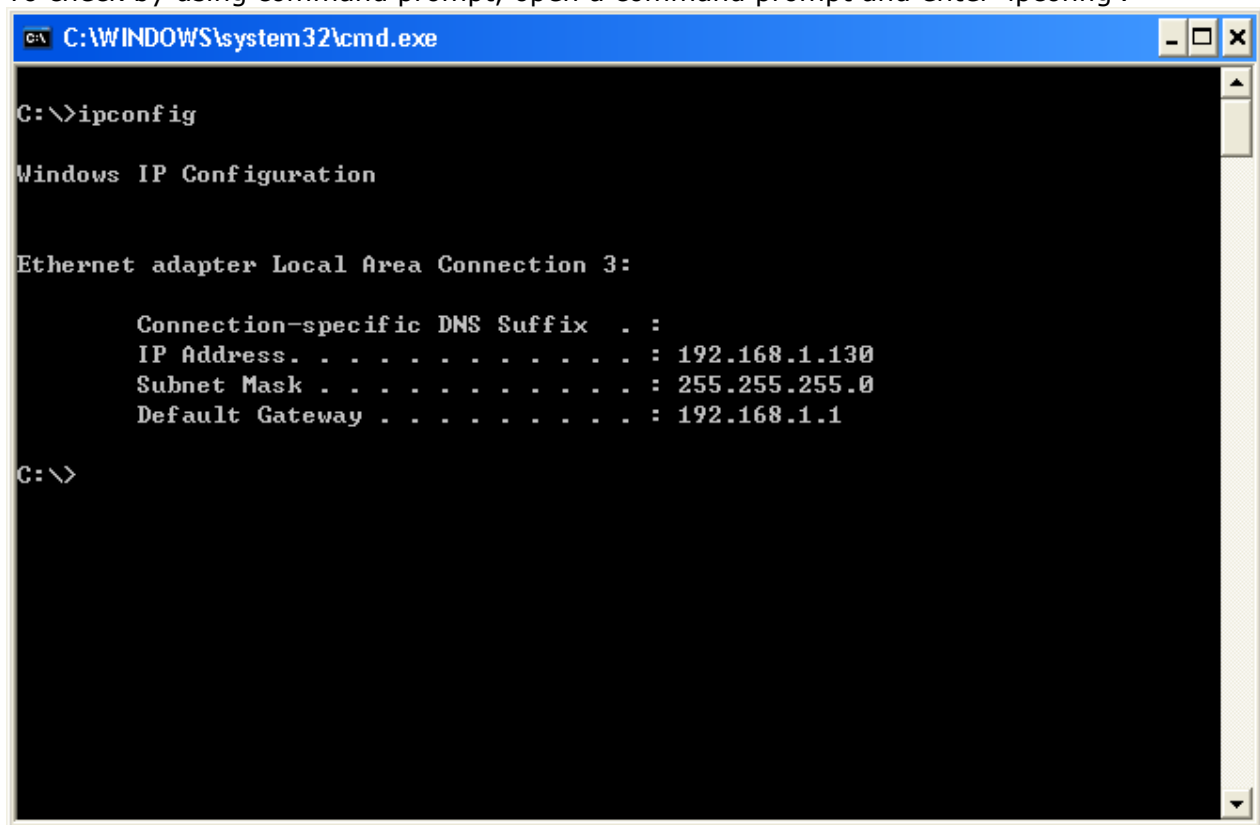


## 5.6.2 Accessing Voltsoft Web from a Remote Computer

Voltsoft Web allows users to control the device information from a remote computer through I.E., just like the remote feature of the IP camera. However, the computer may need some configuration changes in order to allow access to incoming traffic.

1. First, you need to check the IP address of your computer by opening the settings page in the Windows client or check by using command prompt.

To check by using command prompt, open a command prompt and enter 'ipconfig'.



```
C:\WINDOWS\system32\cmd.exe

C:\>ipconfig

Windows IP Configuration

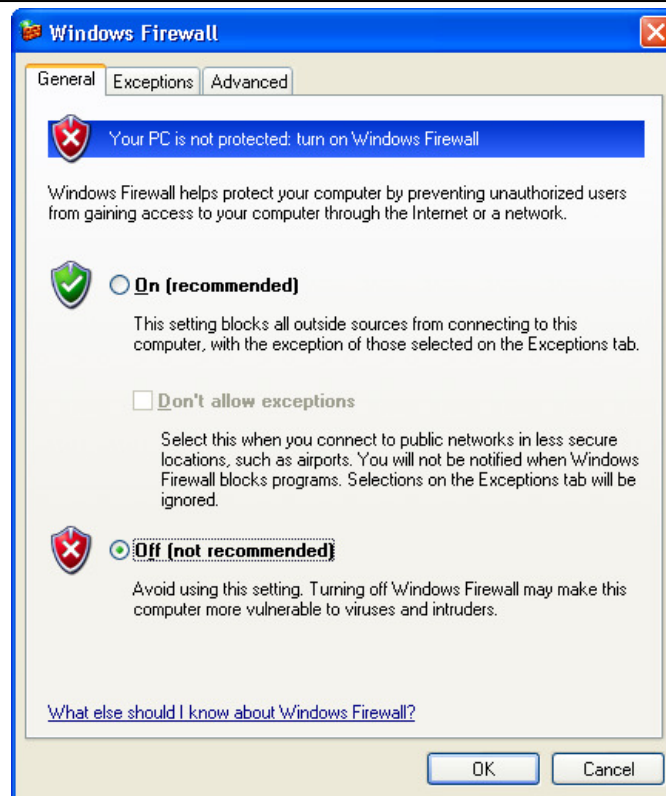
Ethernet adapter Local Area Connection 3:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . . : 192.168.1.130
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\>
```

For example, your IP address is 192.168.1.130 in the above example.

2. Secondly, check your firewall settings. Go to Control Panel, and click on Windows Firewall.

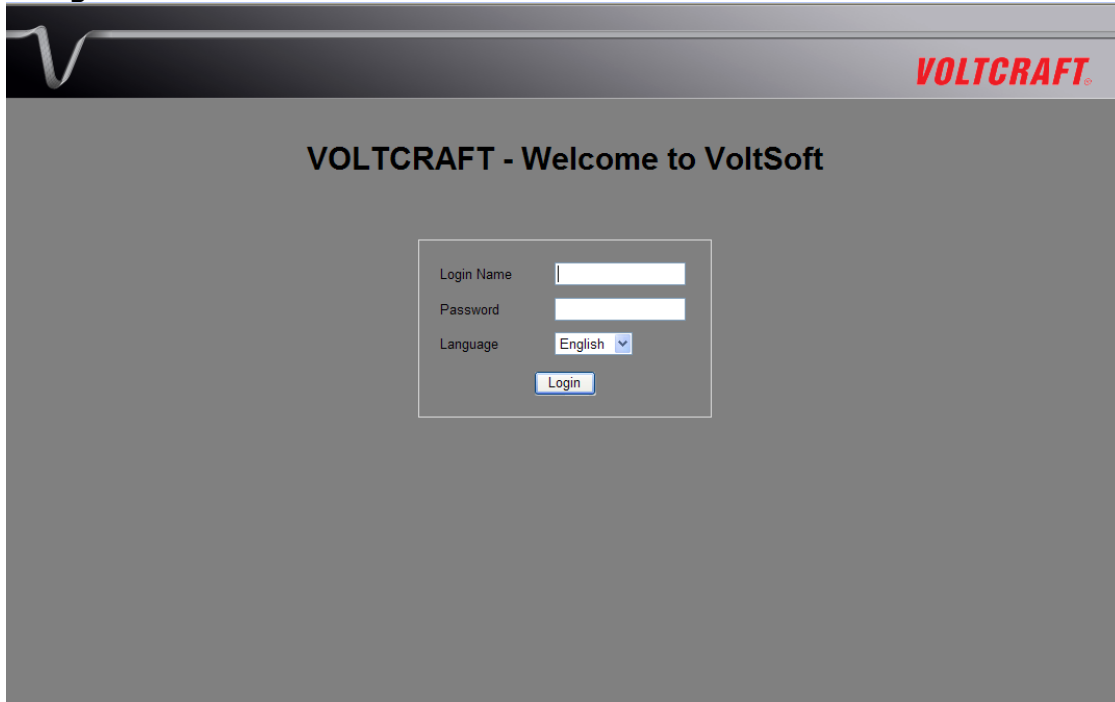


3. For testing, you can turn off your firewall. Or you can also configure the firewall by allowing an exception. For details, please contact your network administrator.
4. Then you can try to access the Votsoft Web through another computer on the same network. E.g. in the above case, you should input <http://192.168.1.130> in I.E. If you have any problems, please contact your network administrator to check the network connectivity between the two computers.
5. You may access Votsoft Web through the Internet from a remote site office, however you will be required to provide the network settings of your computer to your network administrator in order for him/her to configure your company router and firewall.

### 5.6.3 Using the Voltsoft System (Web)

The interface of the Web client will be very similar to the Windows-based client.

#### i. Login Screen



**VOLTcraft**

**VOLTcraft - Welcome to VoltSoft**

Login Name

Password

Language  ▼

**ii. Main Screen**

The screenshot displays the Voltcraft software interface. At the top, a menu bar includes 'File', 'Device Management', 'Layout', and 'Logout'. The 'VOLTcraft' logo is prominently displayed in the upper right. On the left, a sidebar titled 'Data Logger' lists several devices: 'DL141TH - 140', 'DL141TH - 140-2', 'SL451 - 400', and 'DL101T - Logger 1' (which is selected and marked with a green checkmark). Below this is a 'DMM' section. The main window is titled 'DL101T - Logger 1' and contains tabs for 'Device' and 'Graph'. The 'Data' tab is active, showing a 'PC storage range' from '04-05-2011 06:50:37' to '04-05-2011 06:51:23'. A 'Summary' table is present, followed by an 'All Data' section with a table of recorded measurements and two buttons for 'Export CSV' and 'Export Excel'.

**Data Logger**

- DL141TH - 140
- DL141TH - 140-2
- SL451 - 400
- DL101T - Logger 1

**DMM**

**DL101T - Logger 1**

Device Graph

**Data** Graph

PC storage range Earliest data: 04-05-2011 06:50:37 Latest data: 04-05-2011 06:51:23

**Summary**

Measurement	Maximum Value	Minimum Value	Average Value
Temperature (°C)	28.8	28.8	28.8

**All Data** Export CSV Export Excel

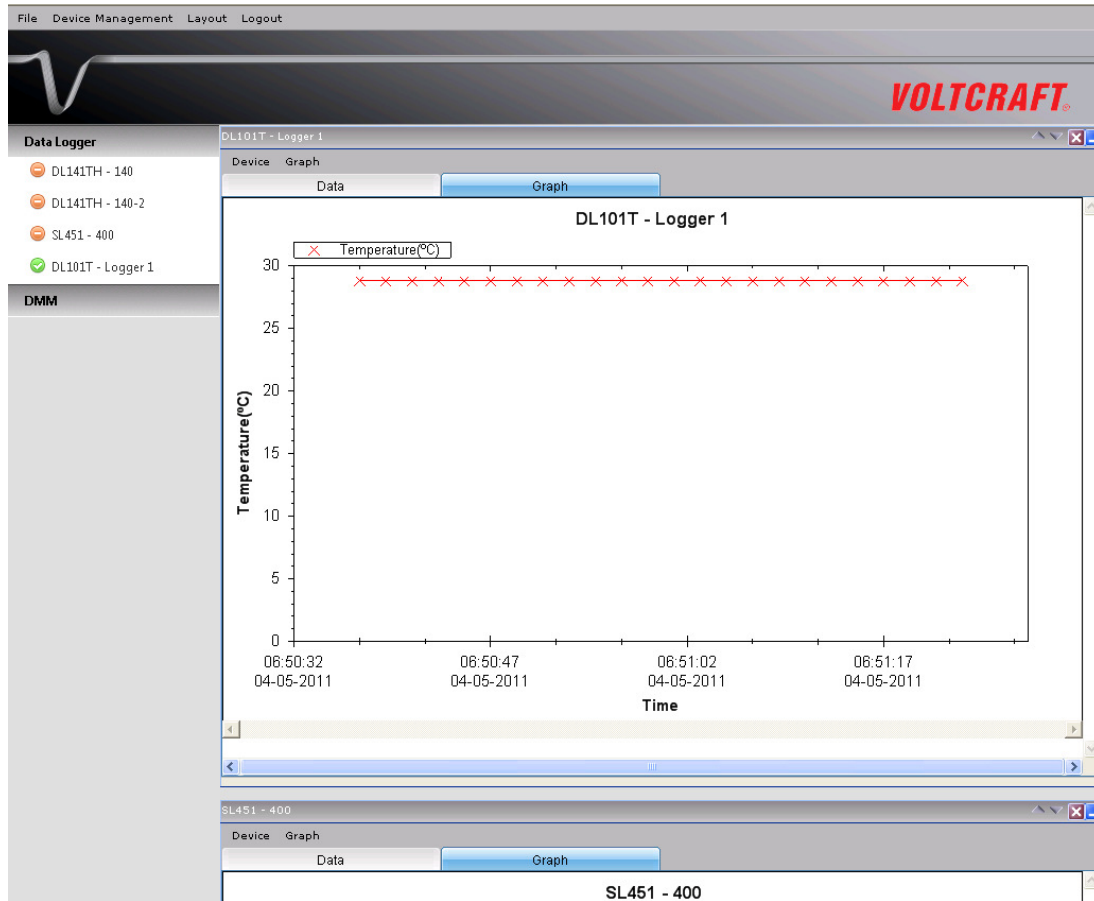
Record Time	Temperature (°C)
04-05-2011 06:50:37	28.8
04-05-2011 06:50:39	28.8
04-05-2011 06:50:41	28.8
04-05-2011 06:50:43	28.8
04-05-2011 06:50:45	28.8
04-05-2011 06:50:47	28.8
04-05-2011 06:50:49	28.8
04-05-2011 06:50:51	28.8
04-05-2011 06:50:53	28.8
04-05-2011 06:50:55	28.8
04-05-2011 06:50:57	28.8
04-05-2011 06:50:59	28.8
04-05-2011 06:51:01	28.8
04-05-2011 06:51:03	28.8
04-05-2011 06:51:05	28.8

Trusted sites 100%

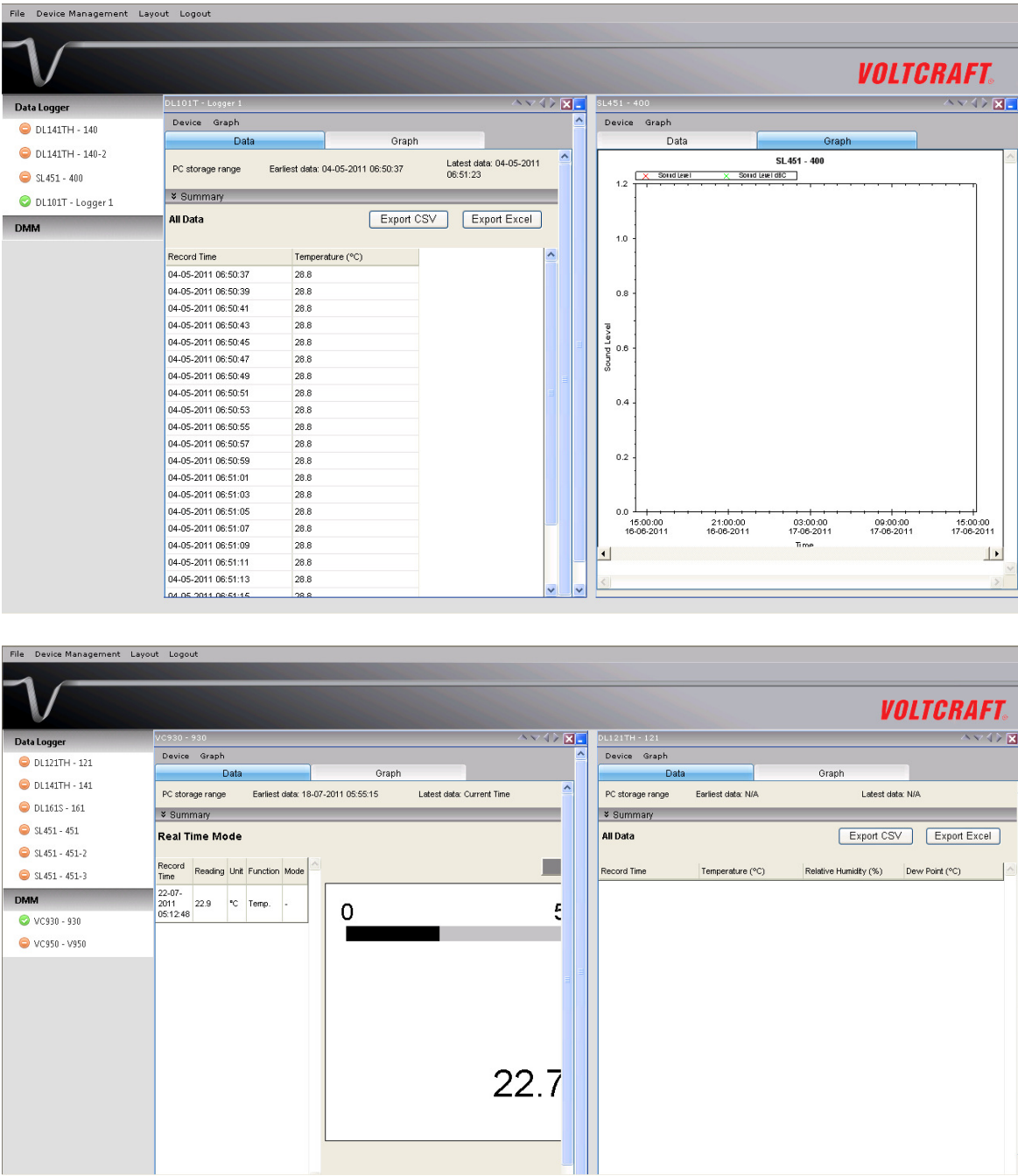
## Screen Layout

One of the most significant differences between the Windows version and the Web version is that you can arrange the Web version's device windows into three different layouts: 1) Single Column, 2) Two Columns, 3) Tab Layout

### 1) Single Column

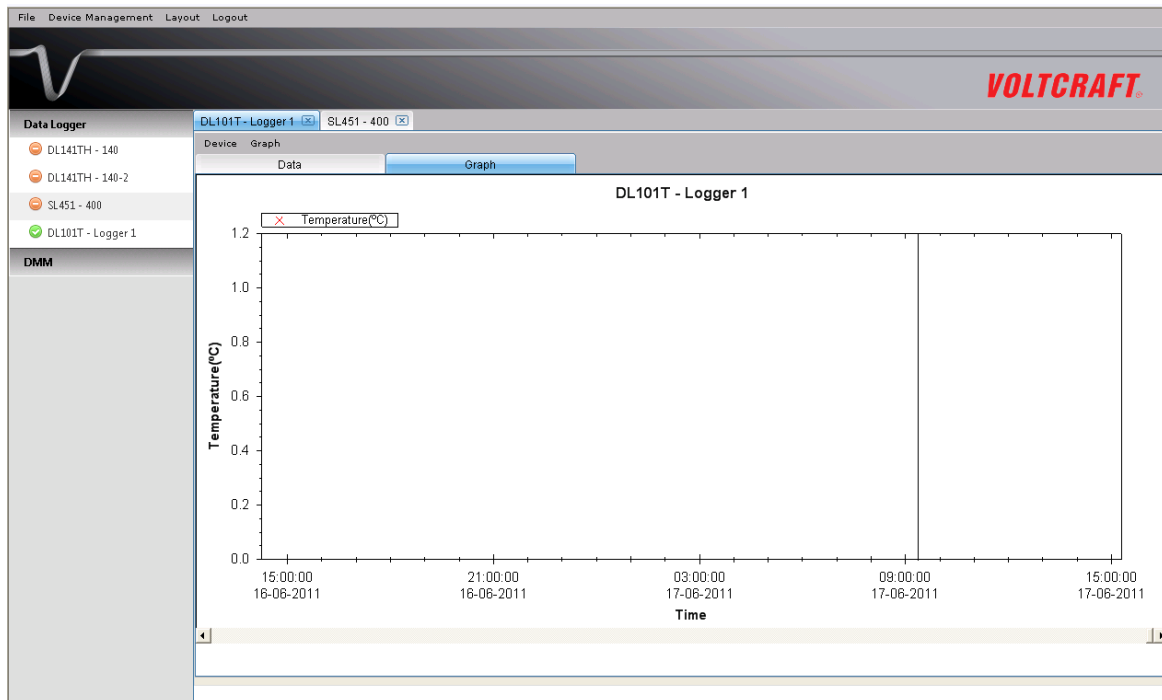


2) Two Columns





## 2) Tab Layout



### 5.6.4 Limitation in Web Version

Although the interface and function of the Web version is very similar to the Windows version, they have some differences as following:

- 1) The Web version is targeted to those users who are not in front of the computer which is connected to the device; therefore, the "Add and Remove Device" function will not be available in the Web version.
- 2) The Web version will not auto refreshed in some areas (when compared with the Windows version), so users are required to press "F5" or the "Refresh" button in the browser tool bar on the interface. These areas are:
  - i. Device list
  - ii. Real-time / Display status for VC930 or VC950
  - iii. Real-time / Display status for VC850 or VC650BT

## 6 Supported Devices

Voltsoft currently support following device:

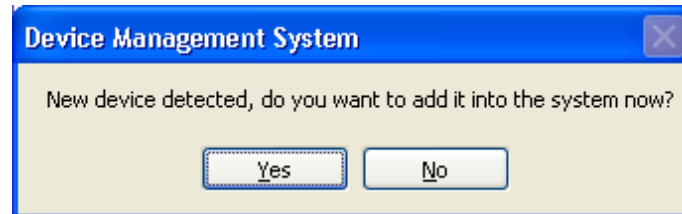
Type	Device Name
Data Logger	DL101T
Data Logger	DL111K
Data Logger	DL121TH
Data Logger	DL131G
Data Logger	DL141TH
Data Logger	DL141TH2K
Data Logger	DL151AN
Data Logger	DL161S
Data Logger	DL181THP
Data Logger	DL191A
Data Logger	DL191V
Data Logger	DL201THM
Data Logger	IR 1200-50D
Data Logger	PL-125-T2USB / PL-125-T4USB
Data Logger	SL451
DMM	VC930 / VC950
DMM	VC880 / VC650BT
DMM	VC890
EL4000	EL4000

## 6.1 DL101T

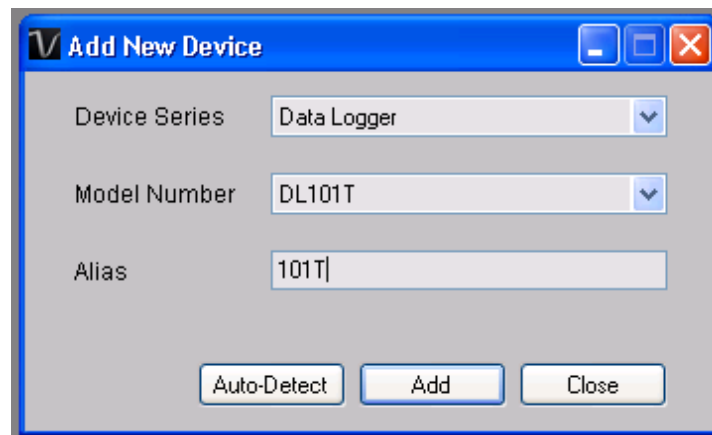
DL101T is a data logger for storing temperature reading.

### 6.1.1 Add new DL101T

When Voltsoft detects a new DL101T attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

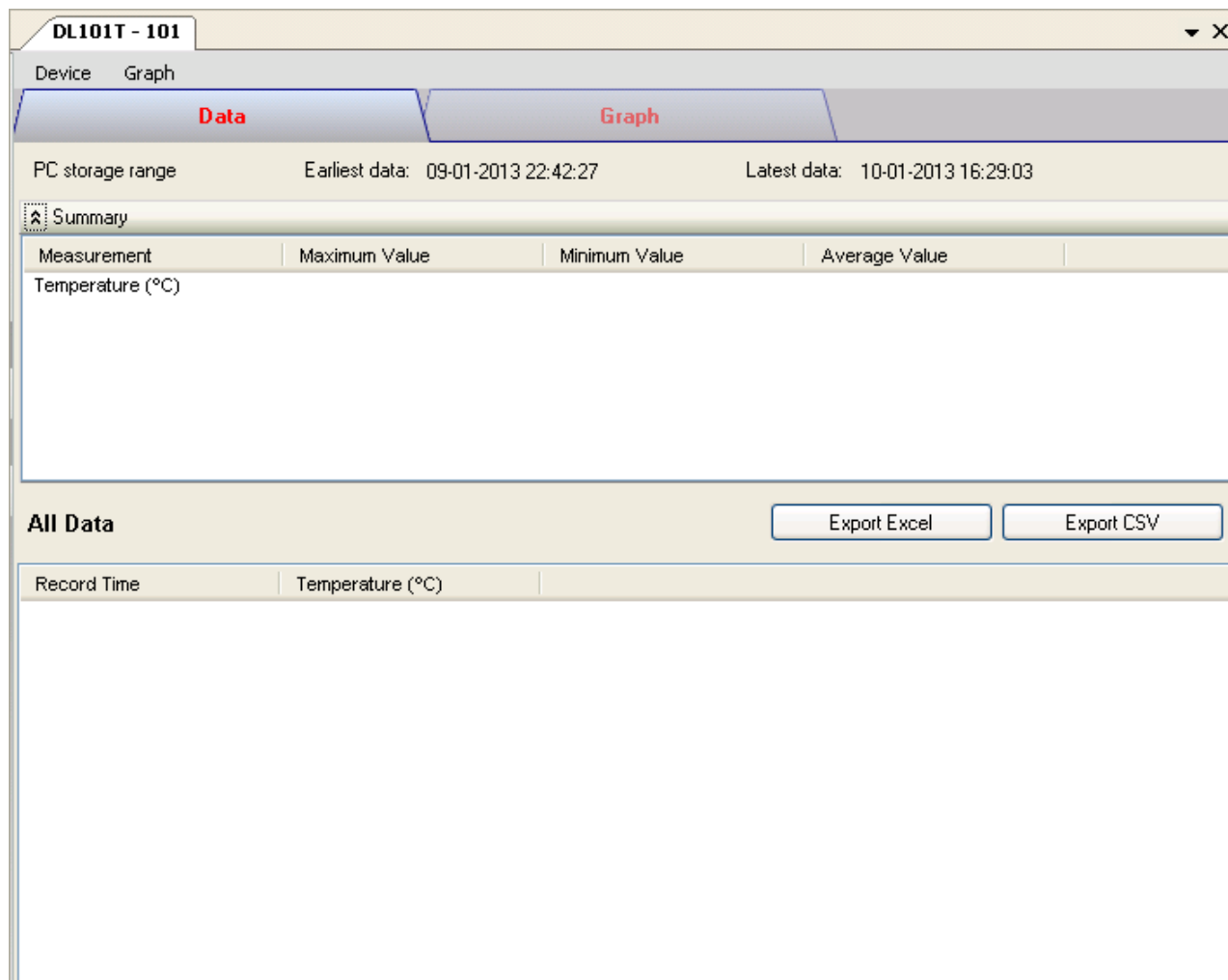


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.1.2 Remove DL101T

To remove DL101T, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.1.3 DL101T – Device Control Panel



The DL101T Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL101T.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.1.4 DL101T - Settings

**101T - Settings (HW ID:01\_1210170003)**

**Basic Settings**

Time: 27-01-2013 16:15:49 ☒ Use System Time

Logger Name: 101T

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 32000 Sample Rate: 2s

Recording Time: 17 Hours 46 Minutes 40 Seconds

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☐ Enable LEDs Alert

Temperature Low Limit: -40.0 °C High Limit: 70.0 °C

Device connect.

Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

### 6.1.5 DL101T - Download Data

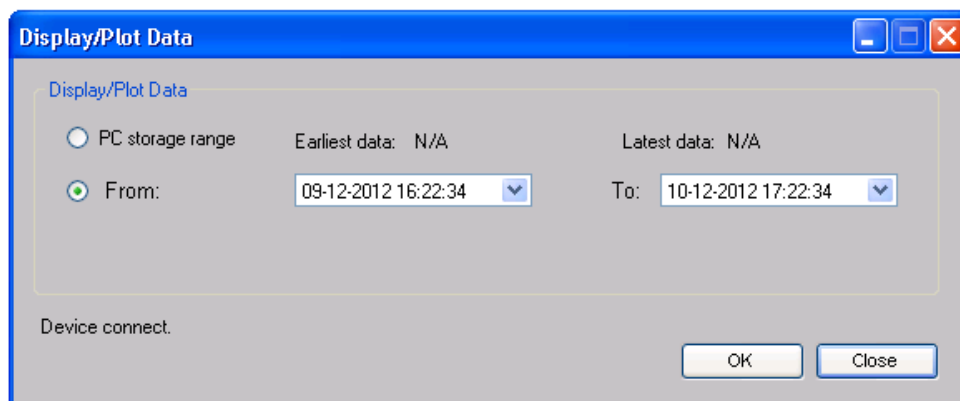
This module allows user to download the data from DL101T.



Click "OK" button to stop the recording and start downloading.

### 6.1.6 DL101T – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

## 6.1.7 DL101T – Data View

DL101T contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, depending on the setting in general setting.

Device Graph

**Data** **Graph**

PC storage range Earliest data: 01-11-2012 16:38:13 Latest data: 02-11-2012 01:31:29

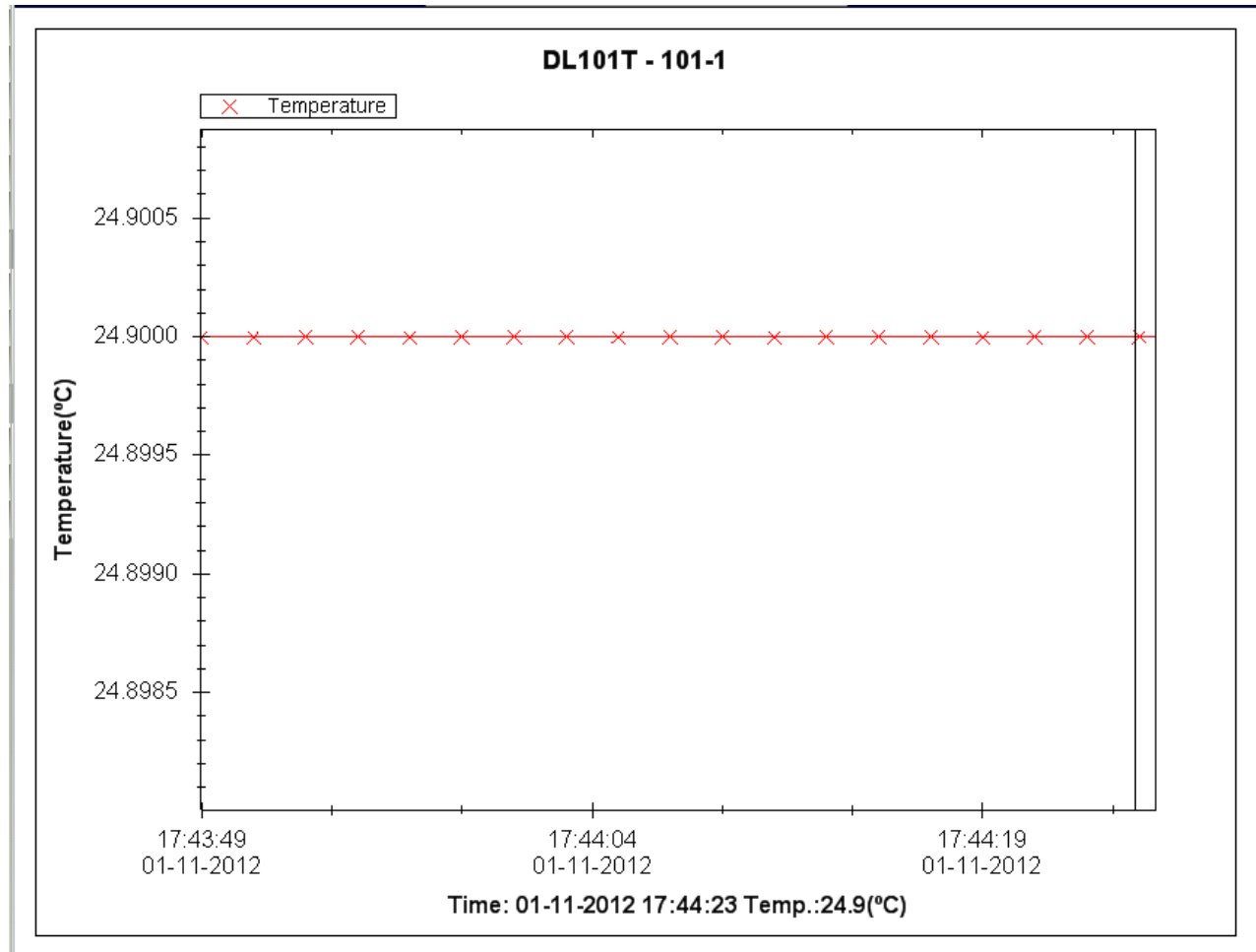
Summary

**All Data** Export Excel Export CSV

Record Time	Temperature (°C)
01-11-2012 16:56:03	25.4
01-11-2012 16:56:05	25.4
01-11-2012 16:56:07	25.4
01-11-2012 16:56:09	25.4
01-11-2012 16:56:11	25.4
01-11-2012 16:56:13	25.4
01-11-2012 16:56:15	25.4
01-11-2012 16:56:17	25.4
01-11-2012 16:56:19	25.4
01-11-2012 16:56:21	25.4
01-11-2012 16:56:23	25.4
01-11-2012 16:56:25	25.4
01-11-2012 16:56:27	25.4
01-11-2012 16:56:29	25.4
01-11-2012 16:56:31	25.4
01-11-2012 16:56:33	25.4
01-11-2012 16:56:35	25.4
01-11-2012 16:56:37	25.4
01-11-2012 16:56:39	25.4
01-11-2012 16:56:41	25.4
01-11-2012 16:56:43	25.4
01-11-2012 16:56:45	25.4
01-11-2012 16:56:47	25.4
01-11-2012 16:56:49	25.4
01-11-2012 16:56:51	25.4
01-11-2012 16:56:53	25.4
01-11-2012 16:56:55	25.4
01-11-2012 16:56:57	25.4
01-11-2012 16:56:59	25.4
01-11-2012 16:57:01	25.4
01-11-2012 16:57:03	25.4
01-11-2012 16:57:05	25.4
01-11-2012 16:57:07	25.4
01-11-2012 16:57:09	25.4
01-11-2012 16:57:11	25.4
01-11-2012 16:57:13	25.4

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

## 6.1.8 DL101T – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.1.9 DL101T – Web Interface

Please refer to section 5.6 on how to launch the web interface.

The web interface for DL101T is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

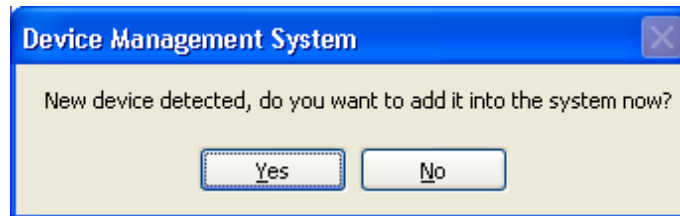


## 6.2 DL121TH

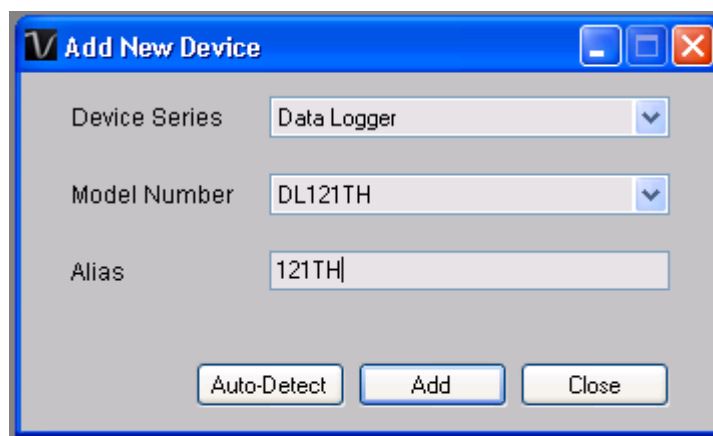
DL121TH is a data logger for storing temperature and humidity reading.

### 6.2.1 Add new DL121TH

When Voltsoft detected a new DL121TH attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

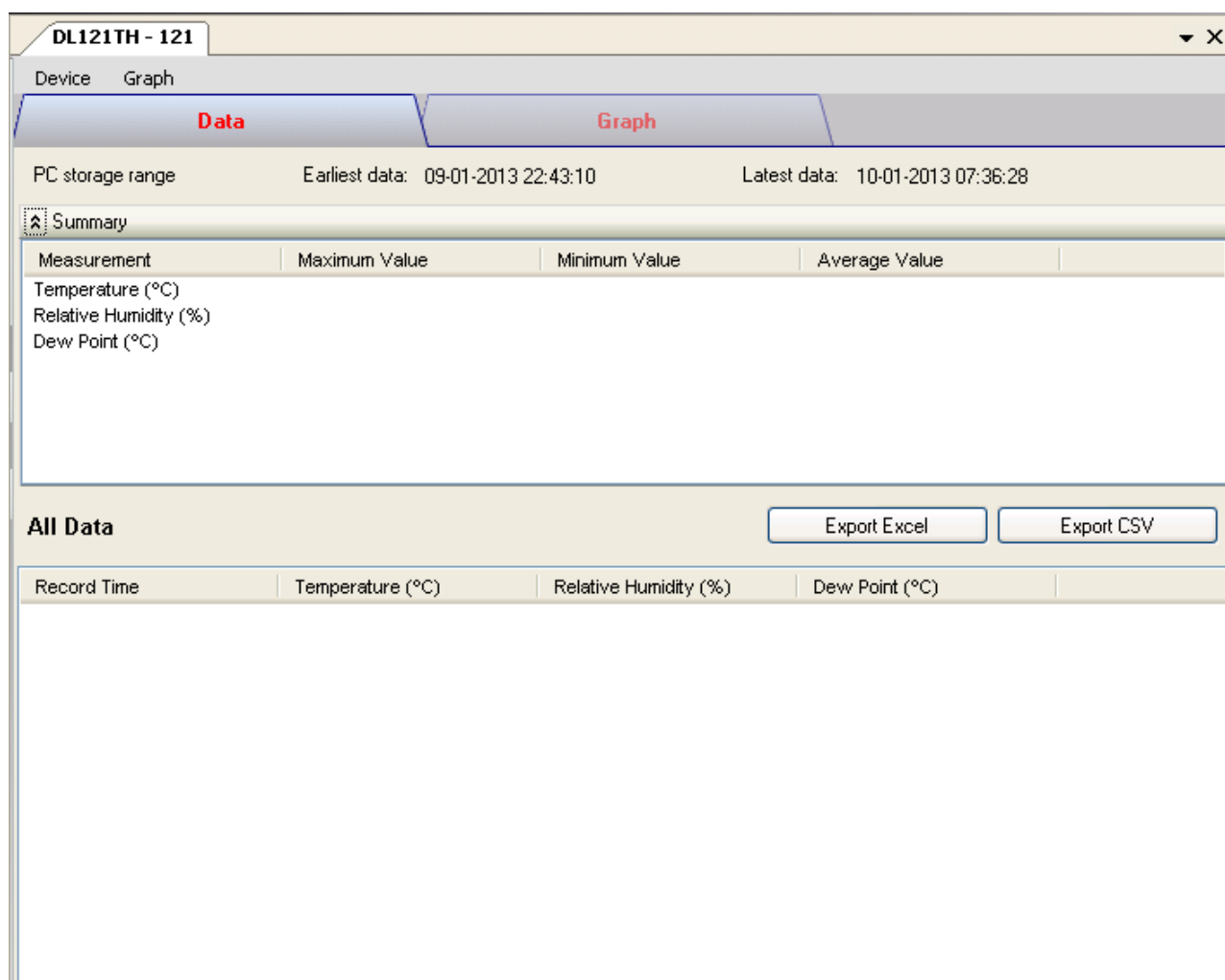


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.2.2 Remove DL121TH

To remove DL121TH, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.2.3 DL121TH – Device Control Panel



DL121TH contain follow items in menu:

1	Device -> Settings	This will launch the setting page of DL121TH.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.2.4 DL121TH - Settings

**DL121TH - Settings (HW ID:02\_1211070004)**

**Basic Settings**

Time: 27-01-2013 16:25:50 ☒ Use System Time

Logger Name: 121TH

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 16000 Sample Rate: 2s

Recording Time: 8 Hours 53 Minutes 20 Seconds

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☐ Enable LEDs Alert

Temperature Low Limit: -40.0 °C High Limit: 70.0 °C

Relative Humidity Low Limit: 0.0 % High Limit: 100.0 %

Device connect.

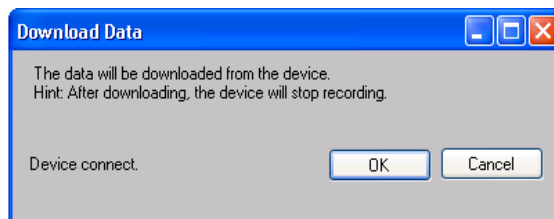
Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Relative humidity Low / High Alarm	Configure the humidity low / high alarm level.
11	Default Button	Reload the factory default settings.
12	Setup Button	Save changes.
13	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

## 6.2.5 DL121TH - Download Data

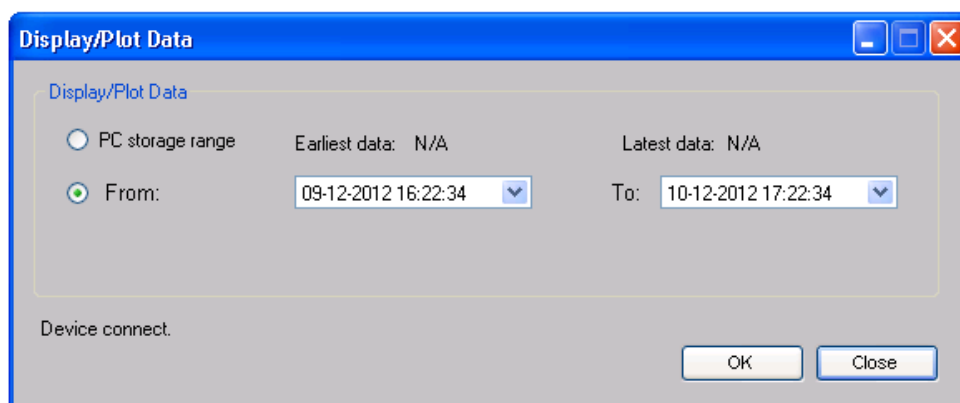
This module allows user to download the data from DL121TH.



Click "OK" button to stop the recording and start downloading.

## 6.2.6 DL121TH – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

## 6.2.7 DL121TH – Data View

DL121TH contains three measurements (Temperature, relative humidity and dew point), template / dew point unit can be Celsius or Fahrenheit, depending on the setting in general setting.

Device

Graph

Data

Graph

PC storage range

Earliest data: 10-10-2012 15:40:38

Latest data: 11-10-2012 00:33:56

Summary

All Data

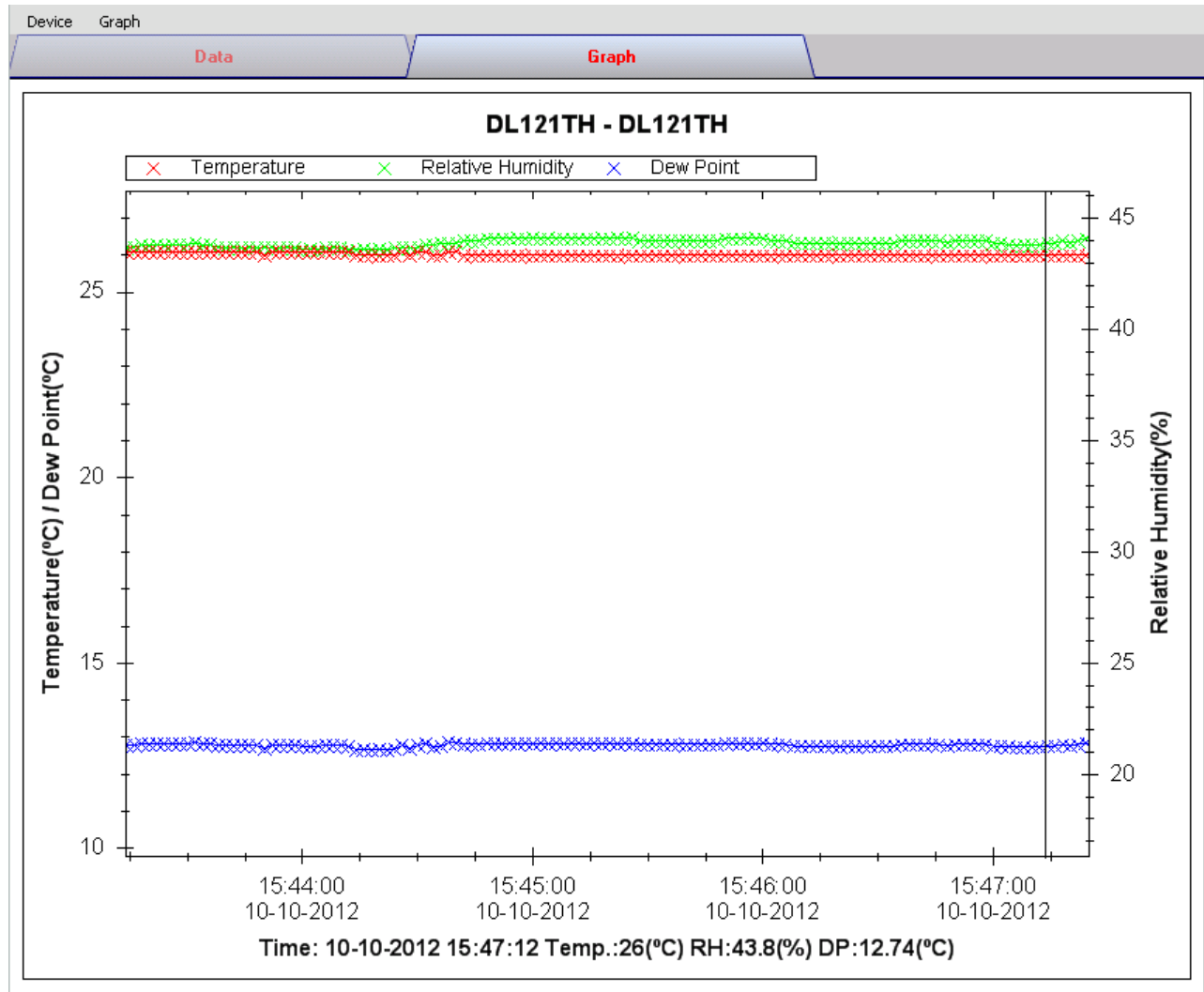
Export Excel

Export CSV

Record Time	Temperature (°C)	Relative Humidity (%)	Dew Point (°C)
10-10-2012 15:40:38	26.1	44.2	12.97
10-10-2012 15:40:40	26.1	44.2	12.97
10-10-2012 15:40:42	26.1	44.2	12.97
10-10-2012 15:40:44	26.1	44.2	12.97
10-10-2012 15:40:46	26.1	44.2	12.97
10-10-2012 15:40:48	26.1	44.2	12.97
10-10-2012 15:40:50	26.1	44.2	12.97
10-10-2012 15:40:52	26.1	44.2	12.97
10-10-2012 15:40:54	26.1	44.1	12.93
10-10-2012 15:40:56	26.1	44.1	12.93
10-10-2012 15:40:58	26.1	44.1	12.93
10-10-2012 15:41:00	26.1	44.1	12.93
10-10-2012 15:41:02	26.1	44.0	12.90
10-10-2012 15:41:04	26.1	44.0	12.90
10-10-2012 15:41:06	26.1	44.0	12.90
10-10-2012 15:41:08	26.1	43.9	12.86
10-10-2012 15:41:10	26.1	43.9	12.86
10-10-2012 15:41:12	26.1	43.9	12.86
10-10-2012 15:41:14	26.1	43.9	12.86
10-10-2012 15:41:16	26.1	43.9	12.86
10-10-2012 15:41:18	26.1	43.9	12.86
10-10-2012 15:41:20	26.1	43.9	12.86
10-10-2012 15:41:22	26.1	43.9	12.86
10-10-2012 15:41:24	26.1	43.9	12.86
10-10-2012 15:41:26	26.1	43.9	12.86
10-10-2012 15:41:28	26.1	43.9	12.86
10-10-2012 15:41:30	26.1	43.9	12.86
10-10-2012 15:41:32	26.1	43.9	12.86
10-10-2012 15:41:34	26.1	43.9	12.86
10-10-2012 15:41:36	26.1	43.9	12.86
10-10-2012 15:41:38	26.1	43.9	12.86
10-10-2012 15:41:40	26.1	43.9	12.86
10-10-2012 15:41:42	26.1	43.9	12.86
10-10-2012 15:41:44	26.1	43.9	12.86
10-10-2012 15:41:46	26.1	43.8	12.83
10-10-2012 15:41:48	26.1	43.7	12.79

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

## 6.2.8 DL121TH – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.2.9 DL121TH –Web Interface

Please refer to section 5.6 on how to launch the web interface.

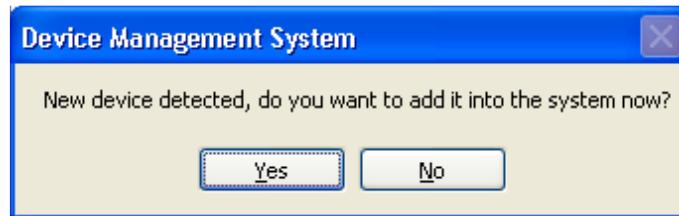
The web interface for DL121TH is the same as Windows version, except the downloaded data can only have 10,000 reading in a single download.

## 6.3 DL131G

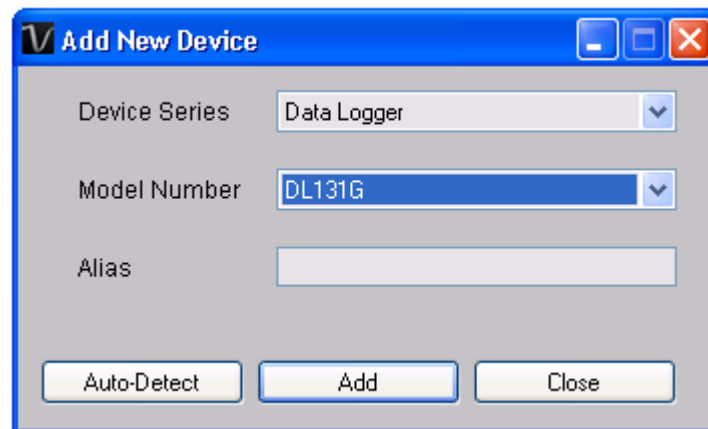
DL131G is a data logger for storing vibration reading. DL131G supports real time and real time Fast Fourier Transform (FFT) measurement.

### 6.3.1 Add new DL131G

When Voltsoft detected a new DL131G attached, the following dialog will be popped up:



Click "Yes", following dialog will be displayed:

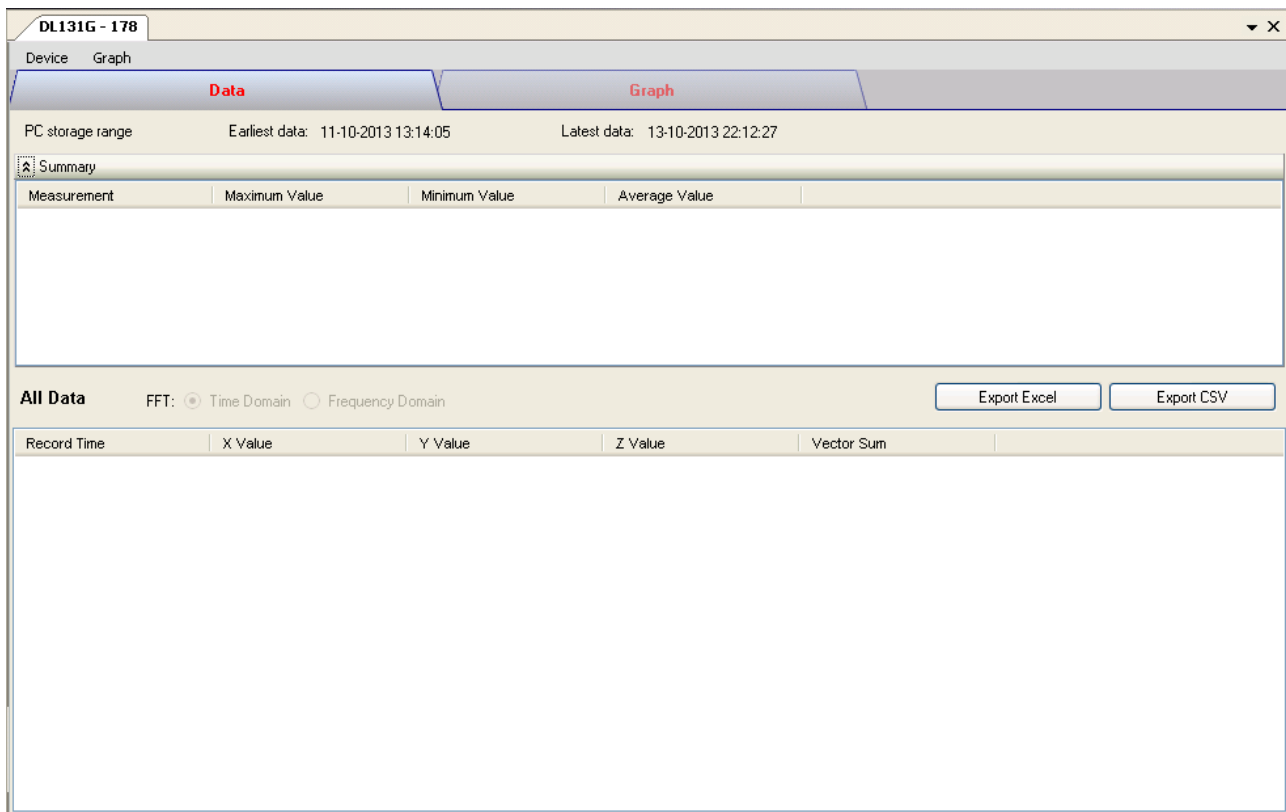


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.3.2 Remove DL131G

To remove DL131G, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.3.3 DL131G – Device Control Panel



The DL131G Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL131G.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.
14	Graph -> View All Data	Zoom out the graph to view all data.



### 6.3.4 DL131G – Settings

**178 - Settings (HW ID:78a\_121123000002)**

**Basic Settings**

Time: 30-10-2013 11:28:59 ☒ Use System Time

Logger Name: 178

Sample Rate: 50 ms

LED Flash Rate: ☒ 10s ☐ 20s ☐ 30s ☐ Disable

Condition for recording start: ☐ By Button ☒ After Setup

**Motion Detection Threshold Setup**

X Threshold: 2g

Y Threshold: 2g

Z Threshold: 2g

**Recording Mode**

☐ Normal

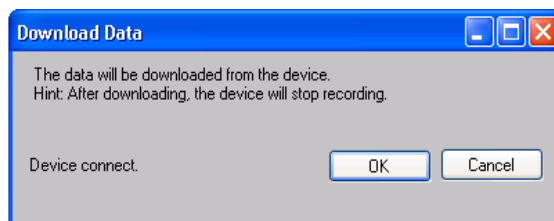
☒ Motion Detection

Device connect. [Default] [Setup] [Close]

1	Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Sample Rate	Instruct the data logger to log readings at a specific rate.
4	LED Flash RateCycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
5	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
6	Motion Detection Threshold Setup	The Motion Detection Threshold Setup filed allows the user to set the acceleration detection threshold.Once the acceleration value is over the threshold,the DATALOGGER will work.
7	Recording Mode	The DATA LOGGER Record Mode can be set as Normal and Motion Detection.
8	Default Button	Load the factory default settings.
9	Setup Button	Save changes.
10	Close Button	Close this interface.

### 6.3.5 DL131G - Download Data

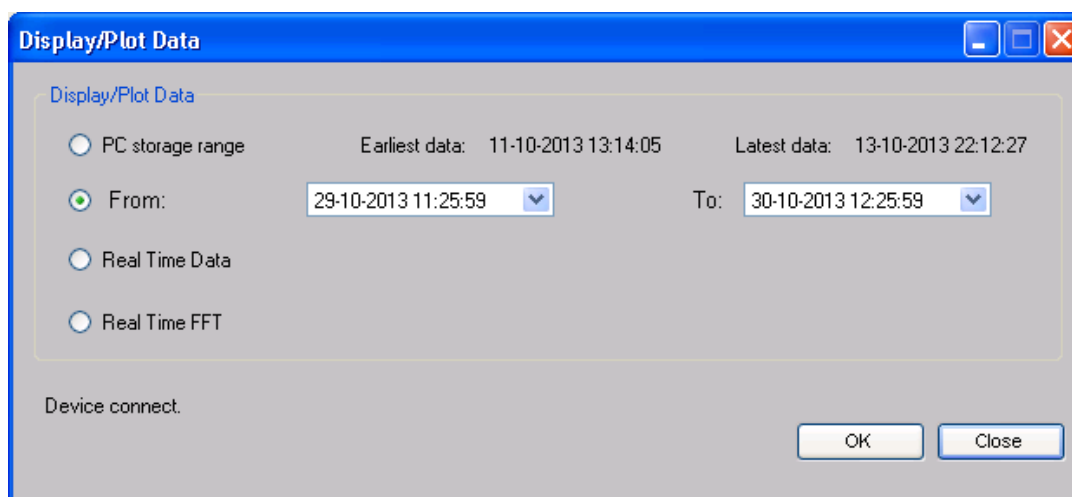
This module allows user to download the data from DL131G.



Click "OK" button to stop the recording and start downloading.

### 6.3.6 DL131G – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

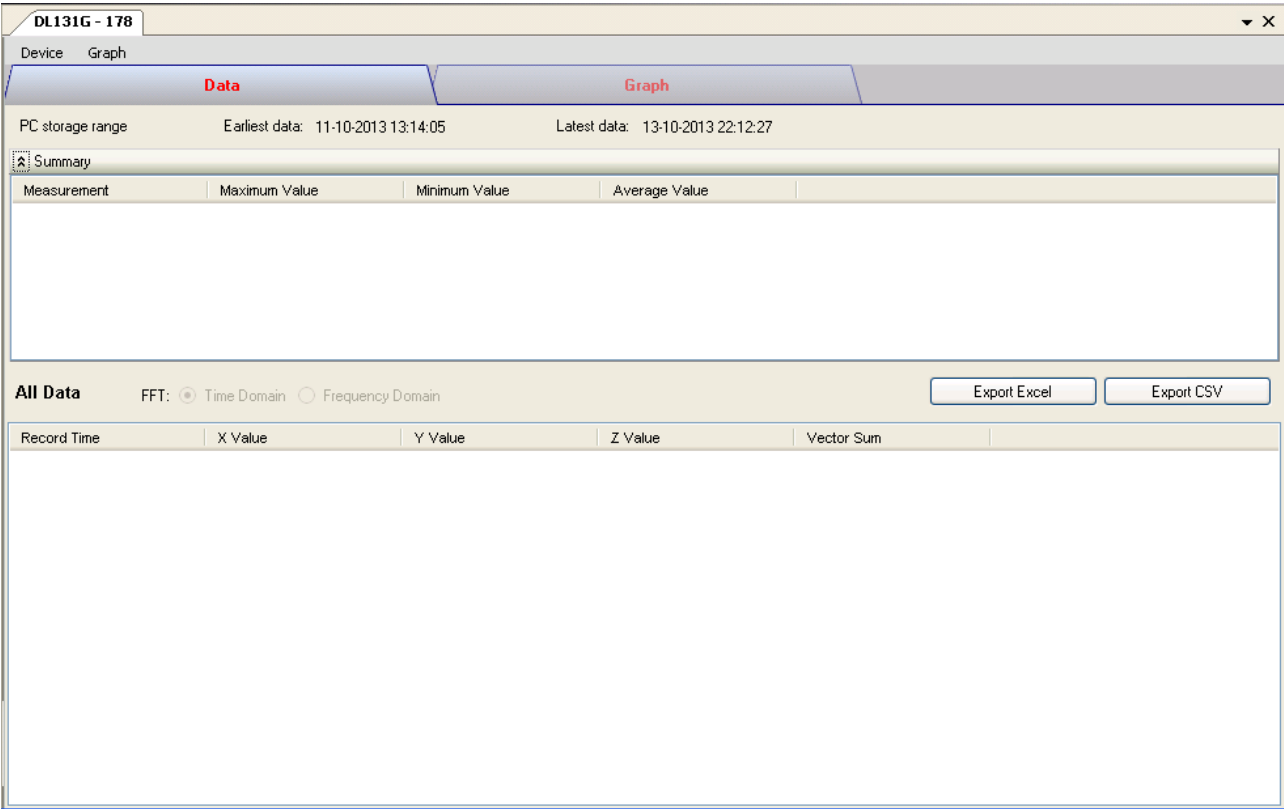


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode.
4	Real Time FFT	Read real-time spectral data for FFT analysis.
5	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
6	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

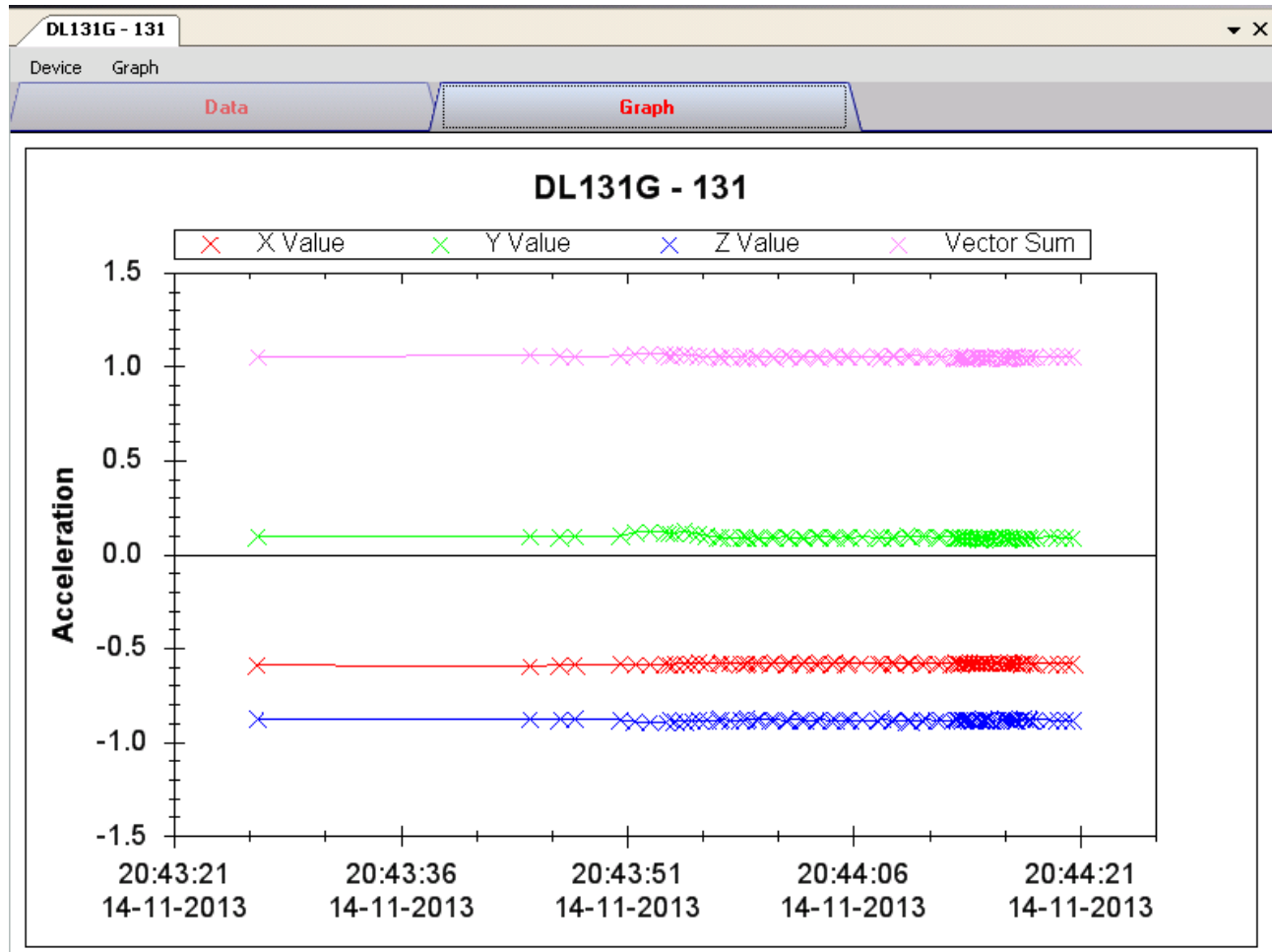
6.3.7 DL131G – Data View

DL131G contains four measurements (X Value, Y Value, Z Value and Vector Sum).



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

### 6.3.8 DL131G – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

### 6.3.9 DL131G – Real Time FFT

The logger will enter real time FFT mode when select “Real Time FFT” in “Display / Plot Data”.

In FFT mode, there is two options for displaying data: Time Domain and Frequency Domain.

#### Time Domain:

In time domain mode, total 128 reading will be download at any specific period of time.

DL131G - 178

Device Graph

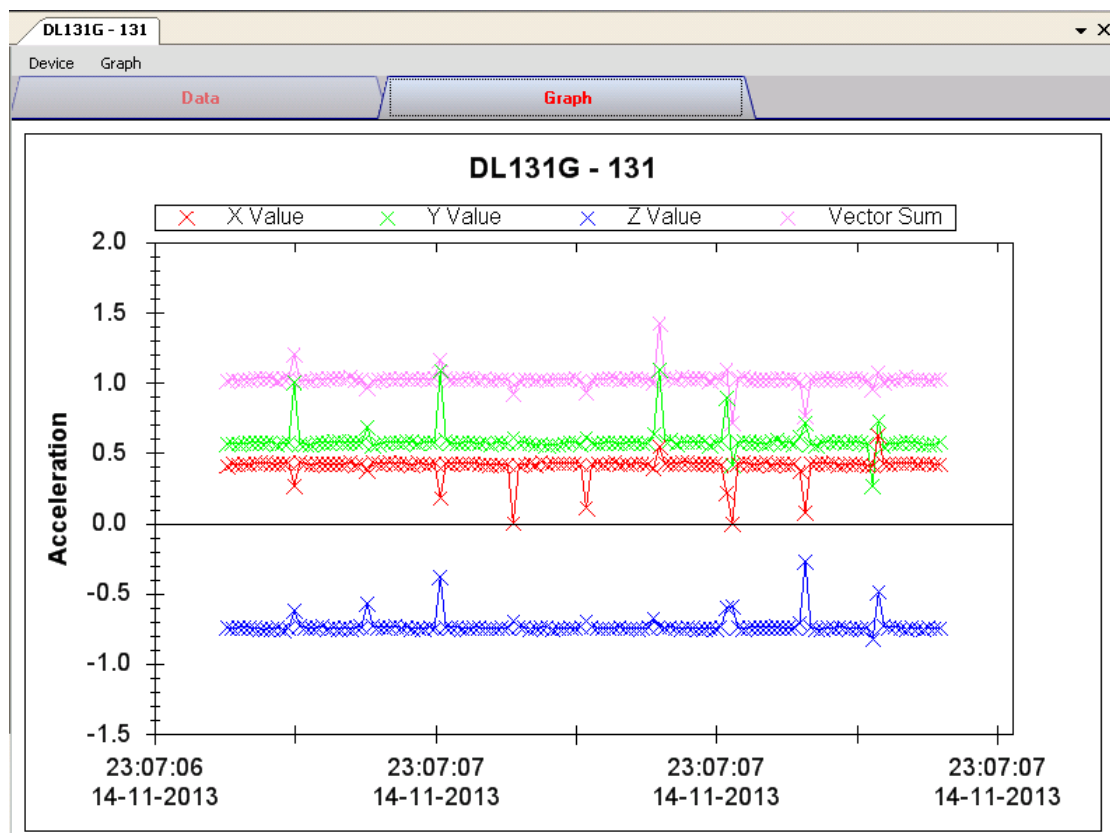
PC storage range: Earliest data: 11-10-2013 13:14:05 Latest data: 13-10-2013 22:12:27

Summary

All Data FFT: ☒ Time Domain ☐ Frequency Domain

Export Excel Export CSV

Record Time	X Value	Y Value	Z Value	Vector Sum
30-10-2013 12:07:45 879	-0.28	0.80	-0.44	0.96
30-10-2013 12:07:45 883	0.90	1.01	-0.34	1.40
30-10-2013 12:07:45 887	-0.14	0.74	-0.35	0.93
30-10-2013 12:07:45 891	-0.22	0.73	-0.36	0.94
30-10-2013 12:07:45 895	-0.21	0.74	-0.38	0.85
30-10-2013 12:07:45 899	-0.19	0.76	-0.37	0.86
30-10-2013 12:07:45 903	-0.20	0.72	-0.43	0.86
30-10-2013 12:07:45 907	-0.18	0.70	-0.45	0.85
30-10-2013 12:07:45 911	0.07	0.81	0.02	0.82
30-10-2013 12:07:45 915	0.09	0.86	0.00	0.87
30-10-2013 12:07:45 919	0.09	0.89	0.02	0.90
30-10-2013 12:07:45 923	0.08	0.87	0.03	0.88
30-10-2013 12:07:45 927	0.08	0.87	0.02	0.88
30-10-2013 12:07:45 931	0.08	0.89	0.02	0.89
30-10-2013 12:07:45 935	0.09	0.87	0.02	0.87
30-10-2013 12:07:45 939	0.08	0.88	0.01	0.89
30-10-2013 12:07:45 943	0.08	0.87	0.01	0.88
30-10-2013 12:07:45 947	0.08	0.88	0.02	0.88
30-10-2013 12:07:45 951	0.08	0.88	0.01	0.89
30-10-2013 12:07:45 955	0.08	0.87	0.02	0.88
30-10-2013 12:07:45 959	0.08	0.88	0.01	0.88
30-10-2013 12:07:45 963	-0.11	0.31	0.26	0.42
30-10-2013 12:07:45 967	0.02	0.71	-0.09	0.72
30-10-2013 12:07:45 971	0.07	0.90	0.04	0.90
30-10-2013 12:07:45 975	0.08	0.88	0.03	0.88
30-10-2013 12:07:45 979	0.08	0.87	0.02	0.87
30-10-2013 12:07:45 983	0.09	0.88	0.01	0.89
30-10-2013 12:07:45 987	0.09	0.90	0.02	0.90
30-10-2013 12:07:45 991	0.08	0.88	0.02	0.89
30-10-2013 12:07:45 995	0.08	0.89	0.03	0.89
30-10-2013 12:07:45 999	0.08	0.88	0.03	0.89
30-10-2013 12:07:46 003	0.08	0.88	0.02	0.88
30-10-2013 12:07:46 007	0.08	0.88	0.02	0.89
30-10-2013 12:07:46 011	0.09	0.88	0.01	0.88
30-10-2013 12:07:46 015	0.00	0.84	0.24	0.87



Frequency Domain:

In frequency domain mode, the 128 reading downloaded will be calculate and transform to 256 readings to display.

DL131G - 178

DeviceGraph

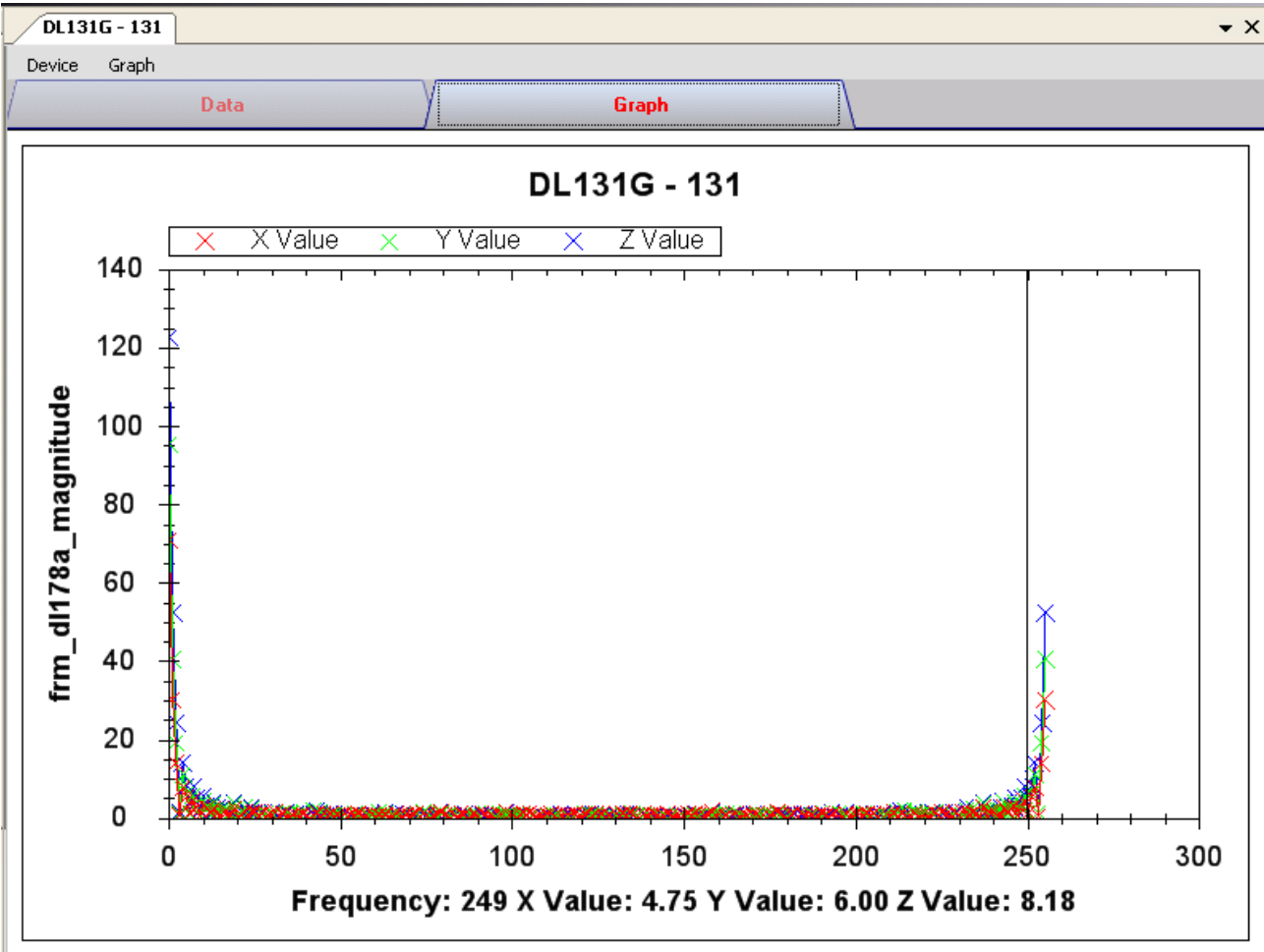
DataGraph

PC storage rangeEarliest data: 11-10-2013 13:14:05Latest data: 13-10-2013 22:12:27

Summary

All DataFFT: ☐ Time Domain☒ Frequency DomainExport ExcelExport CSV

Frequency	X Value	Y Value	Z Value
0	12.12	145.45	9.98
1	4.90	62.90	3.94
2	2.91	28.61	2.75
3	0.50	2.88	0.73
4	1.90	15.80	1.44
5	0.77	11.30	0.80
6	0.89	3.27	0.34
7	0.45	8.99	1.13
8	0.80	6.14	0.16
9	0.27	2.25	0.19
10	0.47	6.90	0.67
11	1.34	4.02	0.36
12	1.10	2.68	0.78
13	1.40	5.46	0.47
14	0.26	2.06	0.21
15	0.43	1.51	0.25
16	1.19	4.38	0.63
17	0.53	2.95	1.54
18	1.43	2.74	0.93
19	2.22	4.40	2.10
20	1.73	1.30	1.55
21	0.60	2.56	0.56
22	0.41	4.10	0.11
23	0.37	0.86	1.55
24	0.16	2.18	0.78
25	0.30	2.57	0.79
26	0.80	0.31	0.28
27	0.51	2.08	0.34
28	0.62	2.39	0.52
29	0.64	0.59	0.36
30	1.34	2.06	0.92
31	1.00	2.74	0.71
32	0.94	1.31	0.57
33	0.22	1.90	0.19
34	0.14	1.73	0.14

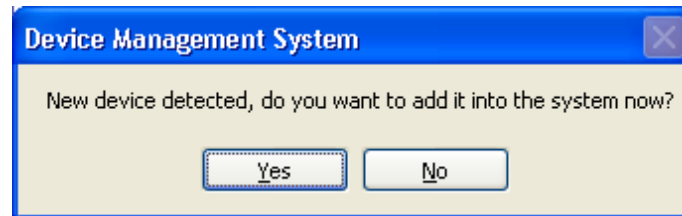


## 6.4 DL141TH

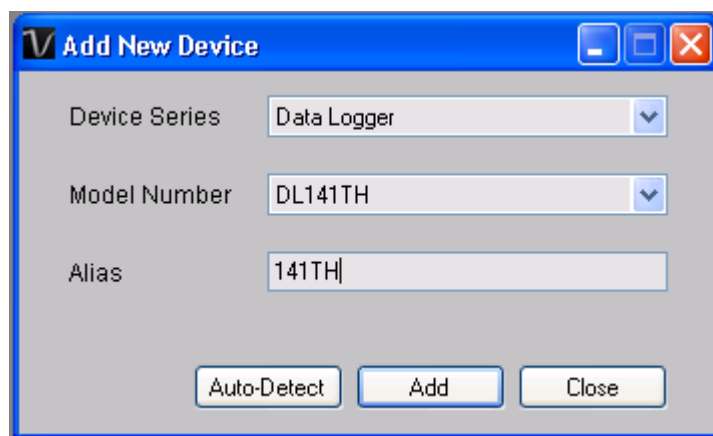
DL141TH is a data logger for storing temperature and humidity readings.

### 6.4.1 Add new DL141TH

When Voltsoft detected a new DL141TH attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

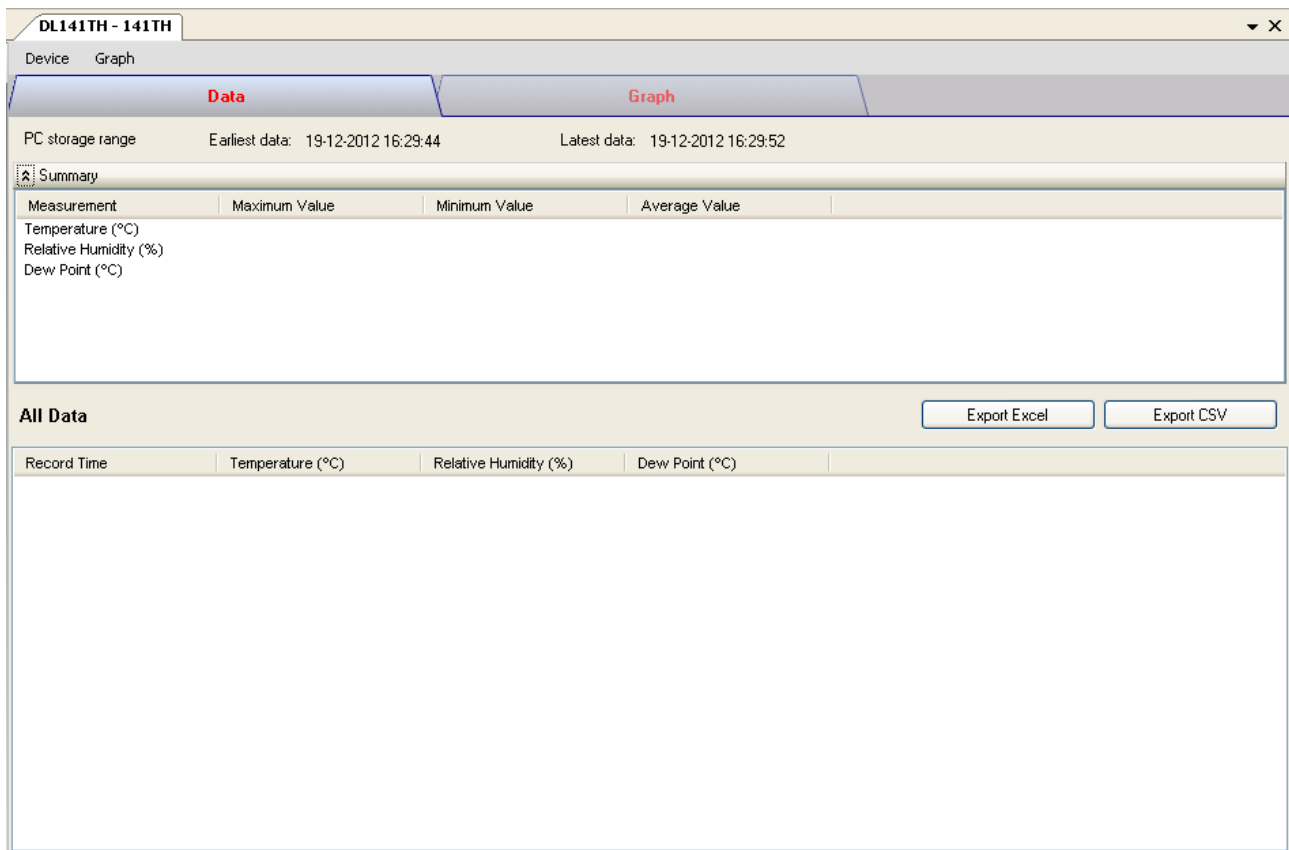


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.4.2 Remove DL141TH

To remove DL141TH, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.4.3 DL141TH – Device Control Panel



The DL141TH Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL141TH.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.



## 6.4.4 DL141TH – Settings

**Logger 140 - Settings**

**Device Time**

06-05-2011 00:20:07 ☒ Use System Time

**Basic Settings**

Logger Name:

Record Start Condition: ☐ By Button ☒ After Setup

Sampling Rate:

Recording Time:

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s ☐ Disable

Recording: ☐ Circulating Record ☒ No Circulating

**Alarm Settings**

☒ Enable LEDs Alert

Temperature: Low Level  °C High Level  °C

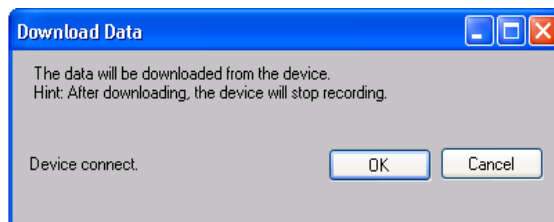
Relative Humidity: Low Level  % High Level  %

Device connect.

1	Device Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Enter the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
	Sample Rate	Instruct the data logger to log readings at a specific rate. The user can input specific data in the edit box on the left and select the time unit using the combo box on the right.
5	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
6	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Recording	Instruct the data logger to continue logging data, recording over the earlier data (Circulating Record), or to stop logging (No Circulating) when the data logger memory is full.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Humidity Low / High Alarm	Configure the humidity low / high alarm level.
11	Default Button	Reload the factory default settings.
12	Setup Button	Save changes.
13	Close Button	Close this interface.

## 6.4.5 DL141TH - Download Data

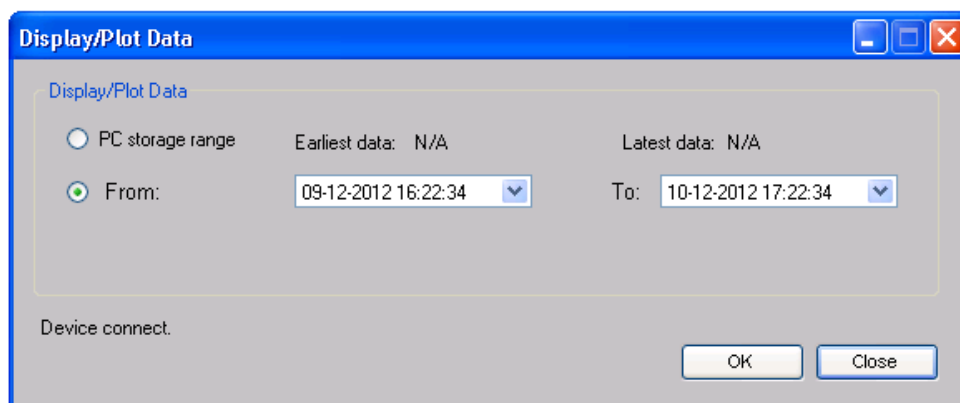
This module allows user to download the data from DL141TH.



Click "OK" button to stop the recording and start downloading.

## 6.4.6 DL141TH – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

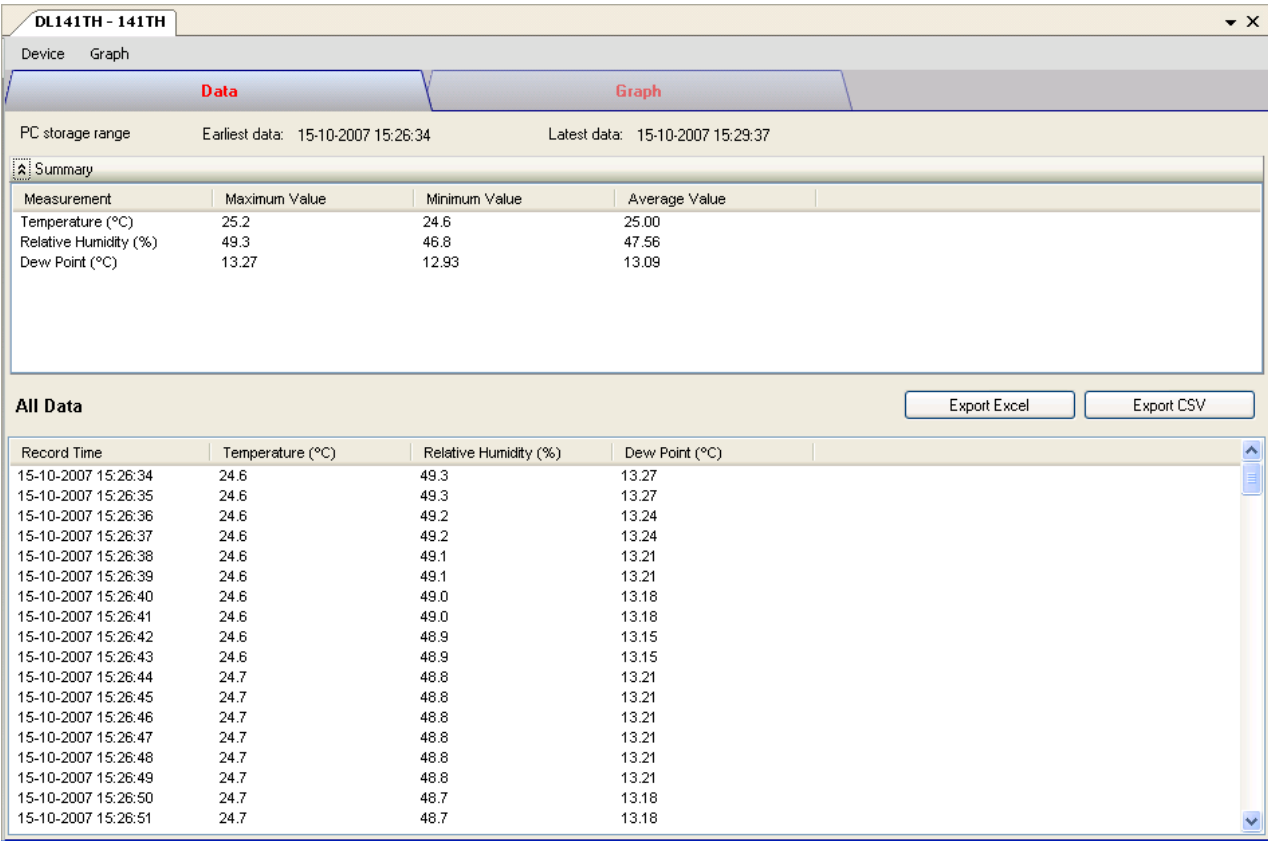


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

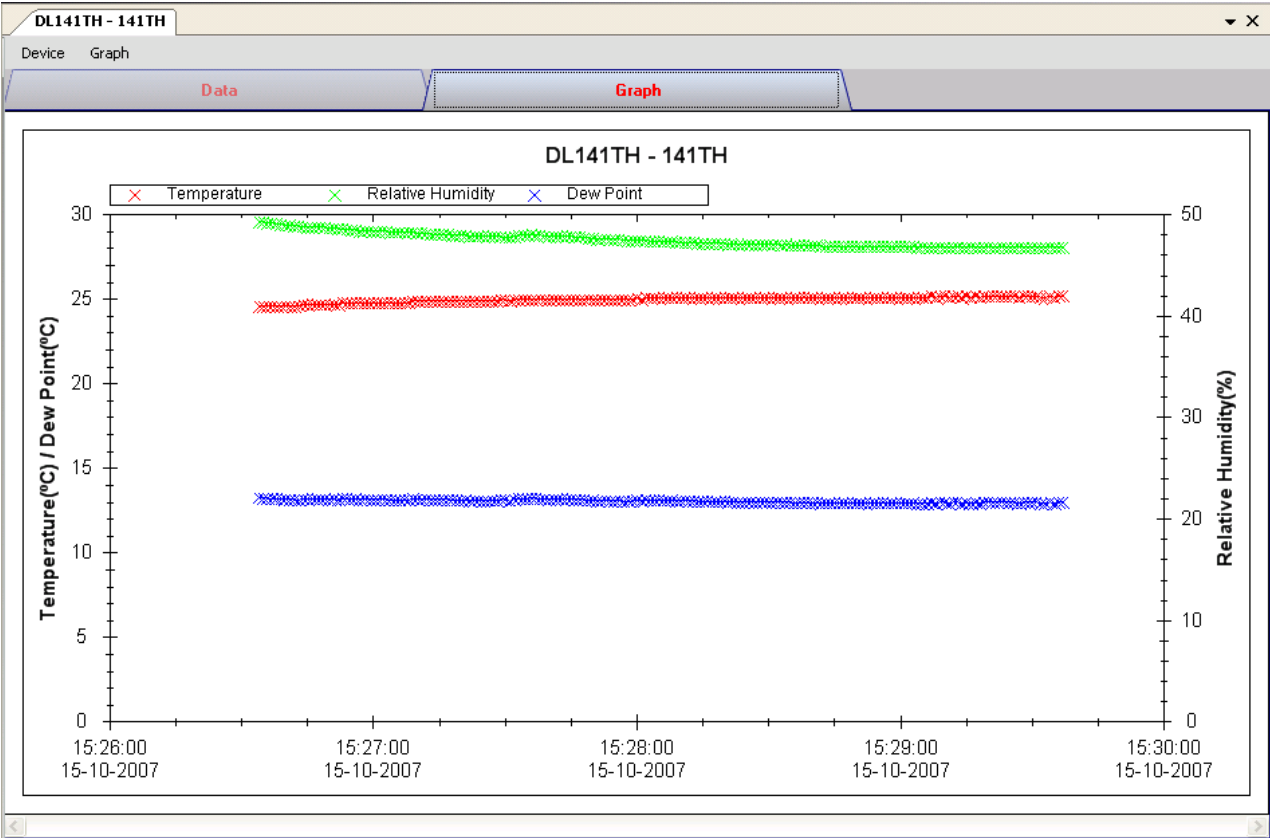
6.4.7 DL141TH – Data View

DL141TH contains three measurements (Temperature, relative humidity and dew point), template / dew point unit can be Celsius or Fahrenheit, depending on the setting in general setting.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.4.8 DL141TH – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.4.9 DL141TH – Web Interface

Please refer to section 5.6 on how to launch the web interface.

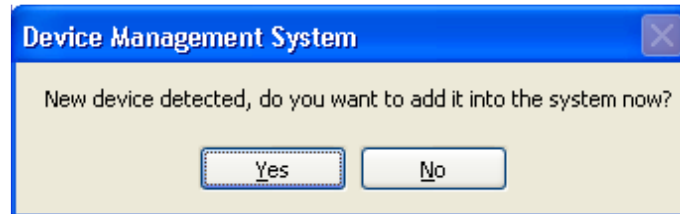
The web interface for DL141TH is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.5 DL161S

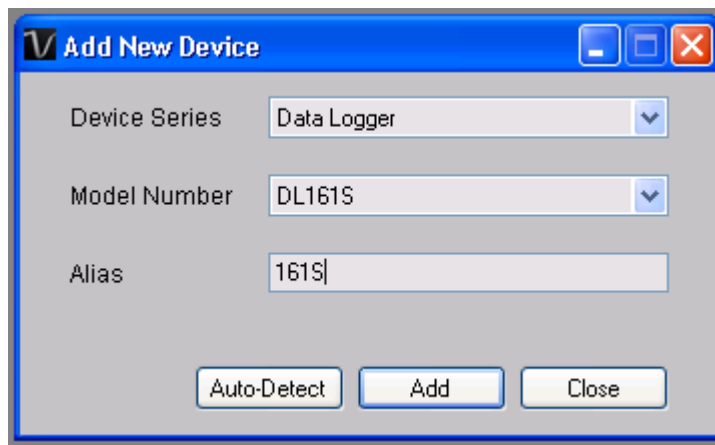
DL161S is a data logger for storing sound level reading. DL161S supports real time measurement.

### 6.5.1 Add new DL161S

When Voltsoft detected a new DL161S attached, the following dialog will be popped up:



Click "Yes", following dialog will be displayed:

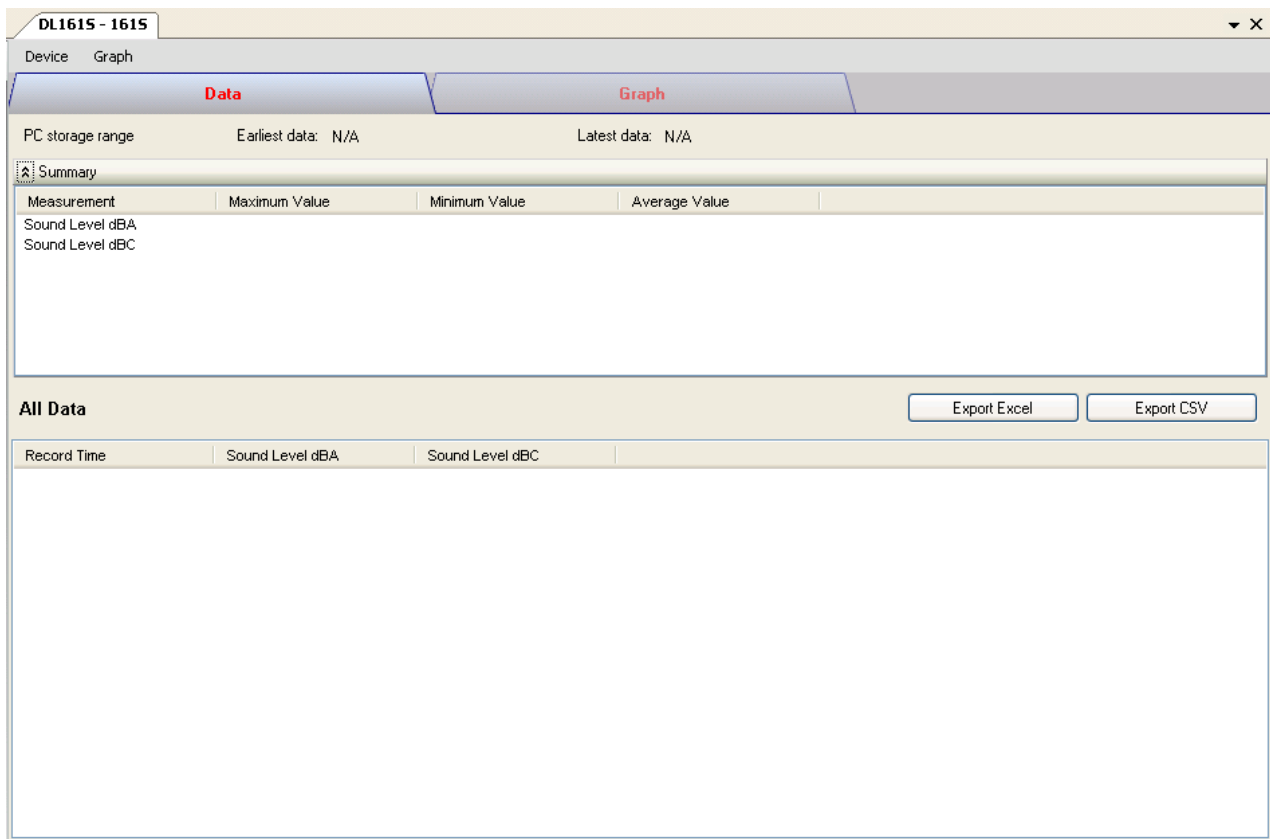


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.5.2 Remove DL161S

To remove DL161S, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.5.3 DL161S – Device Control Panel



The DL161S Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL161S.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
6	Device -> Calibration	Launch the calibration module.
7	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
8	Graph -> Background Colour	Change the background colour of the graph to either black or white.
9	Graph -> Grid	Control whether to show / hide the grid on the graph area.
10	Graph -> Line	Control whether to show / hide the line on the graph area.
11	Graph -> Points Indicator	Control whether to show / hide the points indicator.
12	Graph -> Print	Prints the generated chart.
13	Graph -> Save Image As	Save the image in the chosen file format.
14	Graph -> Zoom Out	Zoom out one level.
15	Graph -> Zoom To Fit	Undo all zoom in and out.
16	Graph -> View All Data	Zoom out the graph to view all data.

## 6.5.4 DL161S – Settings

**160 - Settings**

**Basic Settings**

Time: 05-05-2011 06:29:11 ☒ Use System Time

Logger Name: 160

Sound Unit: ☒ dBA ☐ dBC

Measuring Speed: ☒ Fast ☐ Slow

Mode Setup: ☒ Peak ☐ Normal

Sample Rate: 1 s

Sample Points: 129920 ☒ Infinite

Recording Time: 1 Day 12 Hours 5 Minutes 20 Seconds

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s ☐ Disable

Record Start Condition: By Button ☒ After Setup

Storage Setup: ☐ Store ☒ Real Time

**Alarm Settings**

☒ Enable LEDs Alert

Sound Level: Low Level 30 dBA High Level 130 dBA

Sound Level: Low Level 30 dBC High Level 130 dBC

Device connect.

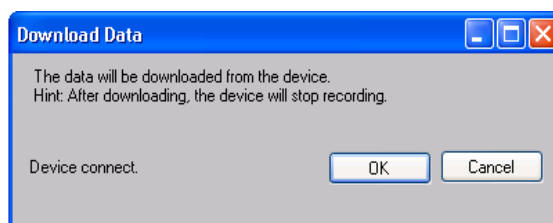
Default Setup Close

1	Time	Configure the device data time value. User can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Sound Unit	The sound unit can be dBA or dBC.
4	Measuring speed	The measuring speed can be Fast or Slow.
5	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
6	Sample Rate	Instruct the data logger to log readings at a specific rate.
7	Sample Points	Configure the data logger sample points.
8	Infinite	For real time mode only, the download will not stop until the user stopped the download.
9	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
10	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
11	Logger Mode	Manual – The data logger will start recording only after the user presses the red button on the device. Instant – The data logger will start recording immediately after setup.
12	Storage Setup	Storage can be Store or Real Time. Store – The data will be stored in offline mode.

		Real Time – The data will be stored in real time mode.
13	LED Flash for High / Low Alarm	Enable / disable LED flash when the alarm is triggered.
14	Low / High Alarm for dBA	Configure the sound level (at unit dBA) for the low / high alarm level.
15	Low / High Alarm for dBC	Configure the sound level (at unit dBC) for the low / high alarm level.
16	Default Button	Load the factory default settings.
17	Setup Button	Save changes.
18	Close Button	Close this interface.

### 6.5.5 DL161S - Download Data

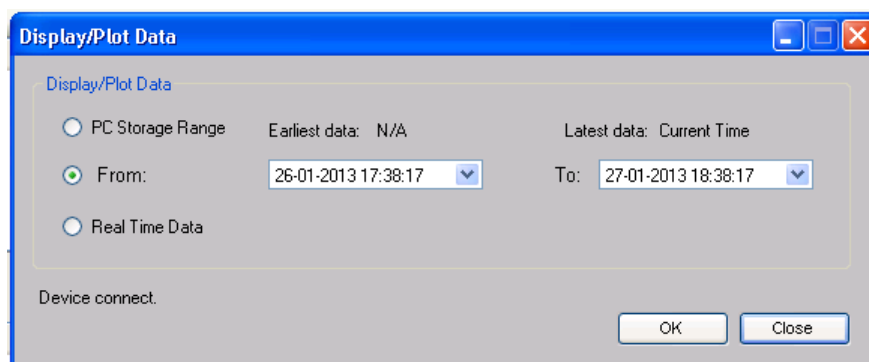
This module allows user to download the data from DL161S.



Click "OK" button to stop the recording and start downloading.

### 6.5.6 DL161S – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)



## 6.5.7 DL161S – Data View

DL161S contains two measurements (sound level in dBA and sound level in dBC), the device can record only one measurement at any specific unit of time (Control in Setting).

**DL161S - 161S**

Device Graph

**Data** **Graph**

PC storage range: Earliest data: 27-01-2013 18:20:24 Latest data: Current Time

**Summary**

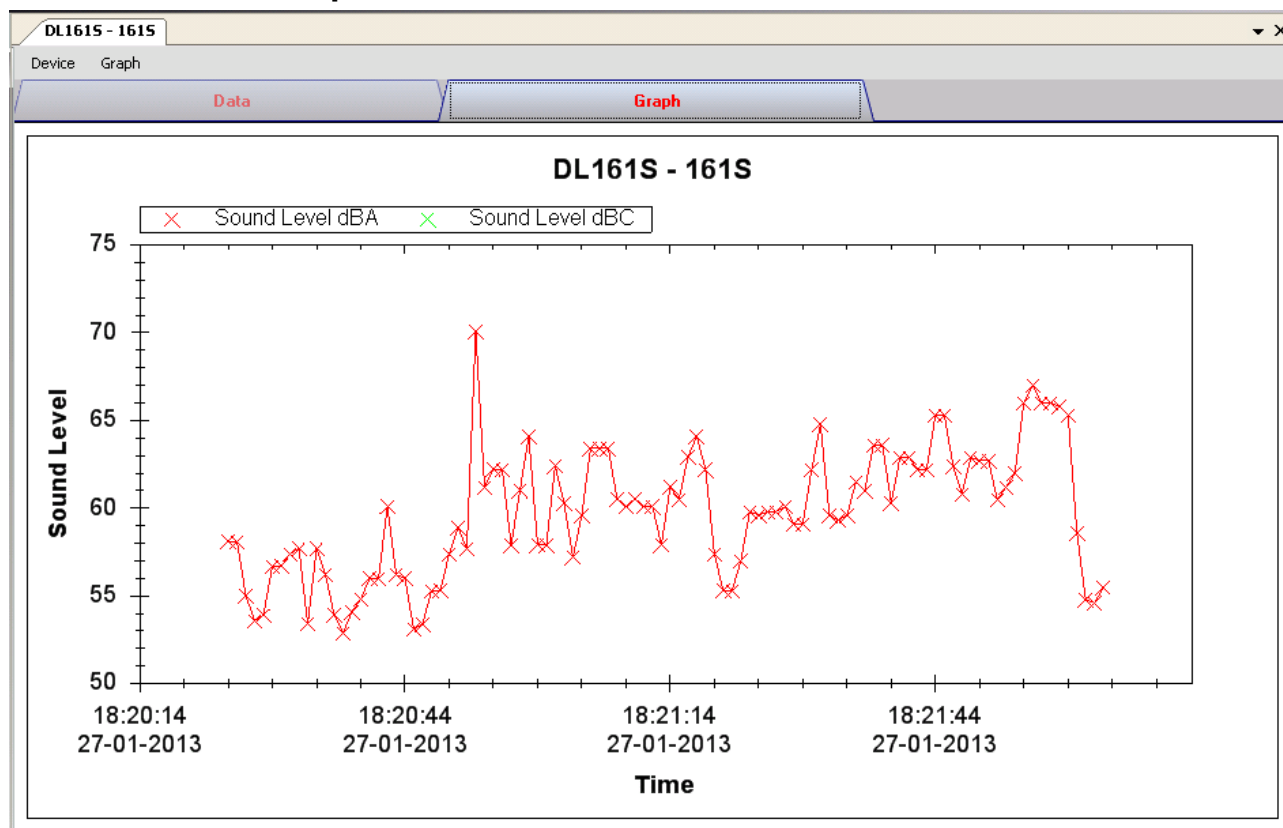
Measurement	Maximum Value	Minimum Value	Average Value
Sound Level dBA	70.1	52.9	59.73
Sound Level dBC			

**All Data** Export Excel Export CSV

Record Time	Sound Level dBA	Sound Level dBC
27-01-2013 18:20:24	58.1	
27-01-2013 18:20:25	58.1	
27-01-2013 18:20:26	55.0	
27-01-2013 18:20:27	53.6	
27-01-2013 18:20:28	53.9	
27-01-2013 18:20:29	56.7	
27-01-2013 18:20:30	56.7	
27-01-2013 18:20:31	57.4	
27-01-2013 18:20:32	57.7	
27-01-2013 18:20:33	53.4	
27-01-2013 18:20:34	57.7	
27-01-2013 18:20:35	56.2	
27-01-2013 18:20:36	53.9	
27-01-2013 18:20:37	52.9	
27-01-2013 18:20:38	54.1	
27-01-2013 18:20:39	54.8	
27-01-2013 18:20:40	56.0	
27-01-2013 18:20:41	56.0	

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

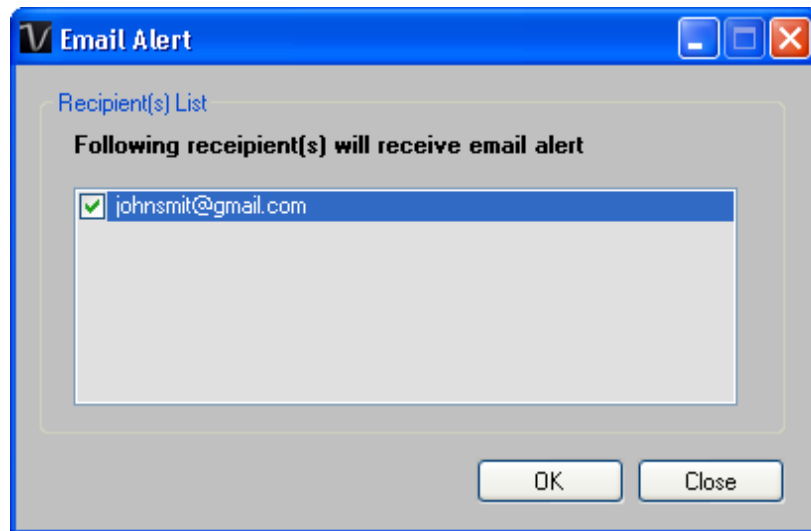
## 6.5.8 DL161S – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

### 6.5.9 DL161S – Email Alert

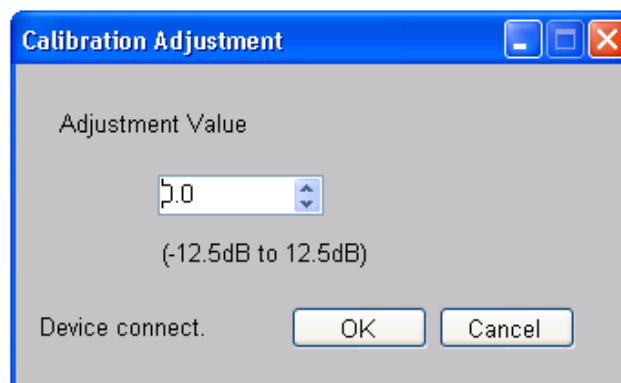


As DL161S supports real time measurement, therefore, it has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level. The alert level can be configured in Setting.

User can use this module to select who will receive the email for the specific device.

### 6.5.10 DL161S – Calibration

DL161S provides an interface to the user for sound level calibration. The calibration adjustment value is allowed between -12.5 dB and 12.5 dB.



Enter the value and click "OK" to set the value.

### **6.5.11 DL161S – Web Interface**

Please refer to section 5.6 on how to launch the web interface.

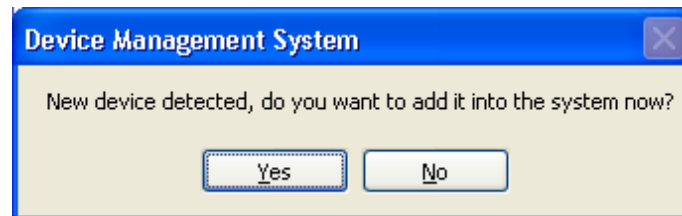
The web interface for DL161S is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.6 DL141TH2K

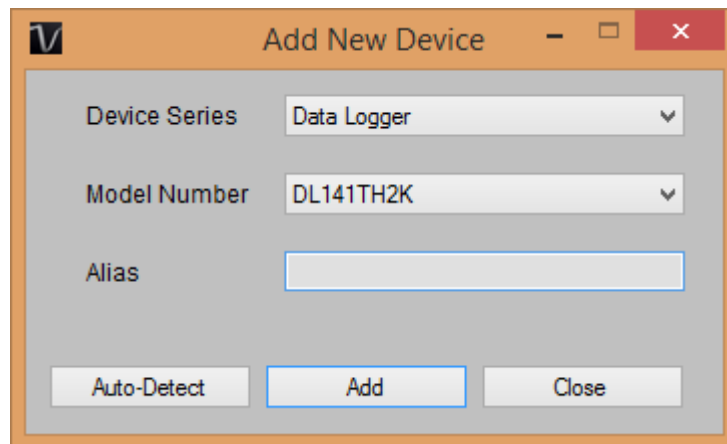
DL141TH2K is a data logger for storing light level.

### 6.6.1 Add new DL141TH2K

When Voltsoft detects a new DL141TH2K attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

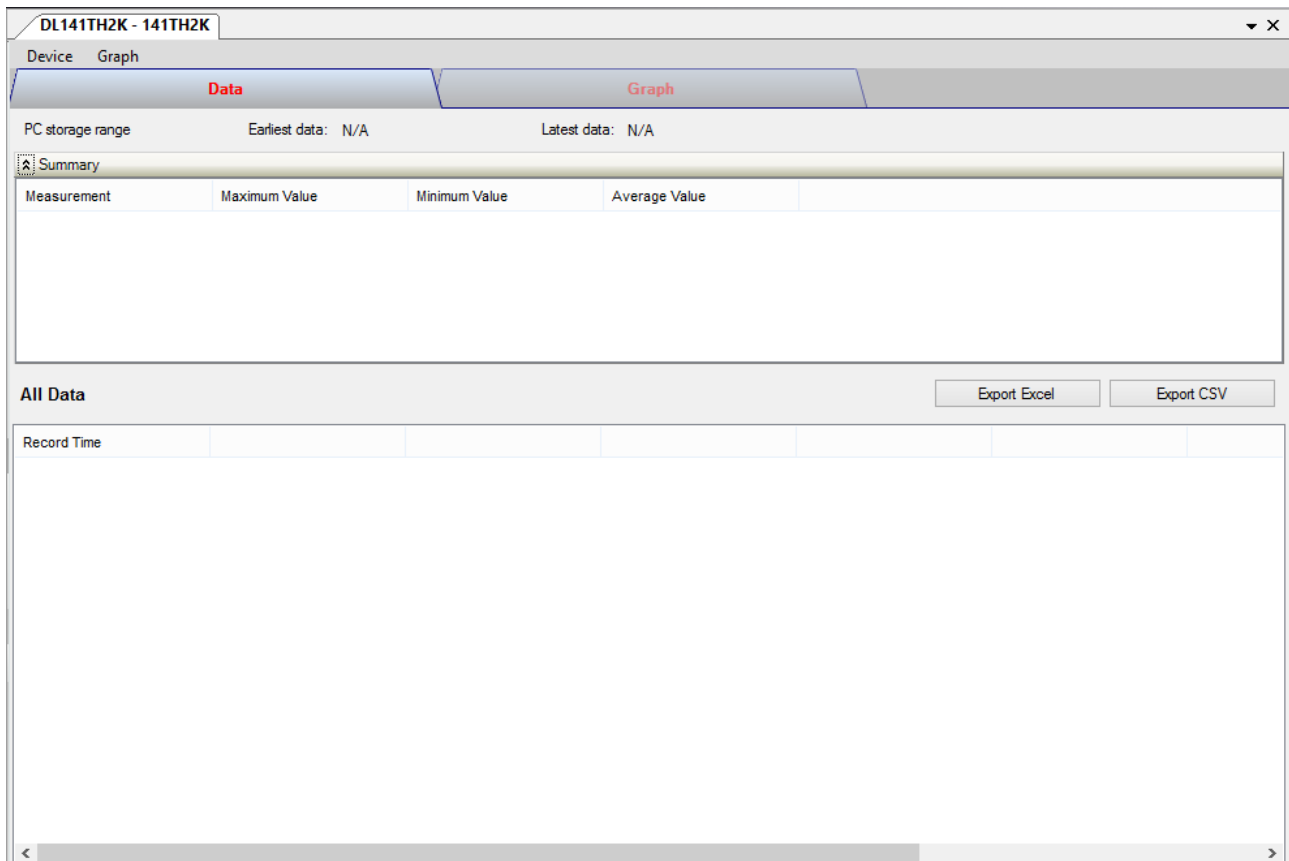


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.6.2 Remove DL141TH2K

To remove DL141TH2K, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.6.3 DL141TH2K– Device Control Panel



The DL141TH2K Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL141TH2K.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.6.4 DT141TH2K - Settings

**141TH2K - Settings (HW ID:172TK\_1412150001)**

**Basic Settings**

Time: 12-08-2015 11:50:35 ☒ Use System Time

Logger Name: 141TH2K

Record Start Condition: ☐ By Button ☒ After Setup

Sample Rate: 1 Second

Recording Time: 36 Days

LED Flash Cycle: ☐ 10s ☐ 20s ☐ 30s ☒ Disable

**Alarm Settings**

☐ Enable LEDs Alert

TK1 Temperature (°C): Low Level 0.0 High Level 1.0

TK2 Temperature (°C): Low Level 0.0 High Level 1.0

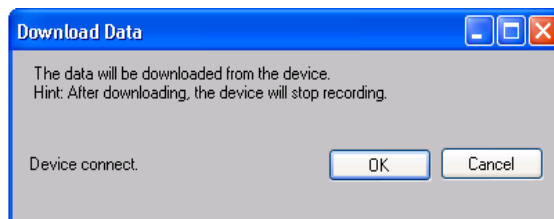
Device disconnect. Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

## 6.6.5 DL141TH2K - Download Data

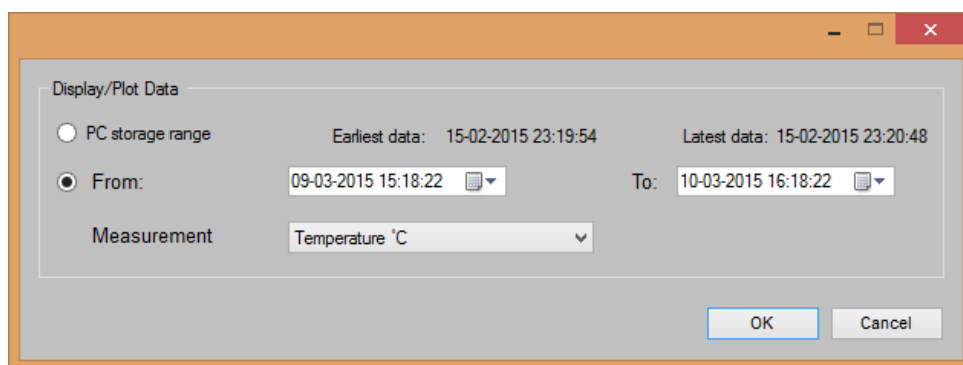
This module allows user to download the data from DL141TH2K.



Click "OK" button to stop the recording and start downloading.

## 6.6.6 DL141TH2K– Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



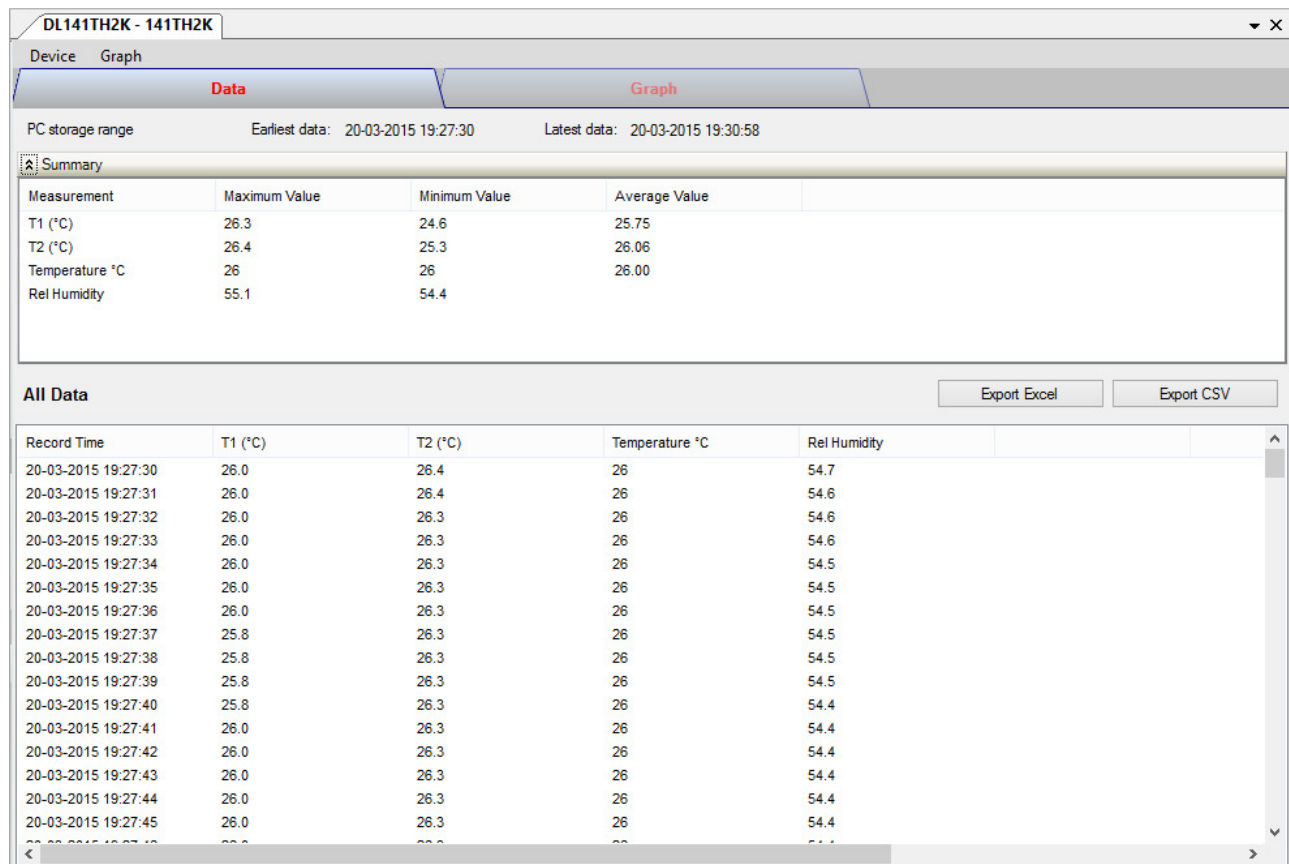
1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)



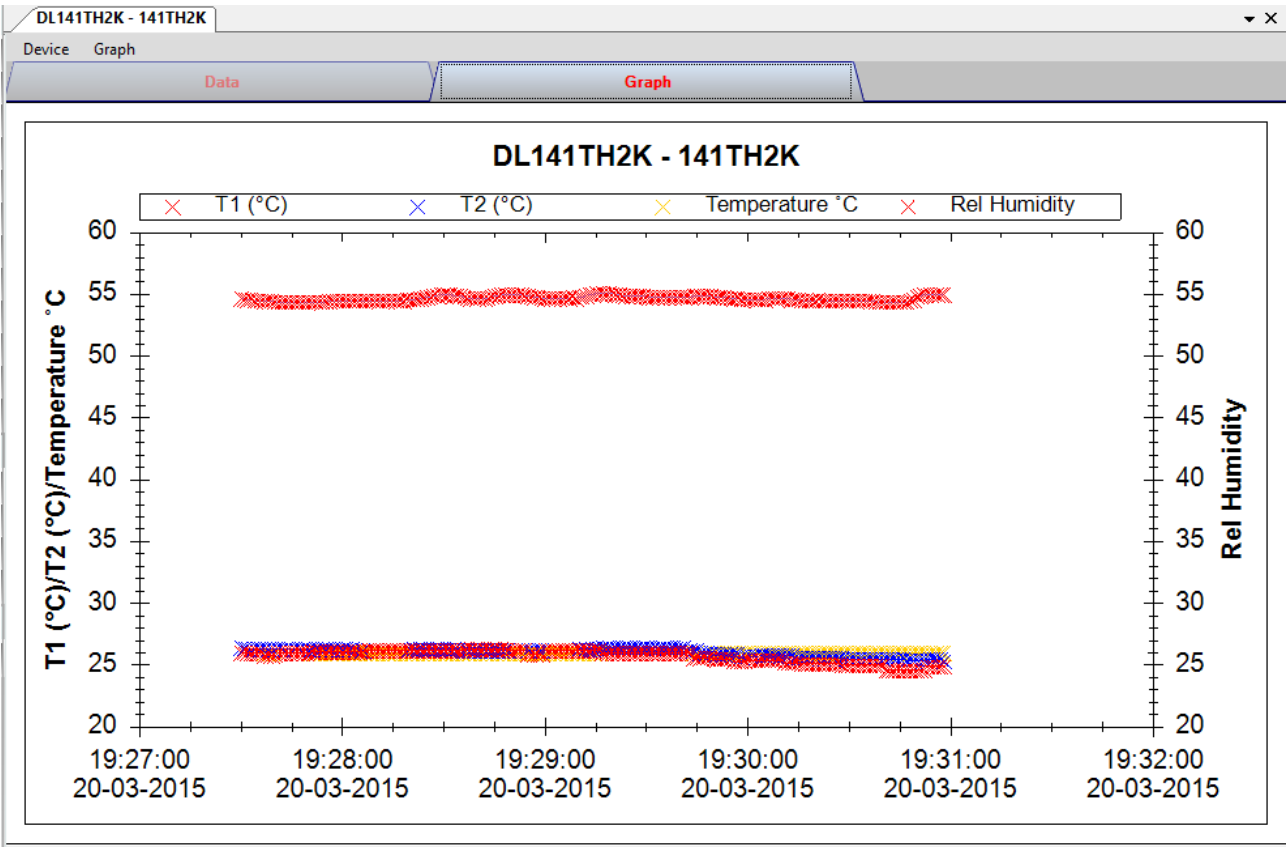
## 6.6.7 DL141TH2K – Data View

DL141TH2K contains total four measurements:T1, T2, Temperature and Relative humidity.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.6.8 DL141TH2K– Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.6.9 DL141TH2K– Web Interface

Please refer to section 5.6 on how to launch the web interface.

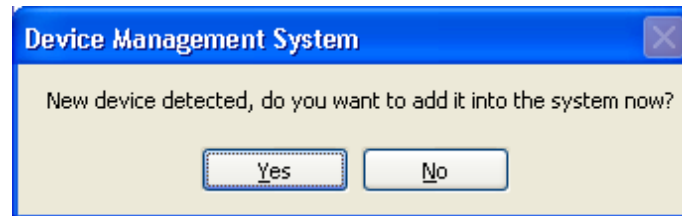
The web interface for DL141TH2K is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.7 DL181THP

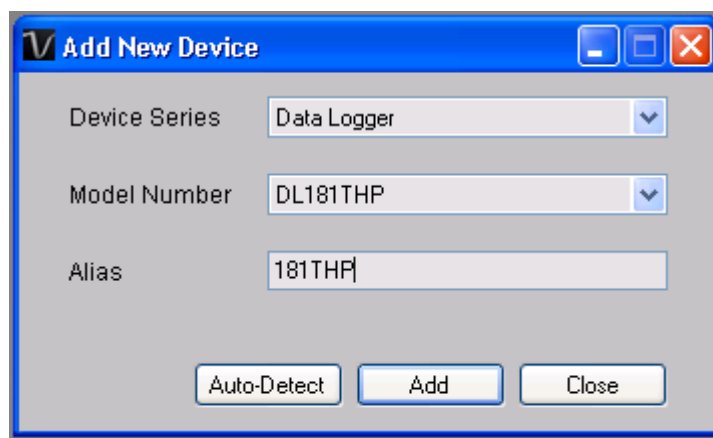
DL181THP is a data logger for storing temperature, humidity and air pressure reading.

### 6.7.1 Add new DL181THP

When Voltsoft detected a new DL181THP attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

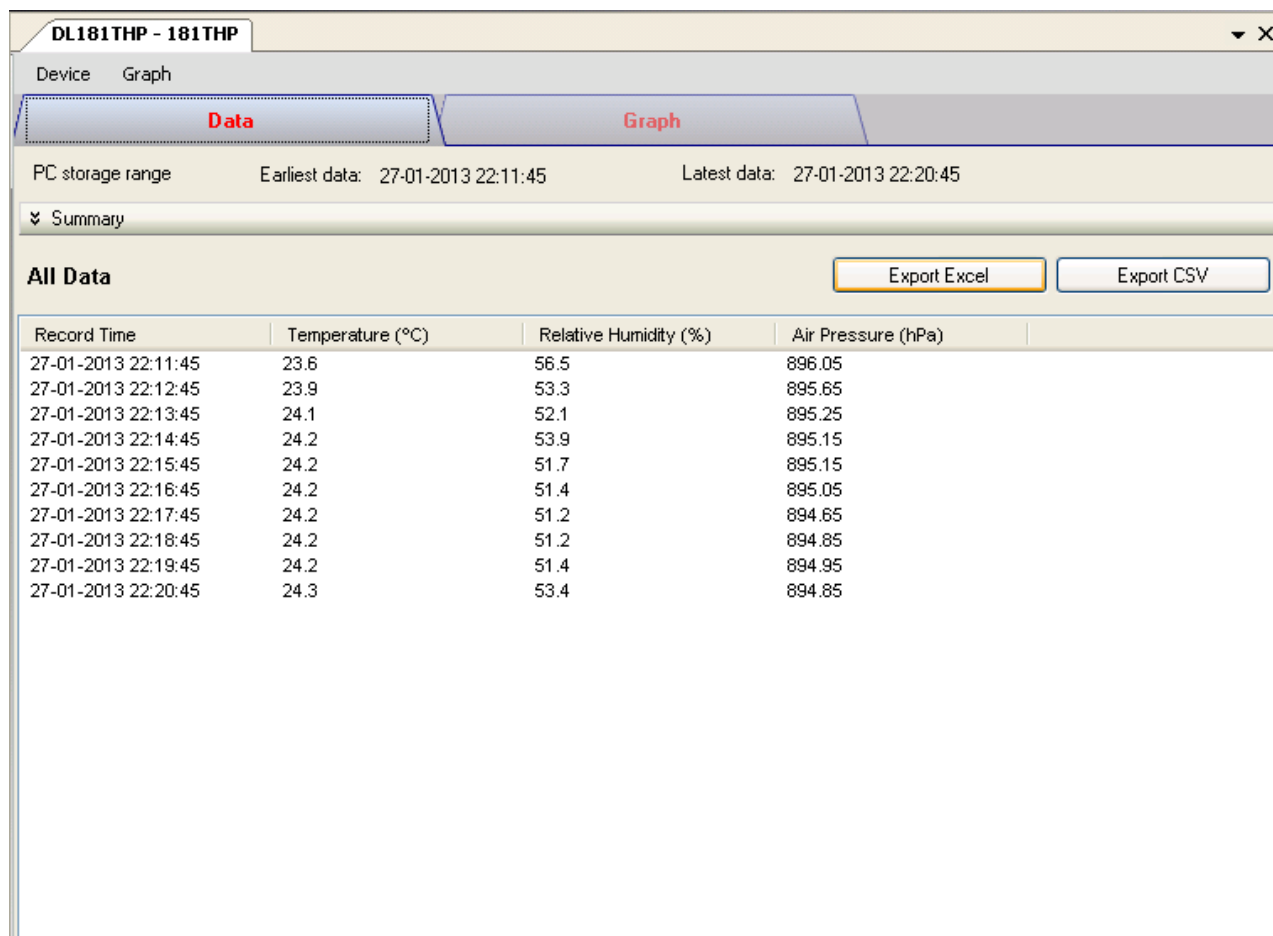


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.7.2 Remove DL181THP

To remove DL181THP, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.7.3 DL181THP – Device Control Panel



The DL181THP Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL181THP.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.7.4 DL181THP – Settings

**DL181THP - Settings (HW ID:0004\_12101700002)**

**Basic Settings**

Time: 27-01-2013 21:58:53 ☒ Use System Time

Logger Name: 181THP

Record Start Condition: ☐ By Button ☒ After Setup

Sample Rate: 0 Hour(s) 1 Minute(s)

Sample Points: 10000

Recording Time: 6 Days 22 Hours 40 Minutes

☒ Enable LEDs Record 10 Sec(s)

**Alarm Settings**

☒ Enable LEDs Alert 1 Sec(s)

Temperature: Low Level -40.0 °C High Level 70.0 °C

Humidity: Low Level 0.0 % High Level 100.0 %

Air Pressure: Low Level 700.0 hPa High Level 1100.0 hPa

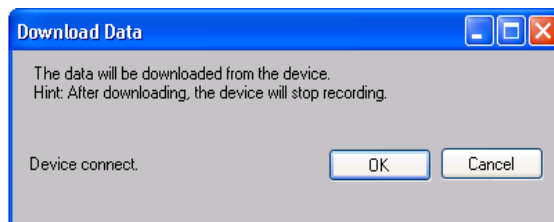
Device connect.

Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Sample Points	Configure the data logger sample points.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	Altitude	Allows user to set the current altitude.
8	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
9	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
10	Temperature Low / High Alarm	Configure the temperature low / high alarm level
11	Humidity Low / High Alarm	Configure the humidity low / high alarm level
12	Air Pressure Low / High Alarm	Configure the air pressure low / high alarm level
13	Default Button	Load the factory default settings.
14	Setup Button	Save changes.
15	Close Button	Close this interface.

## 6.7.5 DL181THP - Download Data

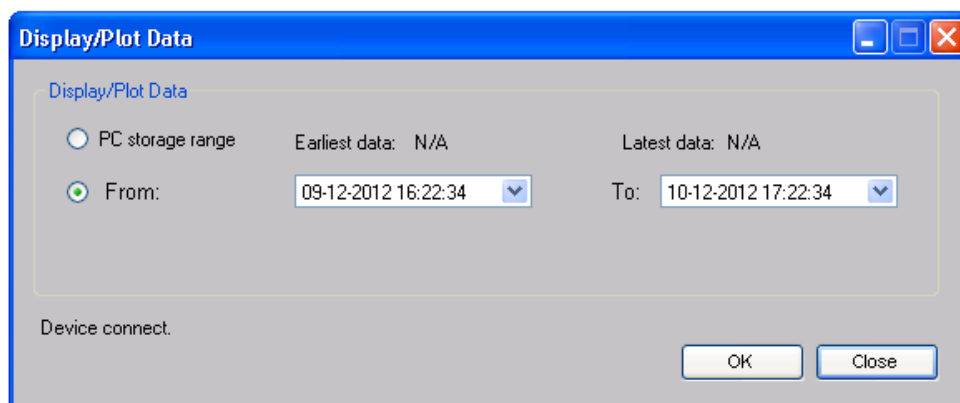
This module allows user to download the data from DL181THP.



Click "OK" button to stop the recording and start downloading.

## 6.7.6 DL181THP – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

### 6.7.7 DL181THP – Data View

DL181THP contains three measurements (Temperature, relative humidity and pressure), template unit can be Celsius or Fahrenheit and pressure unit can be hPa / kPa / Bar / SPI, depending on the setting in general setting.

DL181THP - 181THP

Device Graph

**Data** **Graph**

PC storage range Earliest data: 27-01-2013 22:11:45 Latest data: 27-01-2013 22:20:45

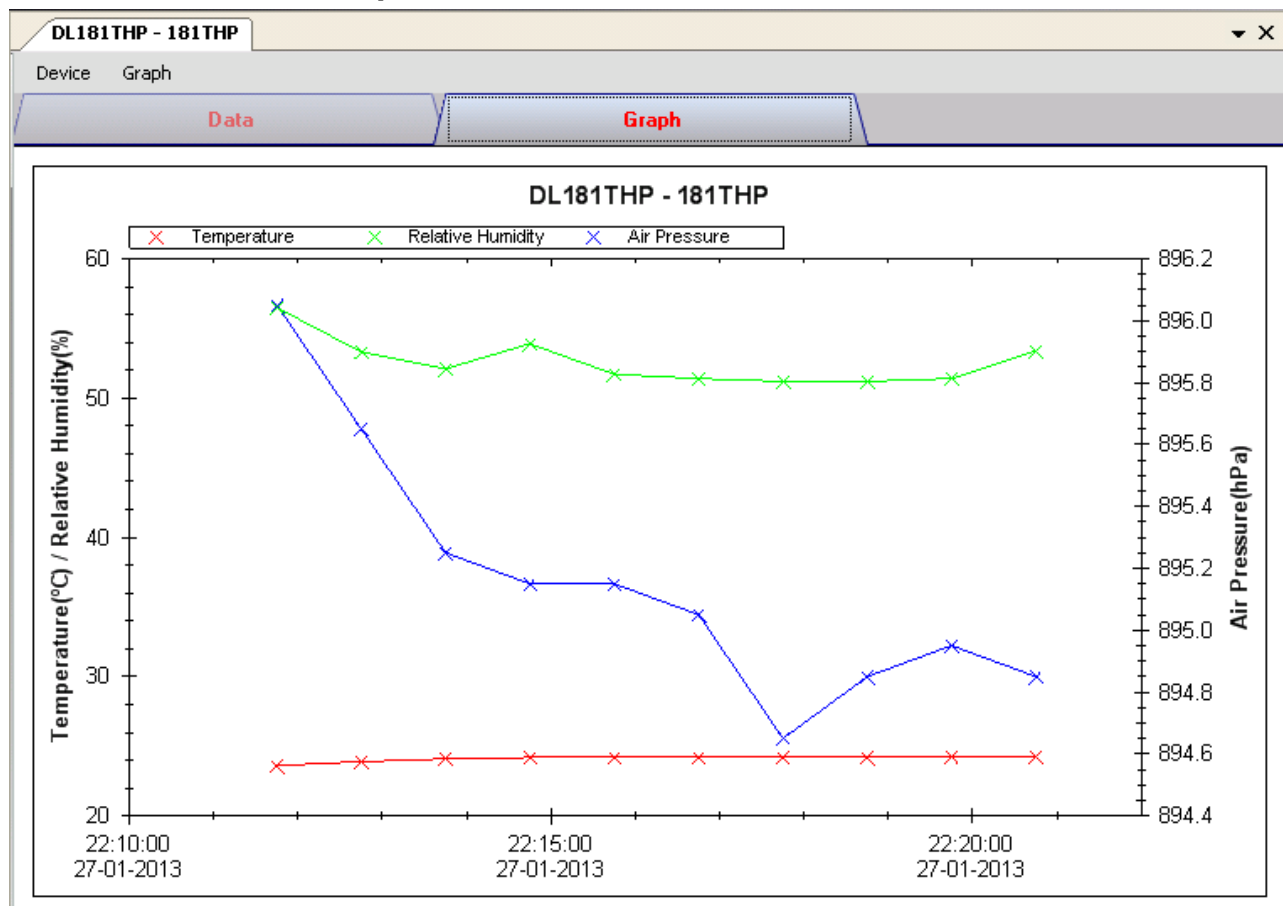
Summary

**All Data** Export Excel Export CSV

Record Time	Temperature (°C)	Relative Humidity (%)	Air Pressure (hPa)
27-01-2013 22:11:45	23.6	56.5	896.05
27-01-2013 22:12:45	23.9	53.3	895.65
27-01-2013 22:13:45	24.1	52.1	895.25
27-01-2013 22:14:45	24.2	53.9	895.15
27-01-2013 22:15:45	24.2	51.7	895.15
27-01-2013 22:16:45	24.2	51.4	895.05
27-01-2013 22:17:45	24.2	51.2	894.65
27-01-2013 22:18:45	24.2	51.2	894.85
27-01-2013 22:19:45	24.2	51.4	894.95
27-01-2013 22:20:45	24.3	53.4	894.85

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

## 6.7.8 DL181THP – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values



### **6.7.9 DL181THP – Web Interface**

Please refer to section 5.6 on how to launch the web interface.

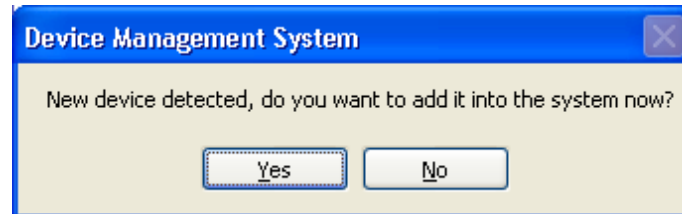
The web interface for DL181THP is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.8 DL131LUX

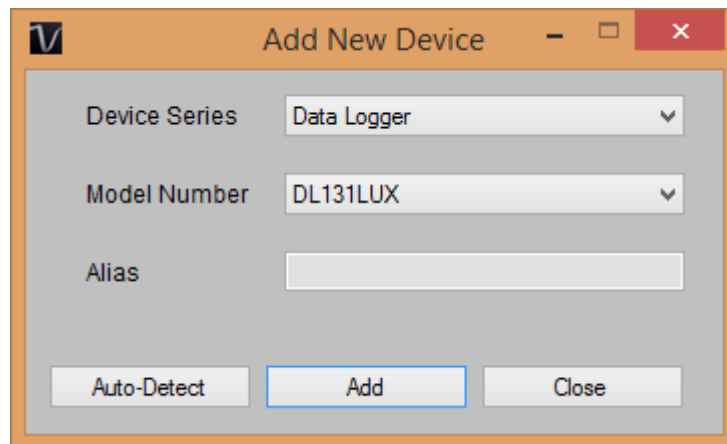
DL131LUX is a data logger for storing light level.

### 6.8.1 Add new DL131LUX

When Voltsoft detects a new DL131LUX attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

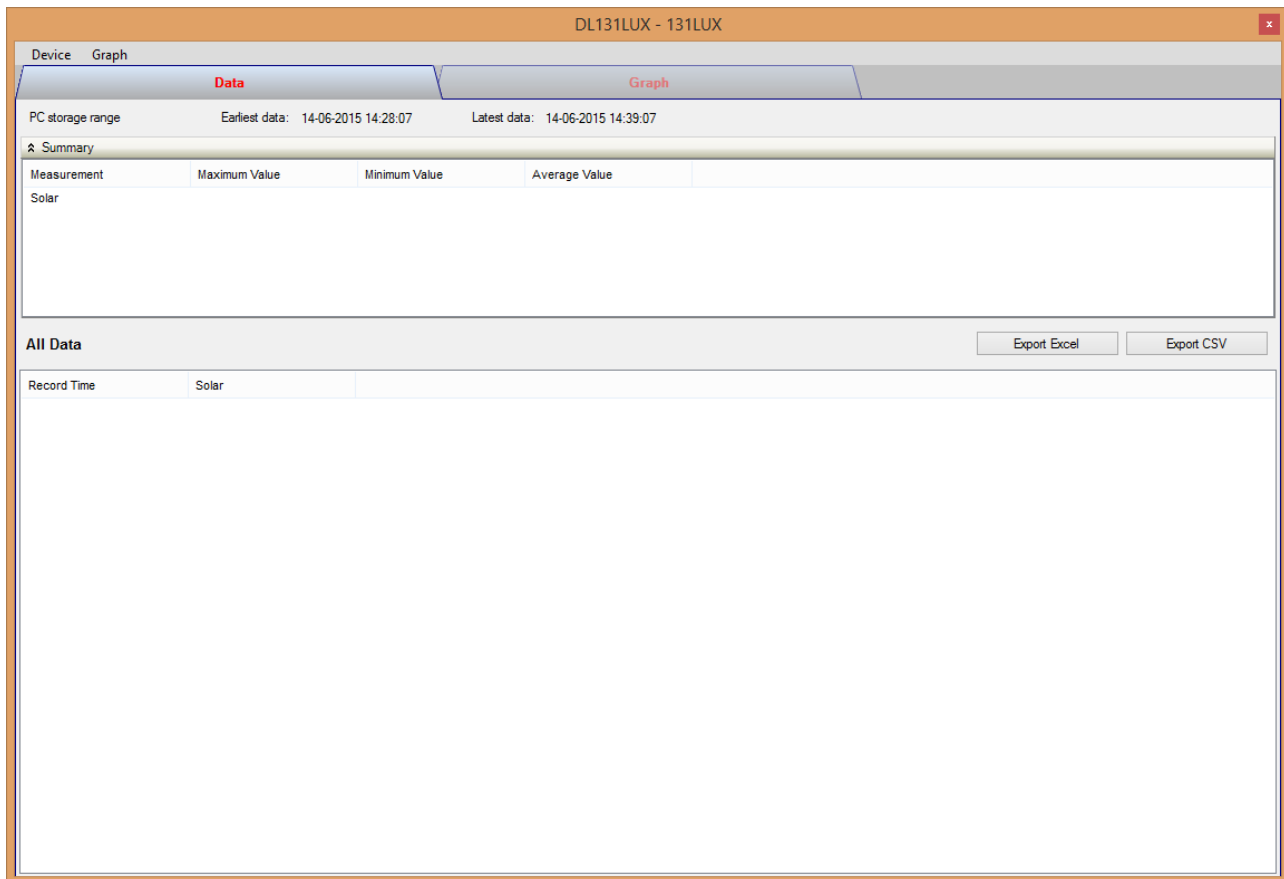


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.8.2 Remove DL131LUX

To remove DL131LUX, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.8.3 DL131LUX – Device Control Panel



The DL131LUX Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL131LUX.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.8.4 DL131LUX - Settings

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

## 6.8.5 DL131LUX - Download Data

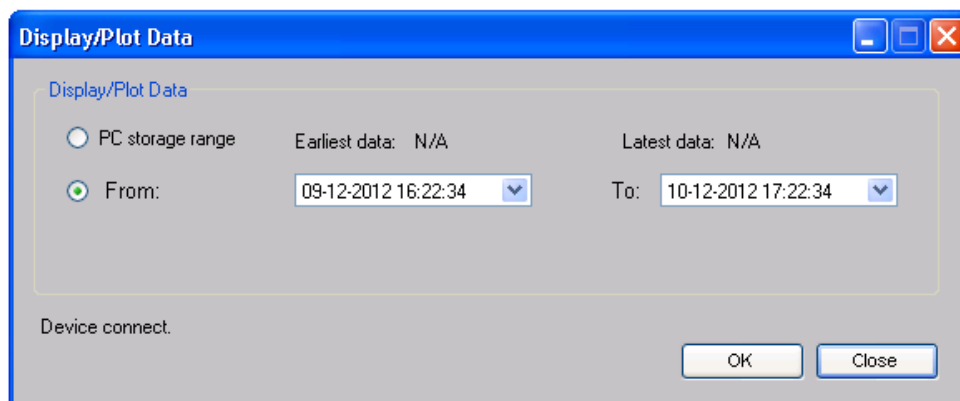
This module allows user to download the data from DL131LUX.



Click "OK" button to stop the recording and start downloading.

## 6.8.6 DL131LUX – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

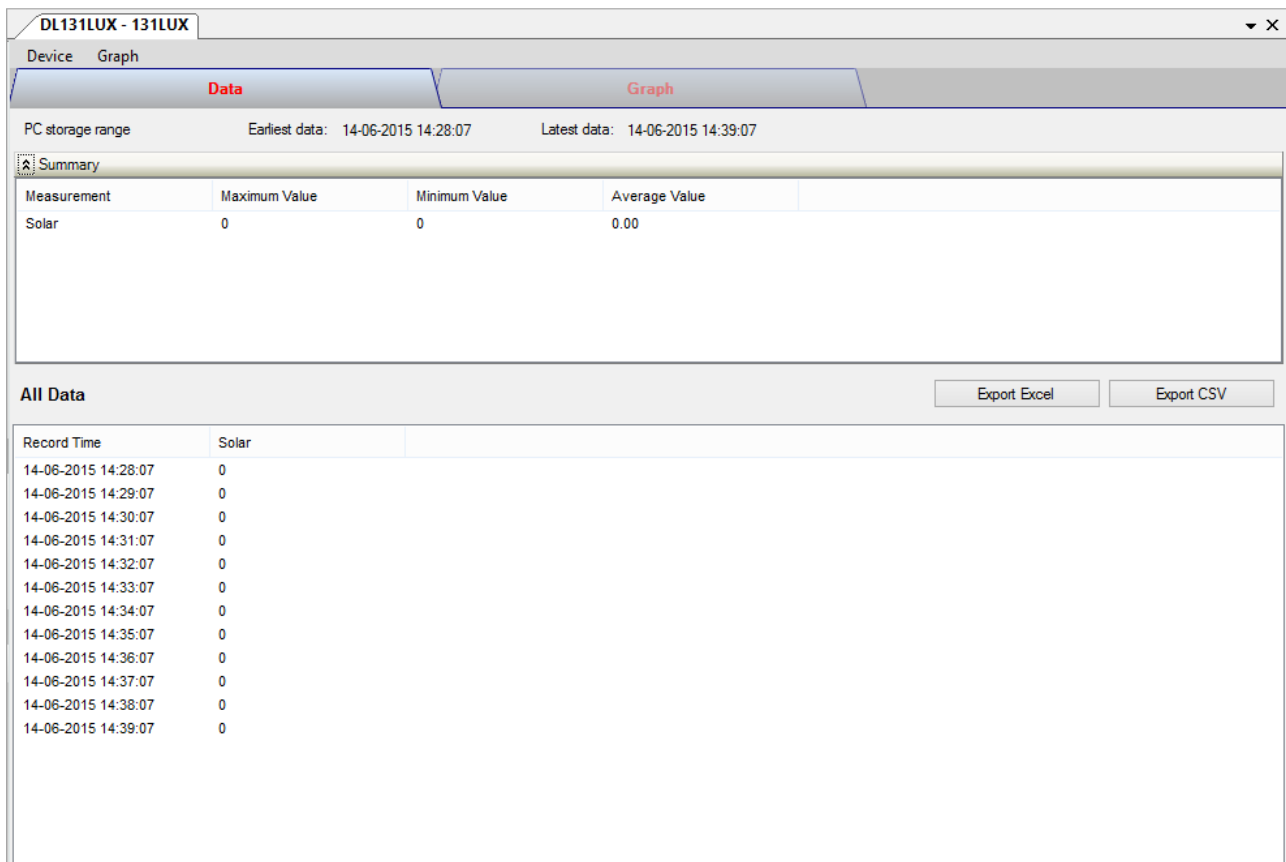


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

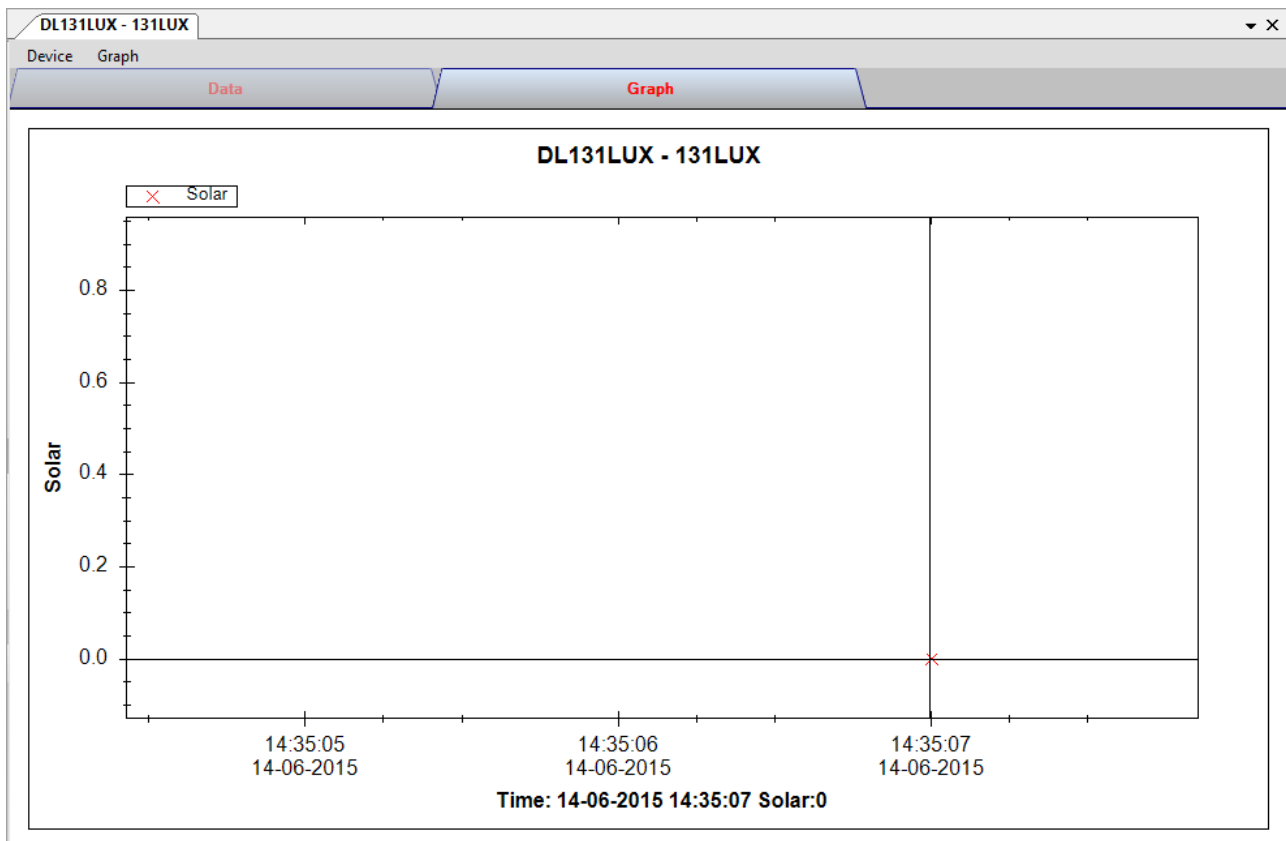
## 6.8.7 DL131LUX – Data View

DL131LUX contains one measurement only, the light level.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

## 6.8.8 DL131LUX – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.8.9 DL131LUX – Web Interface

Please refer to section 5.6 on how to launch the web interface.

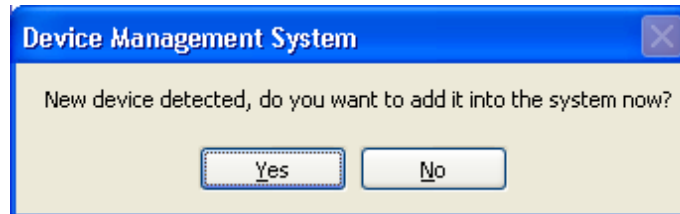
The web interface for DL131LUX is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.9 DL161SAN

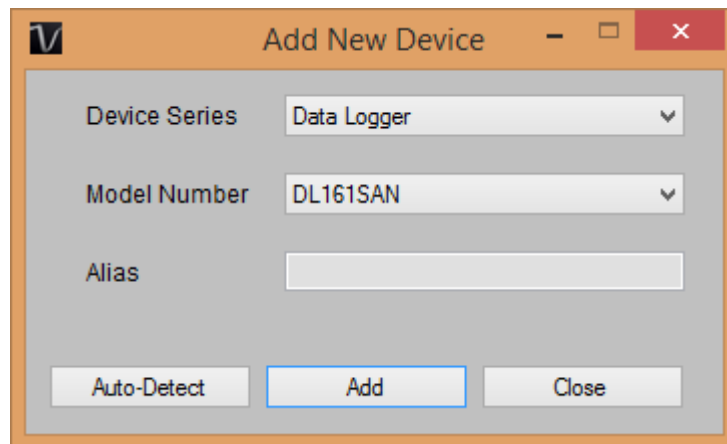
DL161SAN is a data logger for storing wind speed.

### 6.9.1 Add new DL161SAN

When Voltsoft detects a new DL161SAN attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.9.2 Remove DL161SAN

To remove DL161SAN, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.



### 6.9.3 DL161SAN – Device Control Panel

DL161SAN - 161SAN

DeviceGraph

Data

Graph

PC storage range      Earliest data: N/A      Latest data: N/A

Summary

Measurement	Maximum Value	Minimum Value	Average Value	
Maximum Value				
Average Value				
Minimum Value				
RT Value				

All Data

Export ExcelExport CSV

Record Time	Maximum Value	Average Value	Minimum Value	RT Value	
-------------	---------------	---------------	---------------	----------	--

The DL161SAN Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL161SAN.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.9.4 DL161SAN - Settings

**161SAN - Settings (HW ID:0012\_14031000001)**

**Basic Settings**

Time: 13-08-2015 14:41:37 ☒ Use System Time

Logger Name: 161SAN

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 60000 Sample Rate: 10m

Recording Time: 416 Days 16 Hours

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☐ Enable LEDs Alert

Low Level: 0.0 High Level: 0.0

Device disconnect.

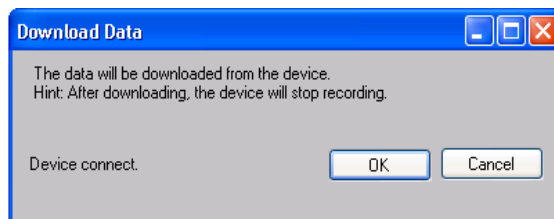
Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.

## 6.9.5 DL161SAN - Download Data

This module allows user to download the data from DL161SAN.

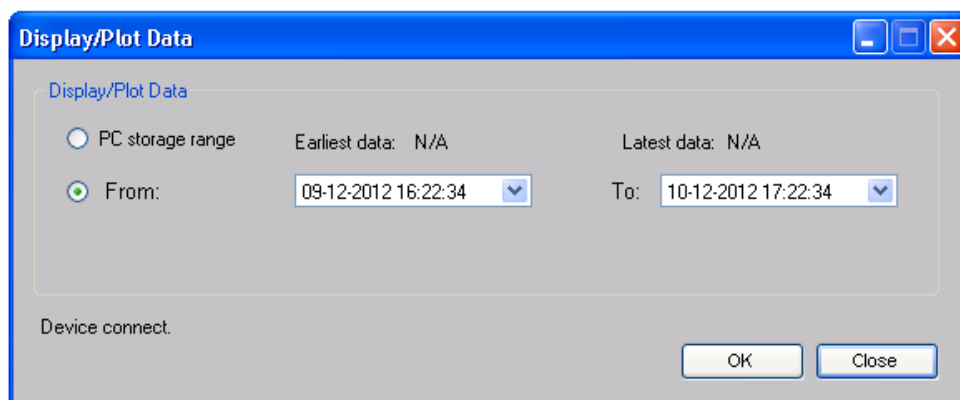


Click "OK" button to stop the recording and start downloading.

\*You must place the datalogger on the key lock before download data.

## 6.9.6 DL161SAN – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

## 6.9.7 DL161SAN – Data View

DL161SAN contains four measurement: Maximum Value, Average Value, Minimum Value and RT Value.

DL161SAN - 161SAN

Device

Graph

Data

Graph

PC storage range

Earliest data: 15-02-2015 21:49:22

Latest data: 15-02-2015 21:52:22

Summary

All Data

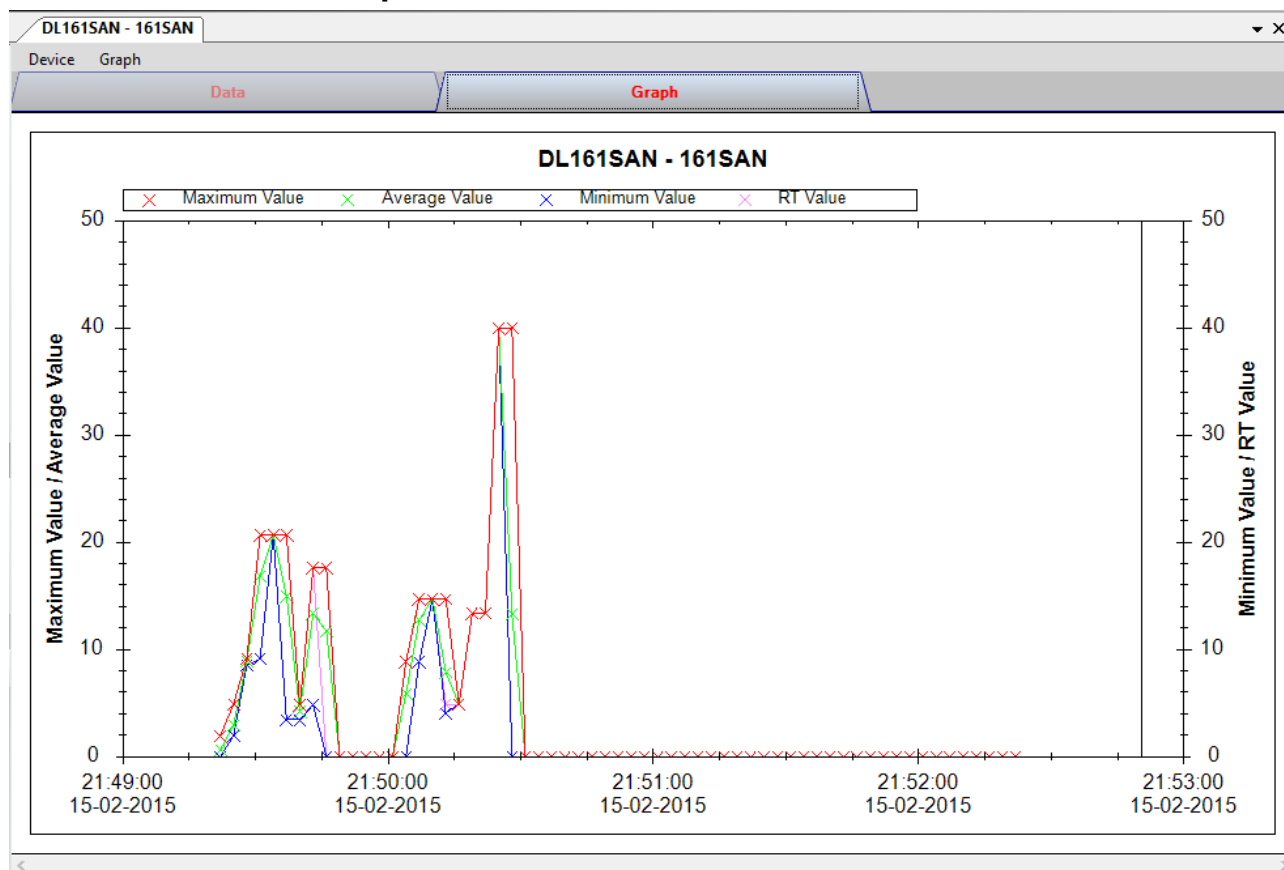
Export Excel

Export CSV

Record Time	Maximum Value	Average Value	Minimum Value	RT Value
15-02-2015 21:49:22	1.94	0.64	0	1.94
15-02-2015 21:49:25	4.92	2.93	1.94	4.92
15-02-2015 21:49:28	9.14	8.92	8.5	9.14
15-02-2015 21:49:31	20.69	16.83	9.14	20.69
15-02-2015 21:49:34	20.69	20.69	20.69	20.69
15-02-2015 21:49:37	20.69	14.93	3.43	3.43
15-02-2015 21:49:40	4.82	4.22	3.43	4.82
15-02-2015 21:49:43	17.63	13.35	4.82	17.63
15-02-2015 21:49:46	17.63	11.75	0	0
15-02-2015 21:49:49	0	0	0	0
15-02-2015 21:49:52	0	0	0	0
15-02-2015 21:49:55	0	0	0	0
15-02-2015 21:49:58	0	0	0	0
15-02-2015 21:50:01	0	0	0	0
15-02-2015 21:50:04	8.85	5.89	0	8.85
15-02-2015 21:50:07	14.72	12.76	8.85	14.72
15-02-2015 21:50:10	14.72	14.72	14.72	14.72
15-02-2015 21:50:13	14.72	7.89	4.08	4.87
15-02-2015 21:50:16	4.87	4.87	4.87	4.87
15-02-2015 21:50:19	13.42	13.42	13.42	13.42
15-02-2015 21:50:22	13.42	13.42	13.42	13.42
15-02-2015 21:50:25	40	40	40	40
15-02-2015 21:50:28	40	13.33	0	0
15-02-2015 21:50:31	0	0	0	0
15-02-2015 21:50:34	0	0	0	0

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

## 6.9.8 DL161SAN – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.9.9 DL161SAN – Web Interface

Please refer to section 5.6 on how to launch the web interface.

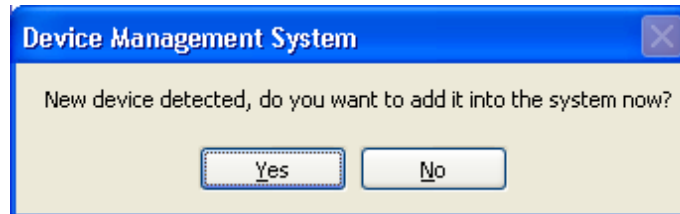
The web interface for DL161SAN is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.10 DL201THM

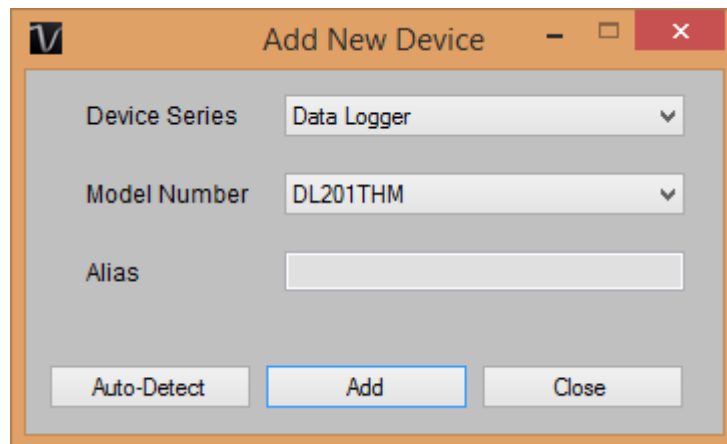
DL201THM is a data logger for storing moisture.

### 6.10.1 Add new DL201THM

When Voltsoft detects a new DL201THM attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.10.2 Remove DL201THM

To remove DL201THM, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.10.3 DL201THM – Device Control Panel

DL201THM - 201THM

Device Graph

**Data** **Graph**

PC storage range Earliest data: N/A Latest data: N/A

Summary

Measurement	Maximum Value	Minimum Value	Average Value

All Data

Record Time

Export Excel Export CSV

The DL201THM Device Control Panel contains follow items in menu:

1	Device -> Settings	This will launch the setting page of DL201THM.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.10.4 DL201THM - Settings

**201THM - Settings (HW ID:0016\_14060500002)**

**Basic Settings**

Time: 13-08-2015 14:57:25 ☒ Use System Time

Logger Name: 201THM

Record Start Condition: ☐ By Button ☒ After Setup

Sample Rate: 1 Minute

Recording Time: 36 Days

LED Flash Cycle: ☐ 10s ☐ 20s ☐ 30s ☒ No Light

**Alarm Settings**

☐ Enable LEDs Alert

Wood Humidity Low Level: 0.0 High Level: 0.0 %RH

Device connect.

Default Setup Close

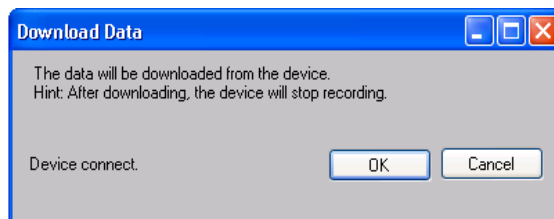
1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device.  After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Instruct the logger to take a finite number of readings.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
6	Recording Time	Calculate the recording time based on the selected sample points and sample rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
9	Low / High Alarm	Configure the low / high alarm level for different measurement.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

Note: Any stored data will be permanently erased when setup is finished.



## 6.10.5 DL201THM - Download Data

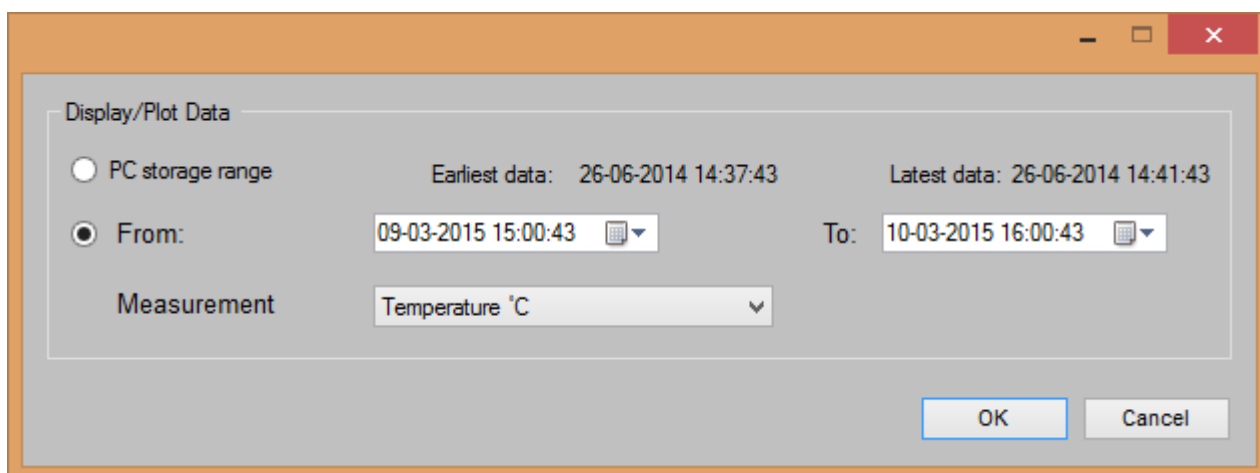
This module allows user to download the data from DL201THM.



Click "OK" button to stop the recording and start downloading.

## 6.10.6 DL201THM – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

## 6.10.7 DL201THM – Data View

DL201THM contains three measurements: Wood humidity, Temperature, Relative humidity.

DL201THM - 201THM

Device
Graph

Data
Graph

PC storage range
Earliest data: 26-06-2014 14:37:43
Latest data: 26-06-2014 14:41:43

Summary

Measurement	Maximum Value	Minimum Value	Average Value
Wood Humidity	0	0	0.00
Temperature °C (°C)	27.3	27.3	27.40
Rel Humidity	55.1	55.1	55.73

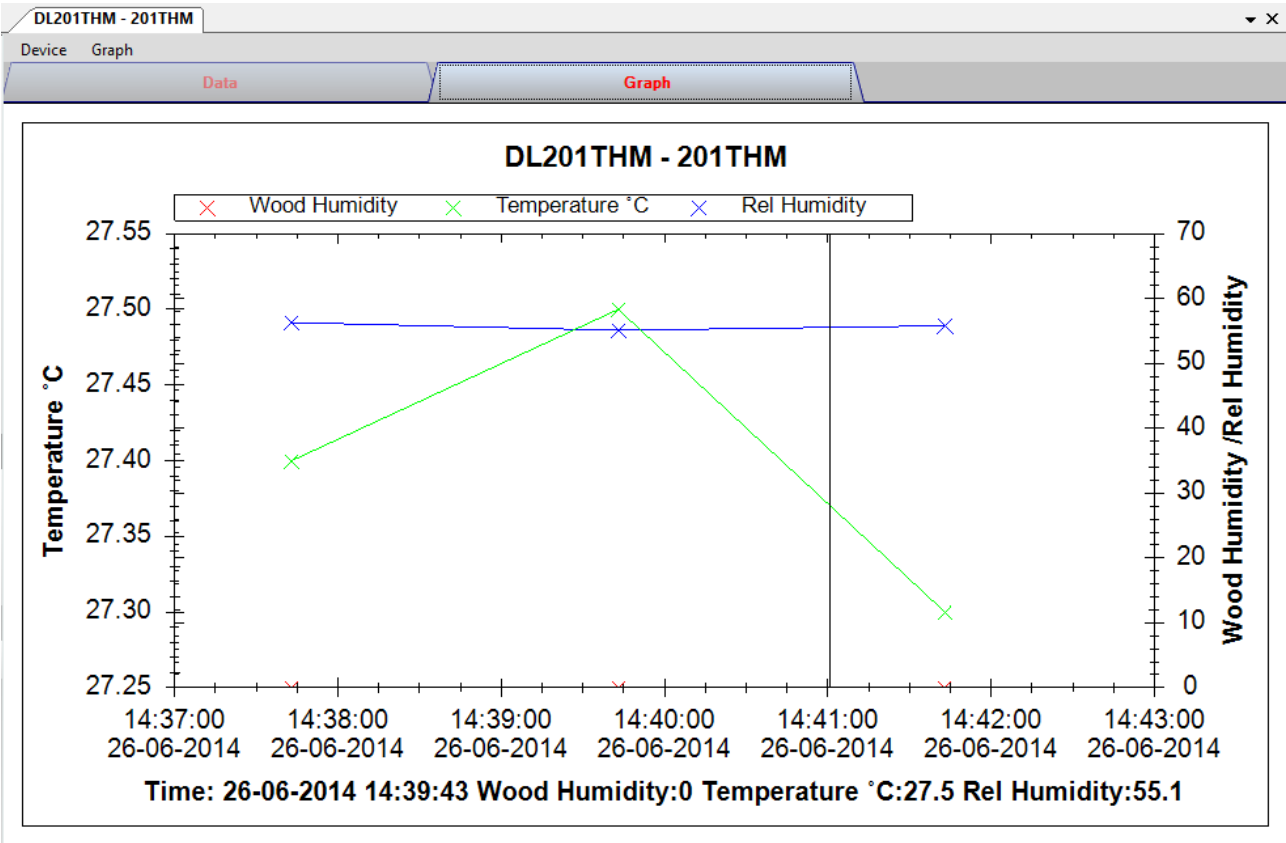
All Data

Export ExcelExport CSV

Record Time	Wood Humidity	Temperature °C (°C)	Rel Humidity
26-06-2014 14:37:43	0	27.4	56.3
26-06-2014 14:39:43	0	27.5	55.1
26-06-2014 14:41:43	0	27.3	55.8

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.10.8 DL201THM – Graph View



Our graph support following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.10.9 DL201THM – Web Interface

Please refer to section 5.6 on how to launch the web interface.

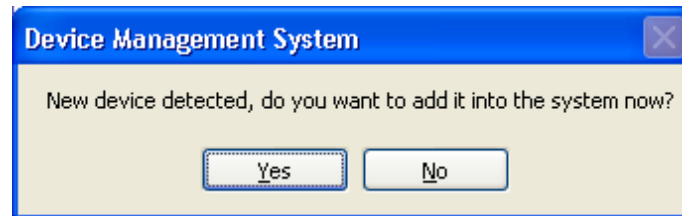
The web interface for DL201THM is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.11 DL111K

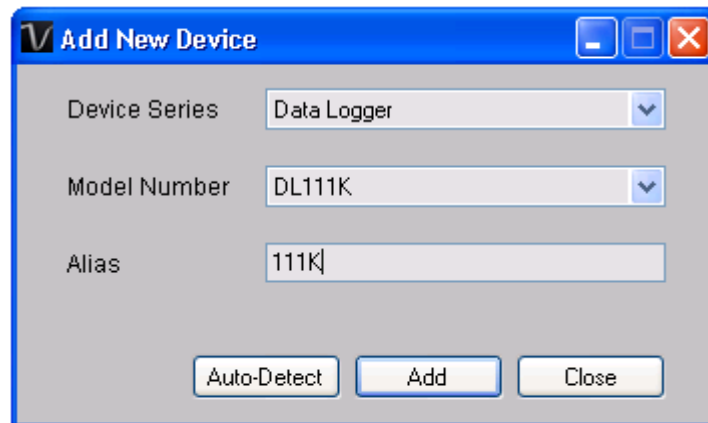
DL111K is a data logger for storing temperature reading.

### 6.11.1 Add new DL111K

When Voltsoft detected a new DL111K attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

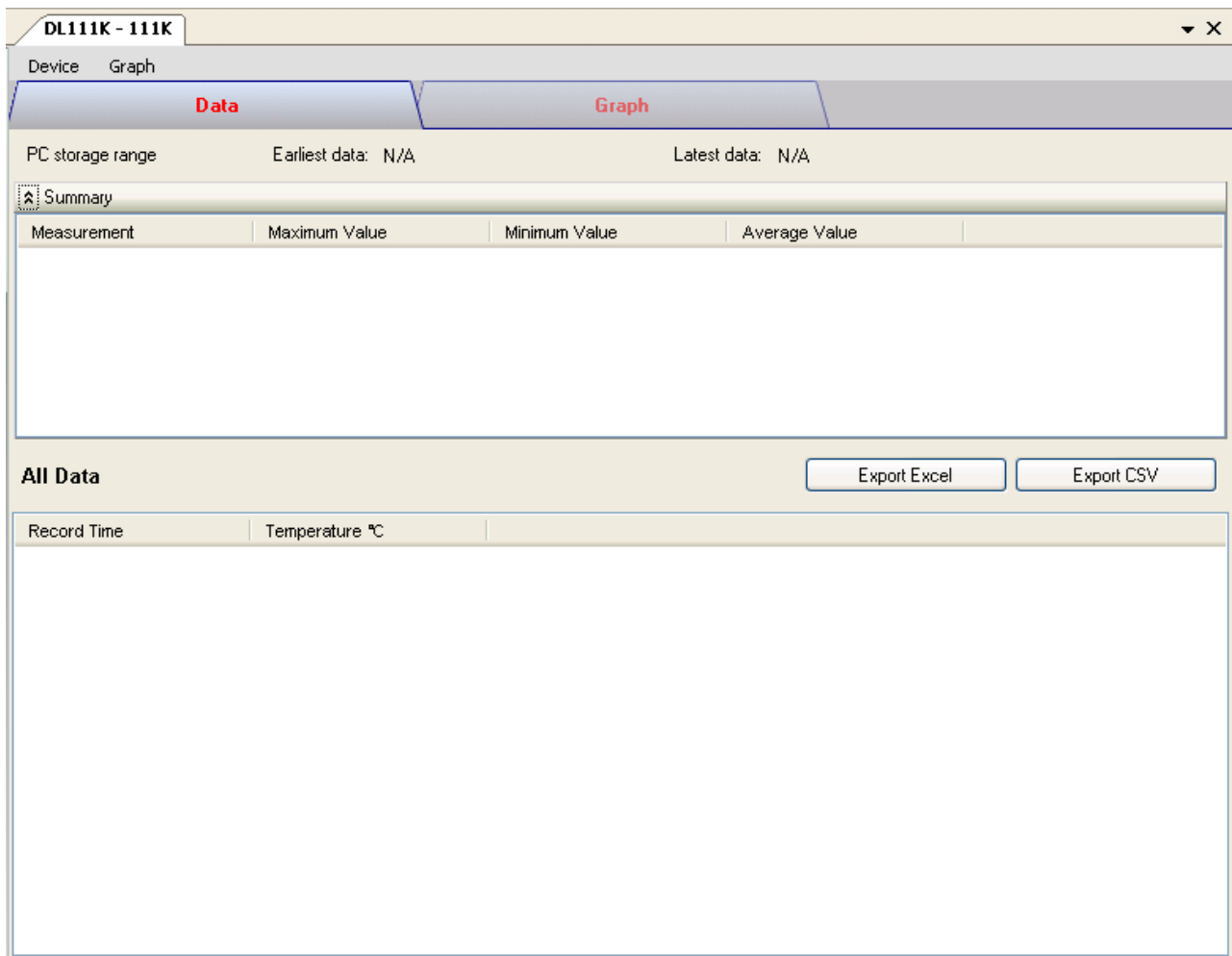


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.11.2 Remove DL111K

To remove DL111K, go to Device Management -> Remove Existing Device and its PC data Storage, select the device want to remove and click the "Remove" button.

### 6.11.3 DL111K – Device Control Panel



The DL111K Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL111K.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.11.4 DL111K – Settings

**111K - Settings (HW ID:0017\_07030100001)**

**Basic Settings**

Time: 02-02-2013 22:54:22 ☒ Use System Time

Logger Name: 111K

Record Start Condition: ☐ By Button ☒ After Setup

Delay Time: 0 Sec

Sample Rate: 1 Second

LED Flash Cycle: ☐ 10s ☐ 20s ☐ 30s ☒ No Light

**Alarm Settings**

Unit: Temperature °C

Low Level: -200 High Level: 1370

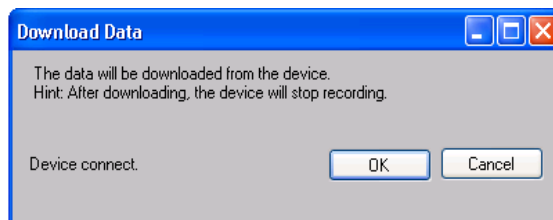
Device connect.

Default Setup Cancel

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Delay Time	Only available if “After Setup” selected.  Specify the delay time for recording start after setup.
5	Sample Rate	Instruct the logger to log readings at a specific rate.
7	LED Flash Cycle	Configure the LED flash cycle - the longer the time, the longer the battery life.
8	Unit	Select temperature unit (Celsius or Fahrenheit)
9	Temperature Low / High Alarm	Configure the temperature low / high alarm level.
10	Default Button	Reload the factory default settings.
11	Setup Button	Save changes.
12	Close Button	Close this interface.

### 6.11.5 DL111K - Download Data

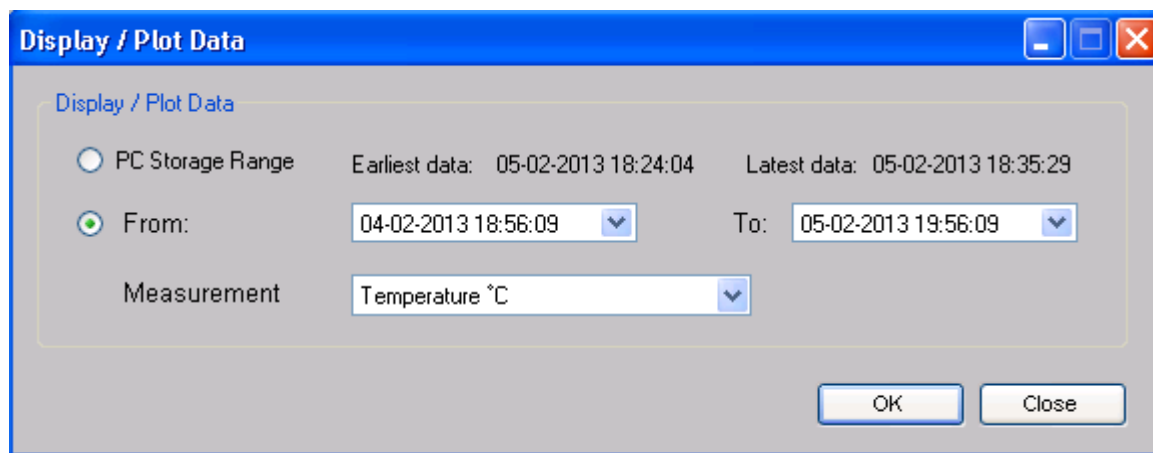
This module allows user to download the data from DL111K.



Click "OK" button to stop the recording and start downloading.

### 6.11.6 DL111K – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

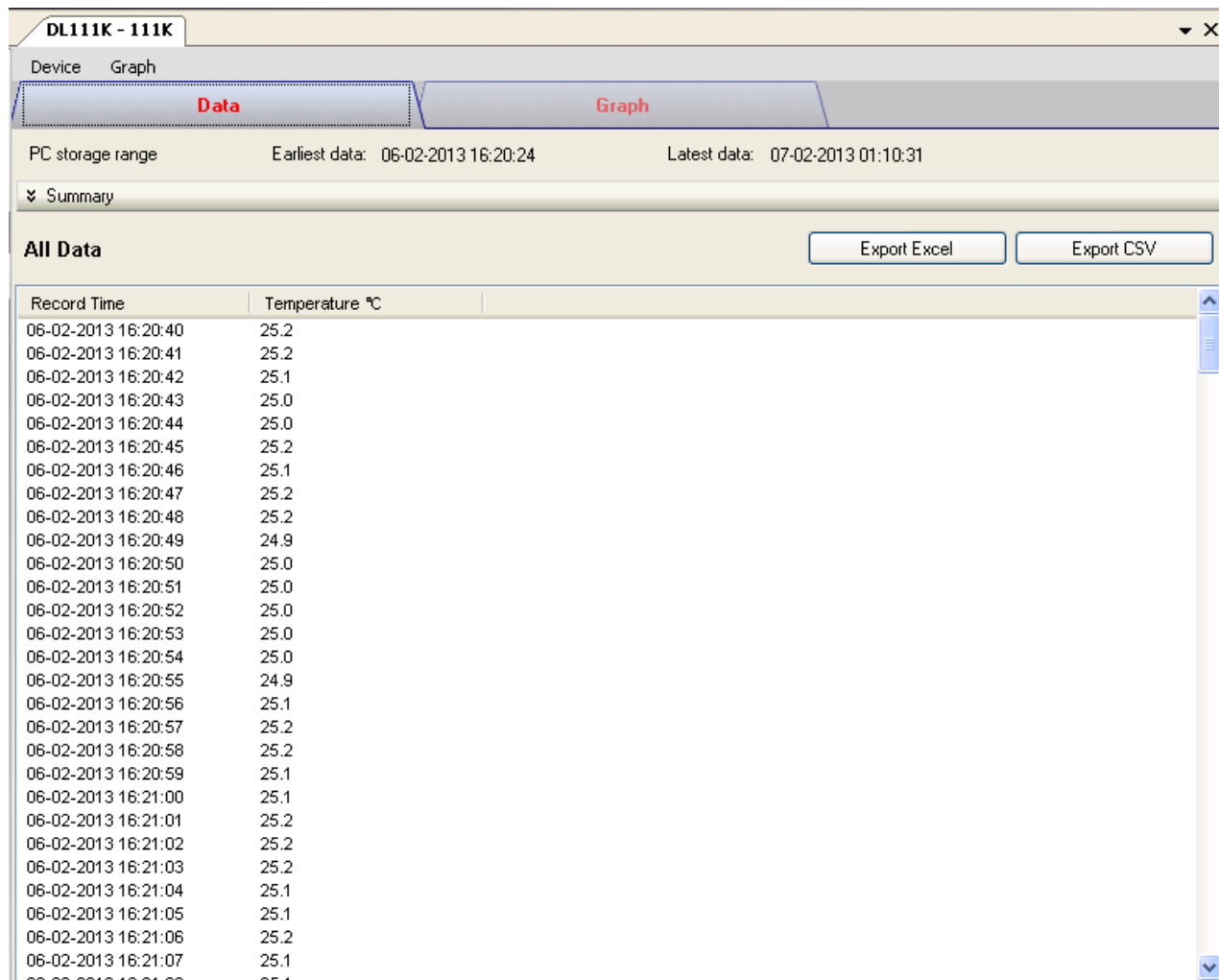


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

## 6.11.7 DL111K – Data View

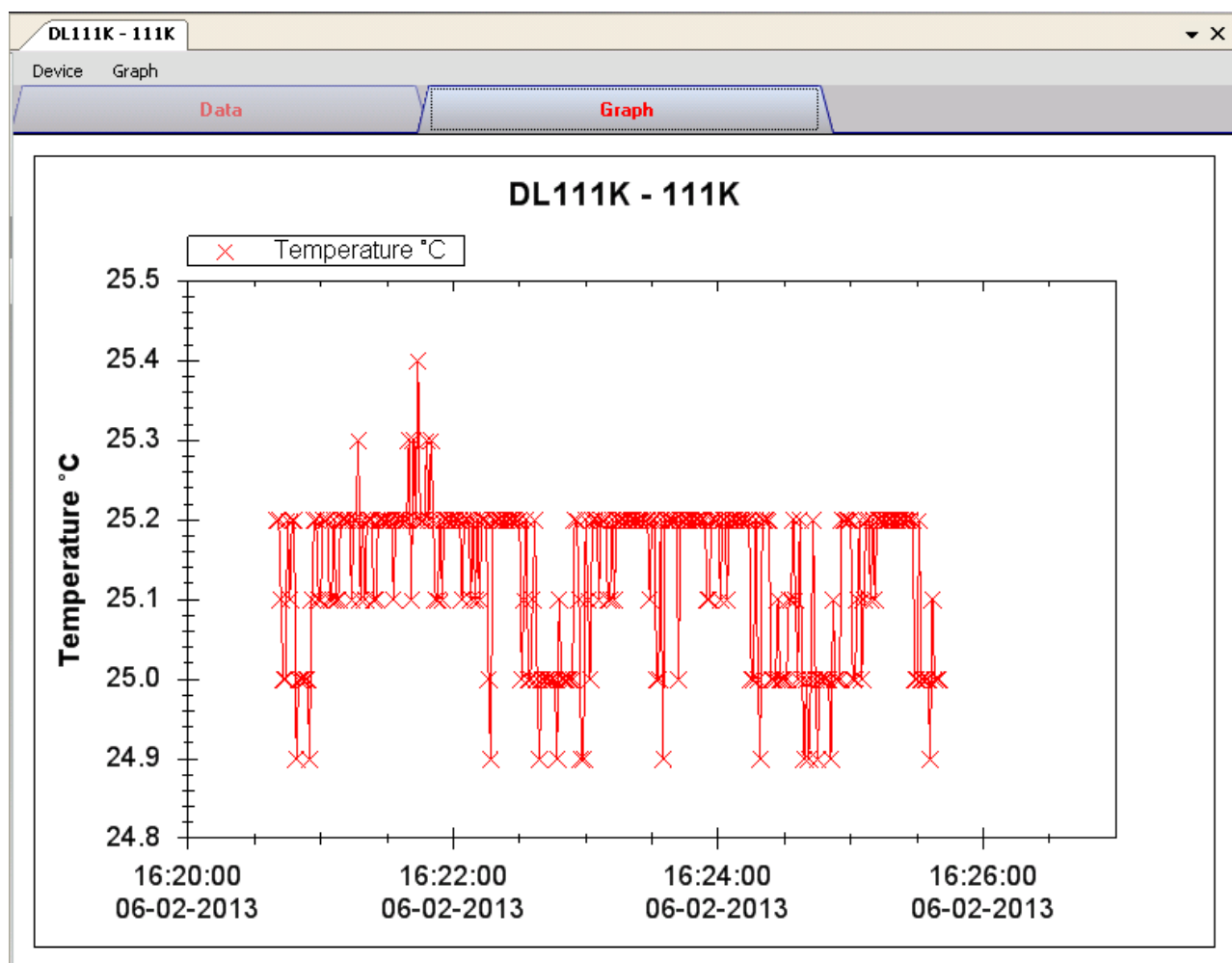
DL111K contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, and can be selected in Display / Plot Data dialog.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.



## 6.11.8 DL111K – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.11.9 DL111K – Web Interface

Please refer to section 5.6 on how to launch the web interface.

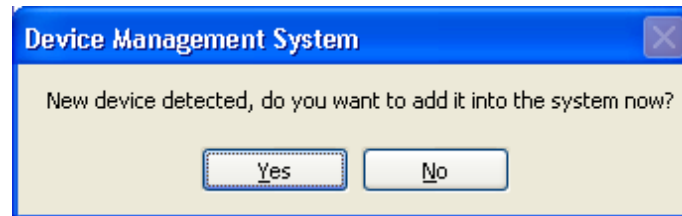
The web interface for DL111K is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.12 DL191A

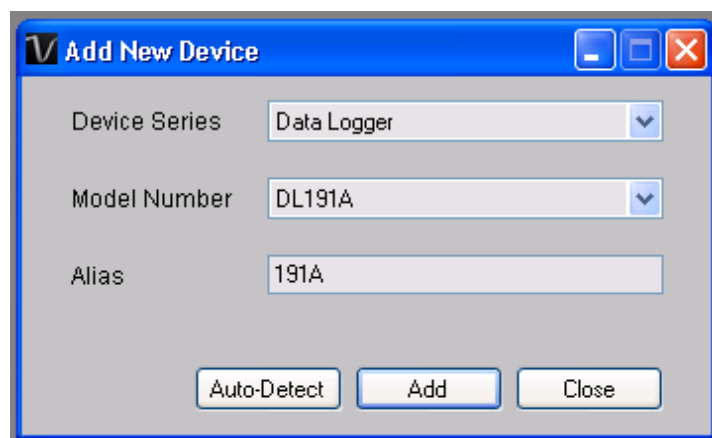
DL191A is a data logger for measuring current.

### 6.12.1 Add new DL191A

When Votsoft detected a new DL191A attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

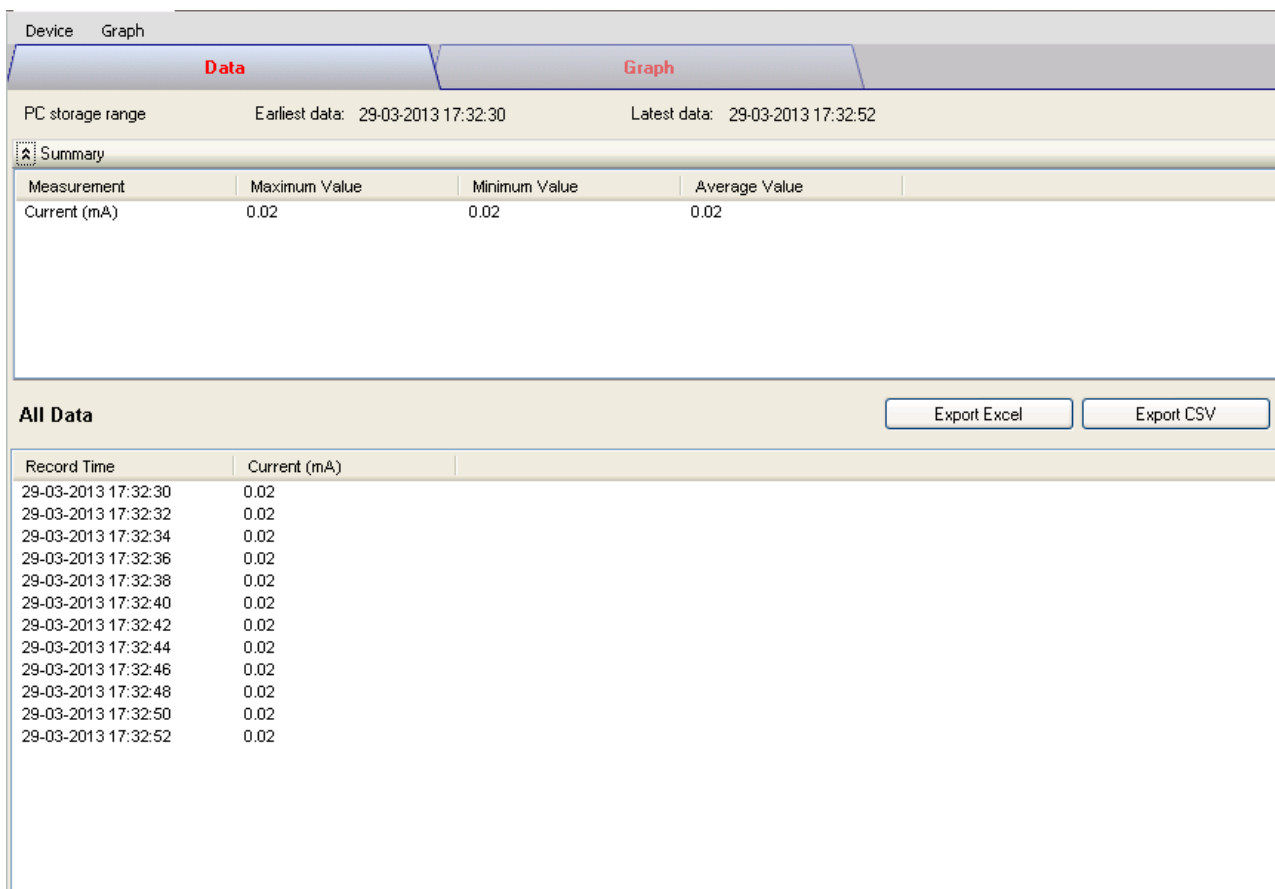


Enter a unique alias for this device, click "Add" will add the device into Votsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.12.2 Remove DL191A

To remove DL191A, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.12.3 DL191A – Device Control Panel



The DL191A Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL191A.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.12.4 DL191A – Settings

**191A - Settings (HW ID:0014\_12090600001)**

**Basic Settings**

Time: 29-03-2013 19:35:57 ☒ Use System Time

Logger Name: 191A

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 32000

Sample Rate: 2s

Record LED Flash: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☒ Enable LED Alert

Low Level: 0 High Level: 20

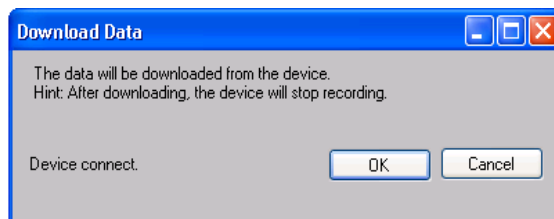
Device connect.

Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for current.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.

## 6.12.5 DL191A - Download Data

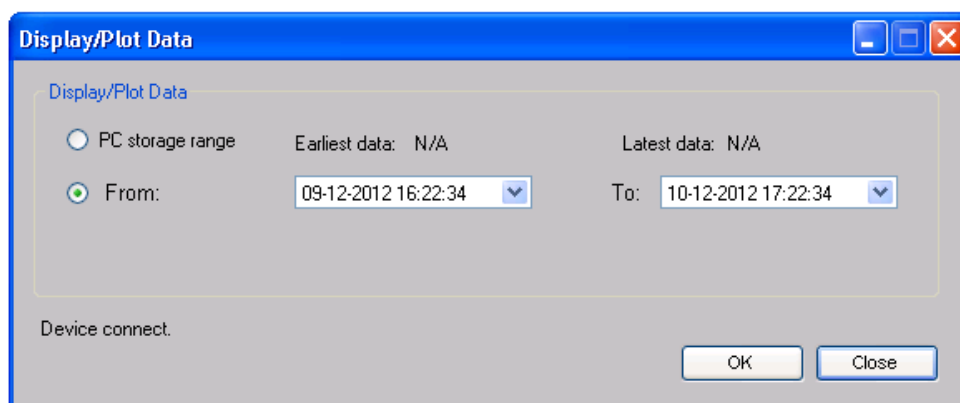
This module allows user to download the data from DL191A.



Click "OK" button to stop the recording and start downloading.

## 6.12.6 DL191A – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

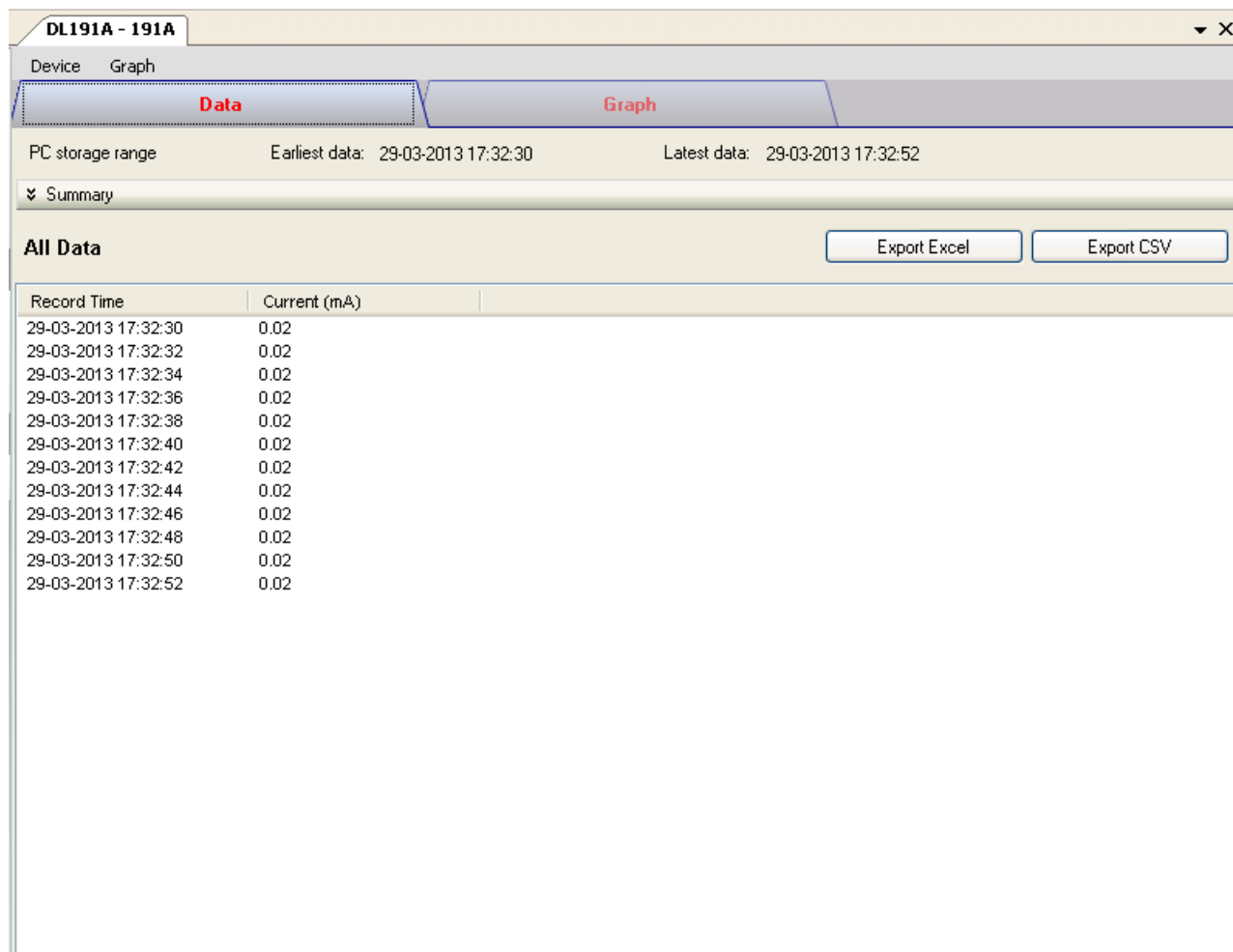


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click on OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

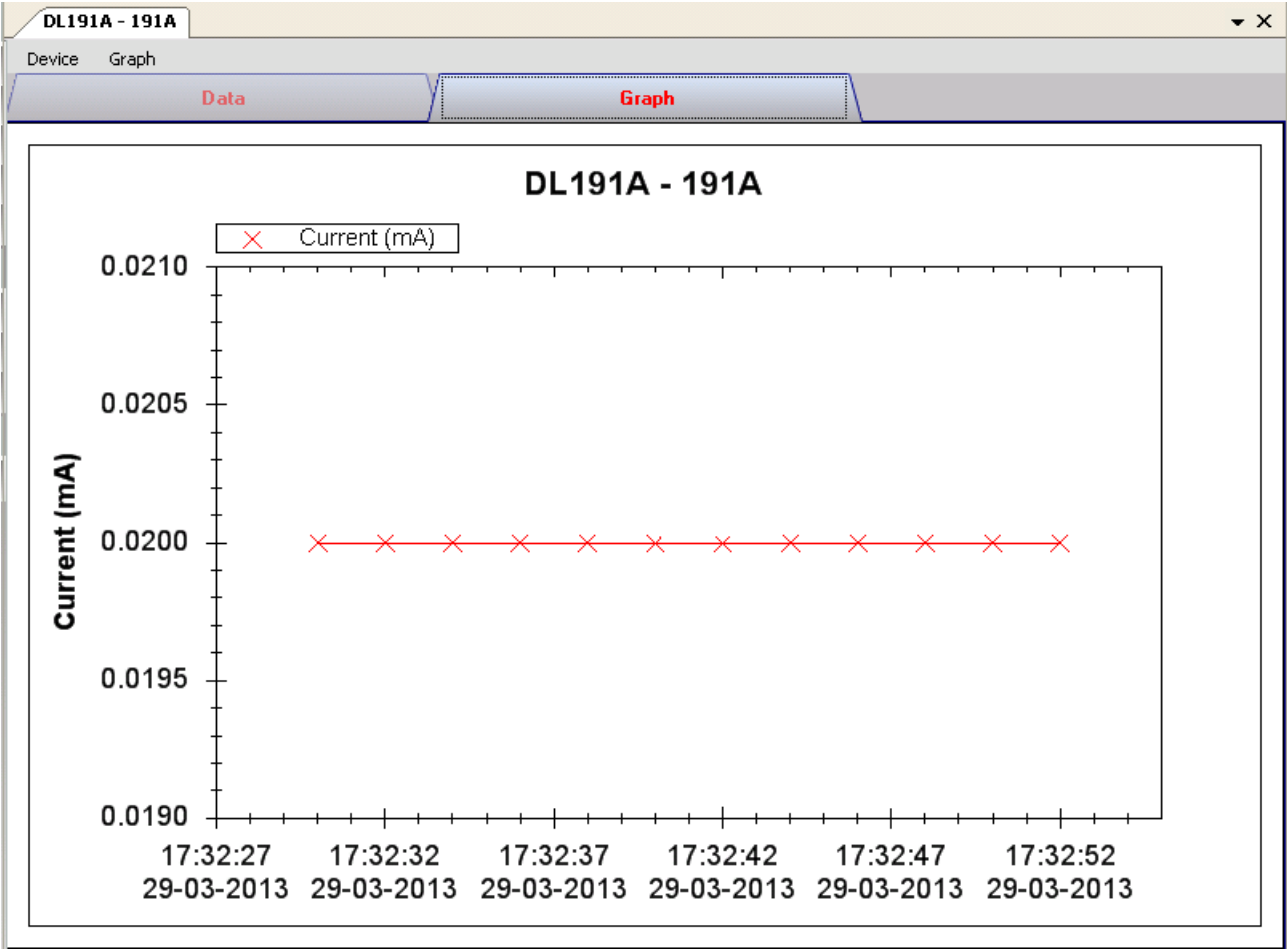
## 6.12.7 DL191A – Data View

DL191A contains one measurement (current) only.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.12.8 DL191A – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.12.9 DL191A – Web Interface

Please refer to section 5.6 on how to launch the web interface.

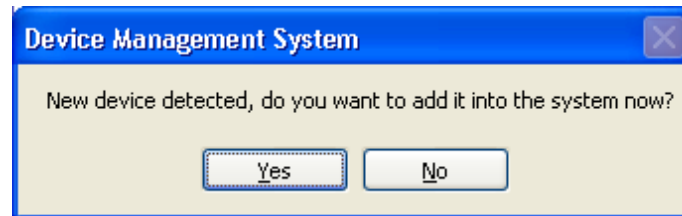
The web interface for DL191A is the same as Windows version, except the download data can only have 10,000 readings in a single download.

## 6.13 DL191V

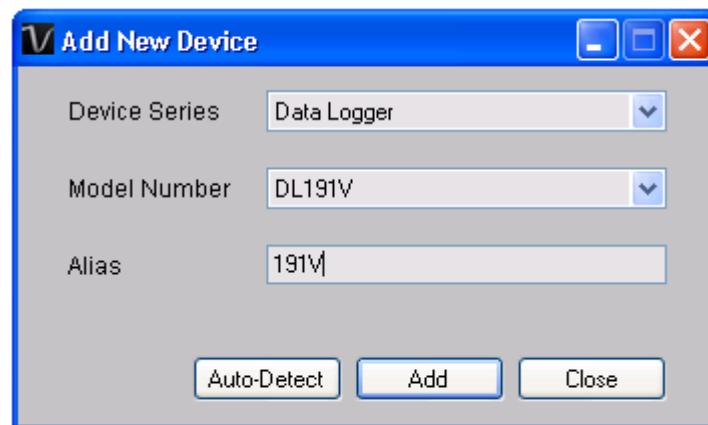
DL191V is a data logger for measuring voltage.

### 6.13.1 Add new DL191V

When Votsoft detected a new DL191V attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:



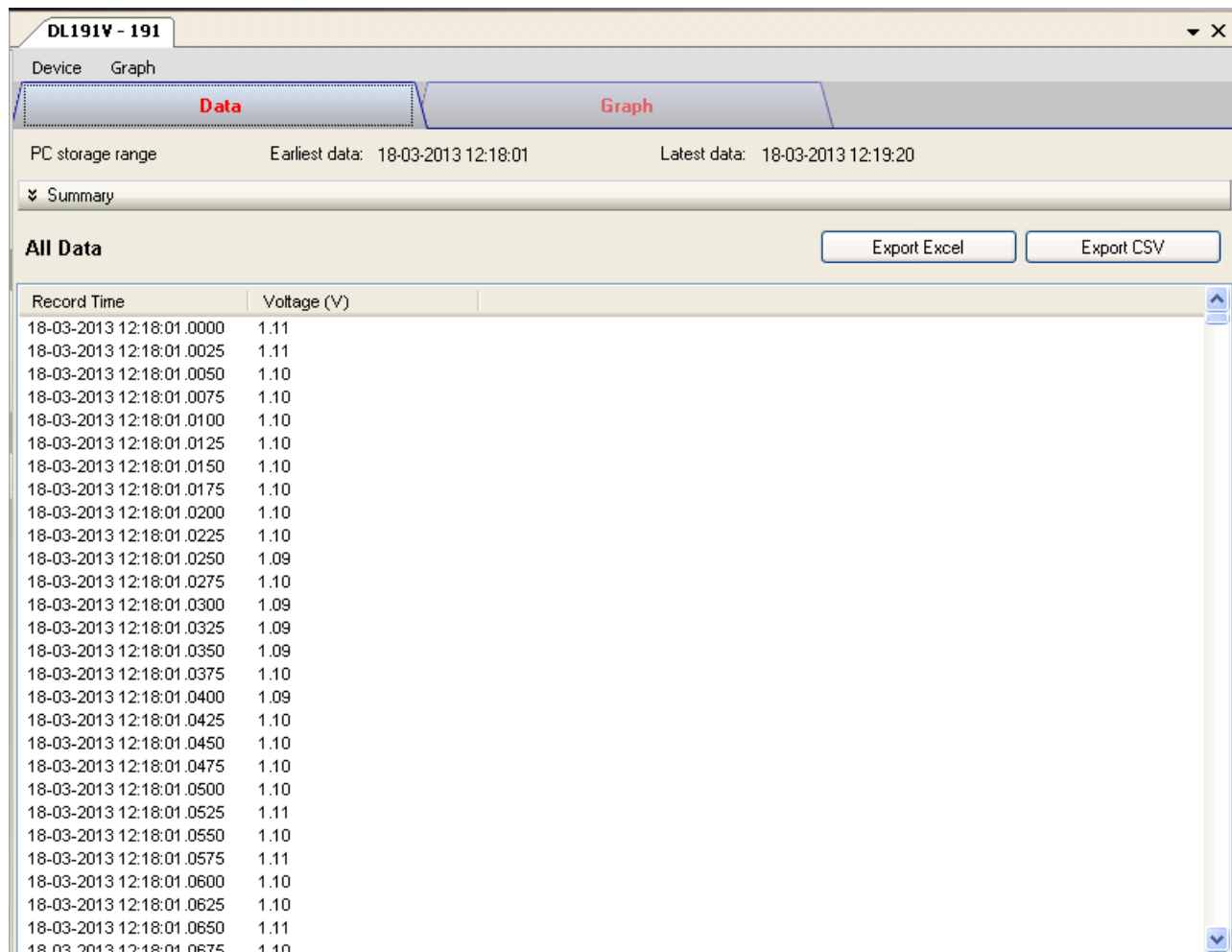
Enter a unique alias for this device, click "Add" will add the device into Votsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.13.2 Remove DL191V

To remove DL191V, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.



### 6.13.3 DL191V – Device Control Panel



The DL191V Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL191V.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.13.4 DL191V – Settings

**DL191V - Settings (HW ID:0013\_12080700003)**

**Basic Settings**

Time: 29-03-2013 21:25:14 ☒ Use System Time

Logger Name: 191V

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 32000

Sample Rate: 2s

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☒ Enable LED Alert

Low Level: 0 High Level: 20

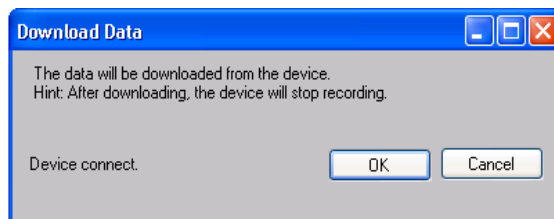
Device connect.

Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user pressed the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for voltage.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.

### 6.13.5 DL191V - Download Data

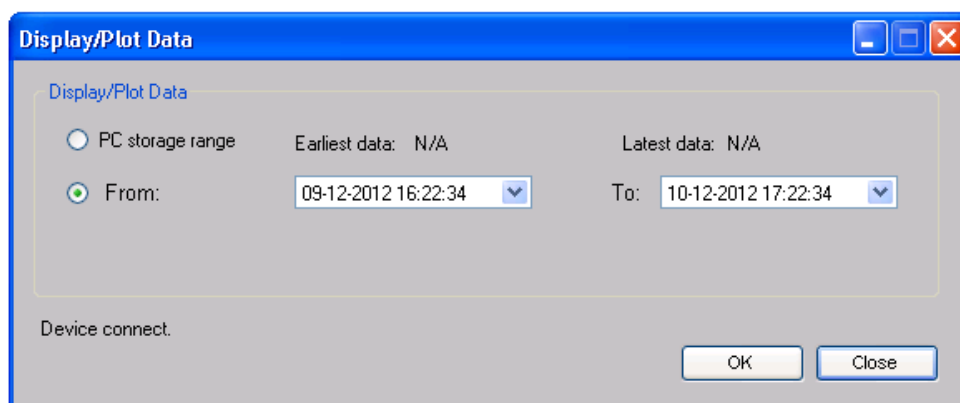
This module allows user to download the data from DL191V.



Click "OK" button to stop the recording and start downloading.

### 6.13.6 DL191V – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

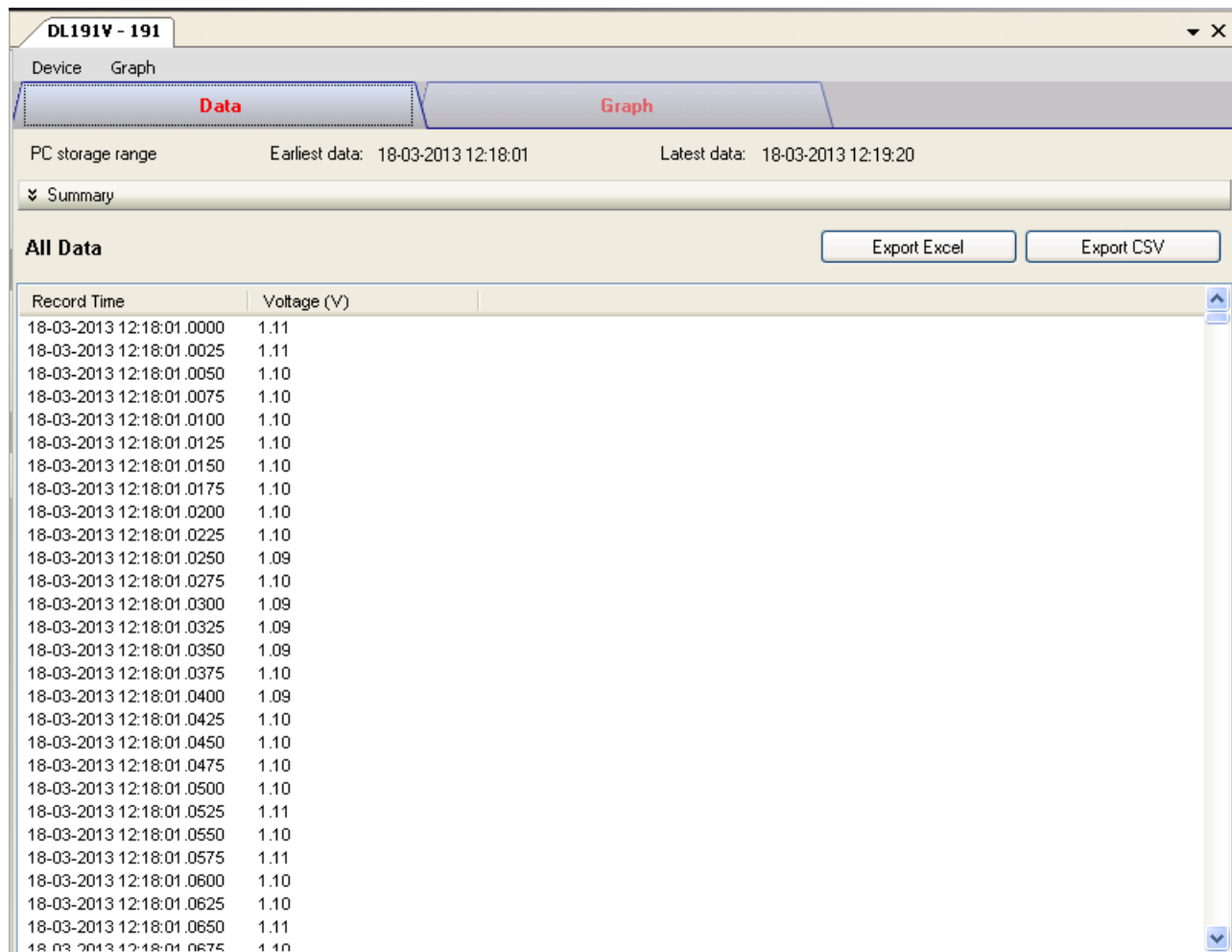


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

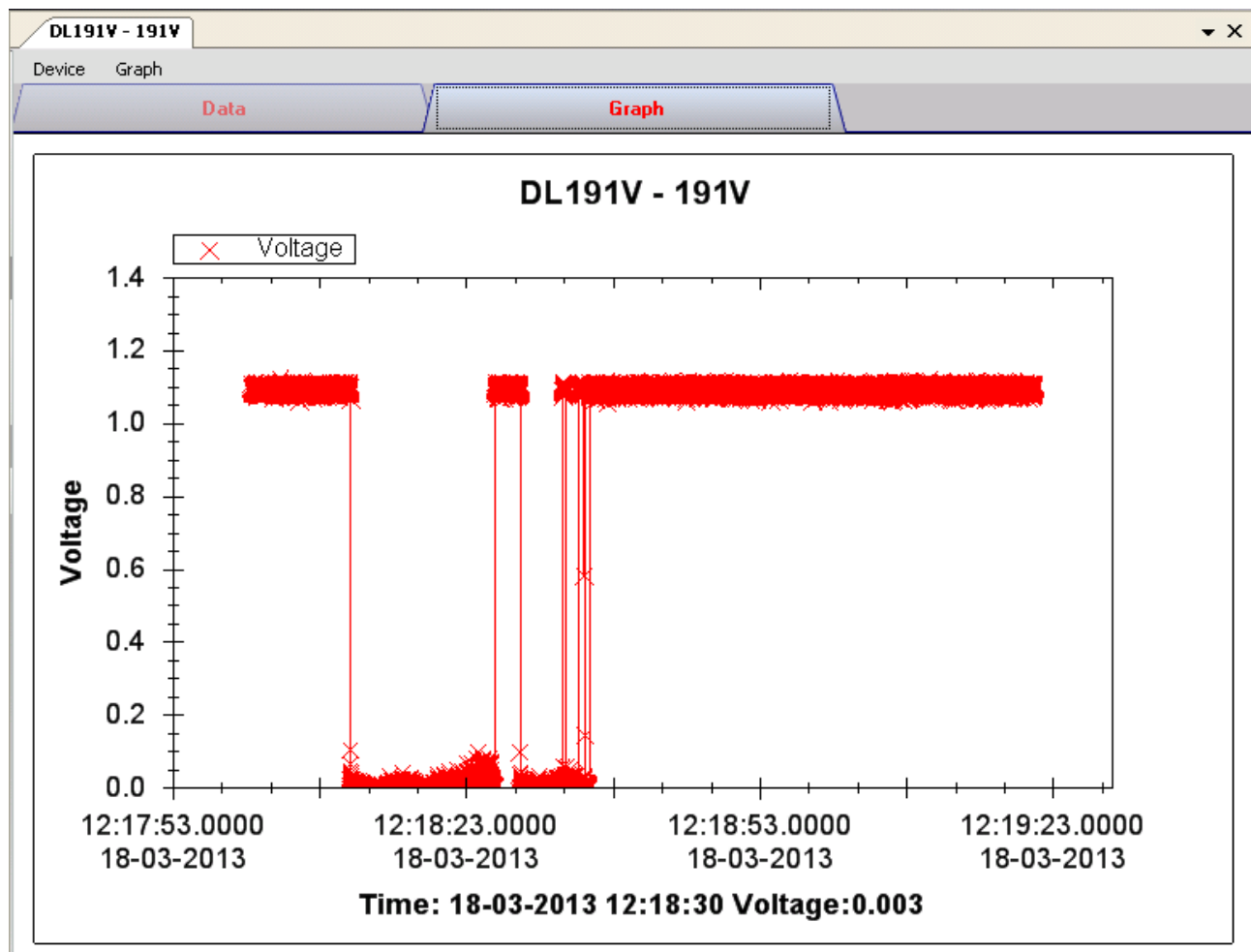
## 6.13.7 DL191V – Data View

DL191V contains one measurement (voltage) only.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

### 6.13.8 DL191V – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

### 6.13.9 DL191V – Web Interface

Please refer to section 5.6 on how to launch the web interface.

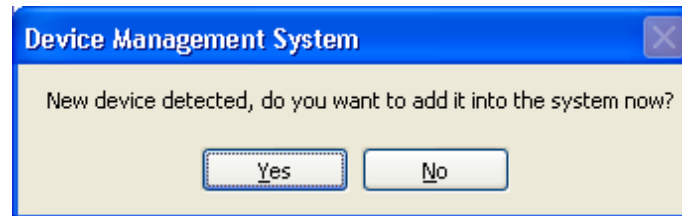
The web interface for DL191V is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.14 DL151AN

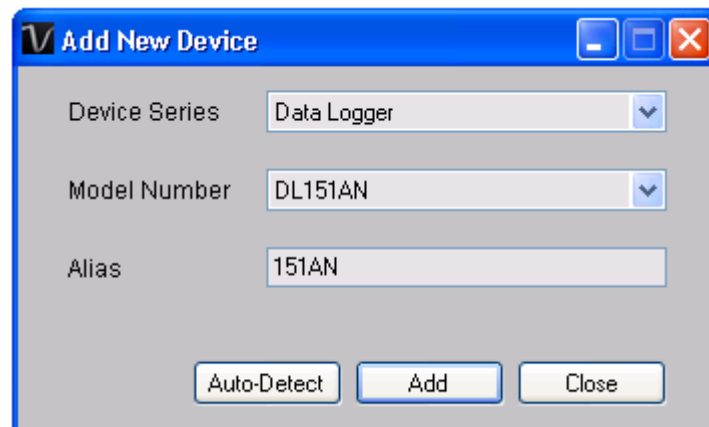
DL151AN is a data logger for measuring air velocity.

### 6.14.1 Add new DL151AN

When Votsoft detected a new DL151AN attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

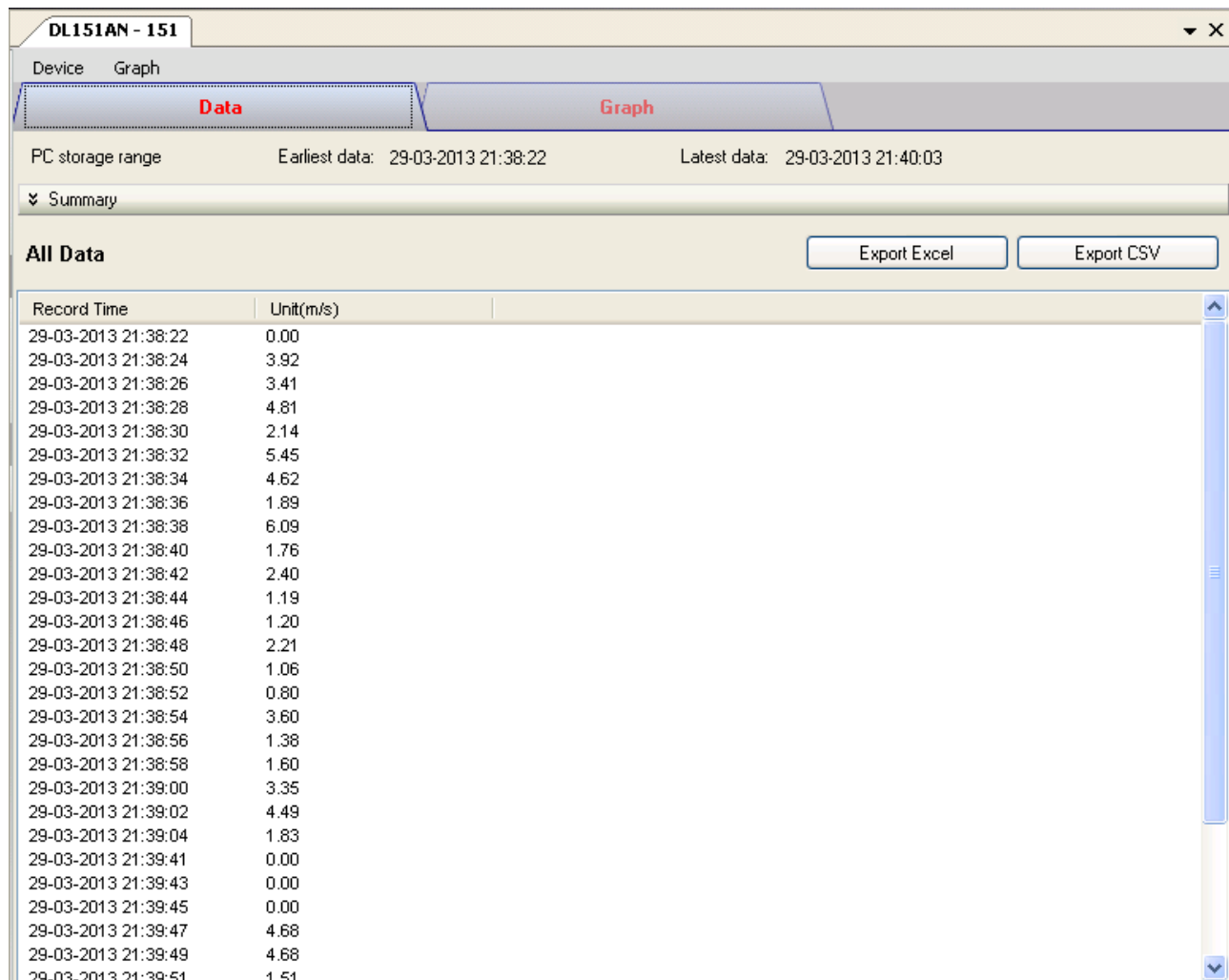


Enter a unique alias for this device, click "Add" will add the device into Votsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.14.2 Remove DL151AN

To remove DL151AN, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.14.3 DL151AN – Device Control Panel



The DL151AN Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of DL151AN.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.14.4 DL151AN – Settings

**V 151 - Settings (HW ID:0011\_12101000002)**

**Basic Settings**

Time: 29-03-2013 22:03:27 ☒ Use System Time

Logger Name: 151

Record Start Condition: ☐ By Button ☒ After Setup

Sample Points: 32000

Sample Rate: 2s

LED Flash Cycle: ☒ 10s ☐ 20s ☐ 30s

**Alarm Settings**

☒ Enable LED Alert

Low Level: 0 High Level: 15 Unit: m/s

Device connect.

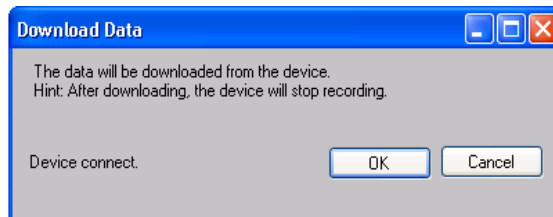
Default Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Logger Name	Input the unique alias for that device.
3	Record Start Condition	By Button – The data logger will start recording only after the user presses the red button on the device. After Setup – The data logger will start recording immediately after setup.
4	Sample Points	Configure the data logger sample points.
5	Sample Rate	Instruct the data logger to log readings at a specific rate.
6	Record LED Flash	Configure the LED flash cycle - the longer the time, the longer the battery life.
7	Enable LED Alert	Enable / disable LED flash when the alarm is triggered.
8	Low / High Alarm	Configure the low / high alarm level for air velocity.
9	Default Button	Load the factory default settings.
10	Setup Button	Save changes.
11	Close Button	Close this interface.



### 6.14.5 DL151AN - Download Data

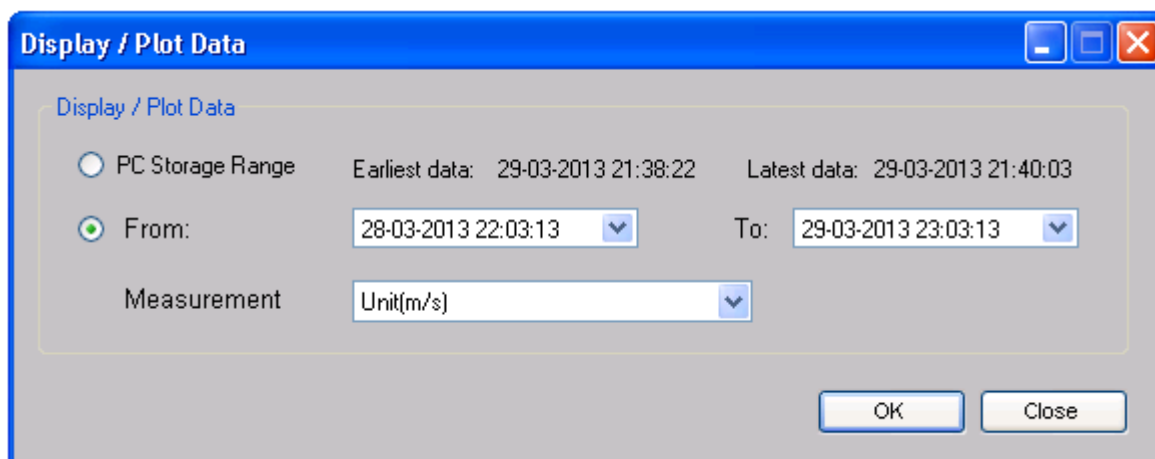
This module allows user to download the data from DL151AN.



Click "OK" button to stop the recording and start downloading.

### 6.14.6 DL151AN – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

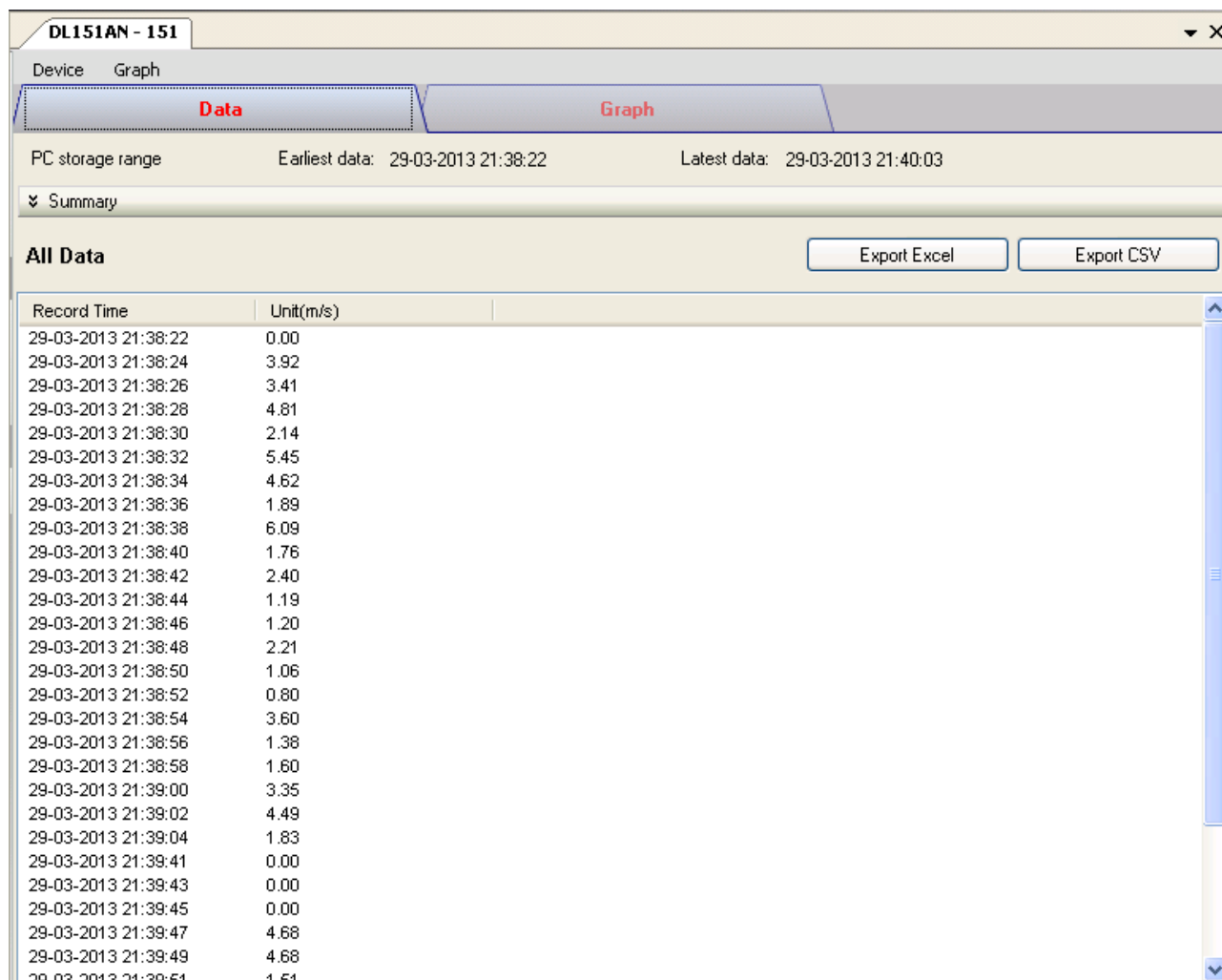


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement unit to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

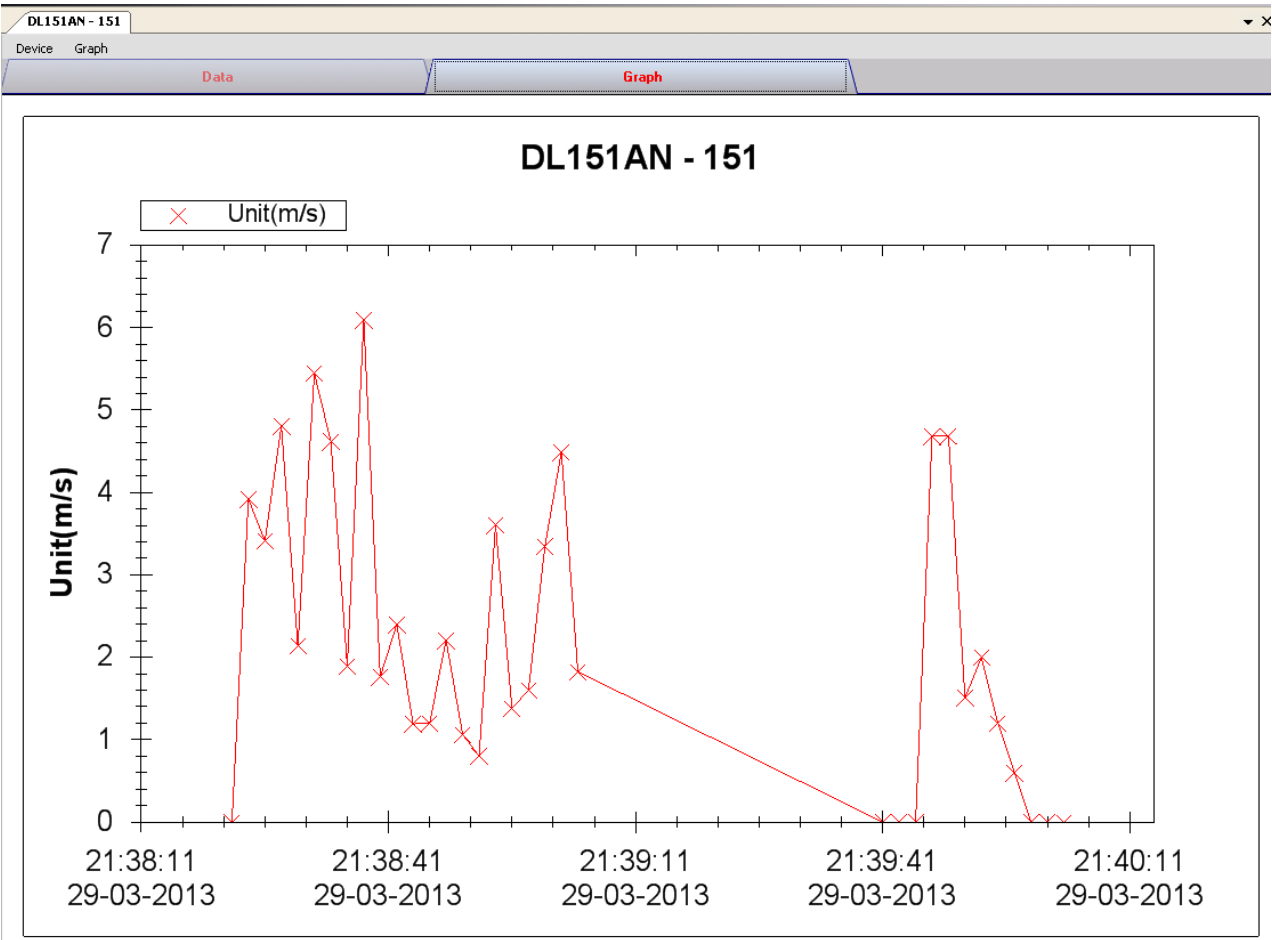
## 6.14.7 DL151AN – Data View

DL151AN contains one measurement (air velocity) only, but in different unit (m/s, ft/min, knots, km/h and MPH).



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

6.14.8 DL151AN – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.14.9 DL151AN – Web Interface

Please refer to section 5.6 on how to launch the web interface.

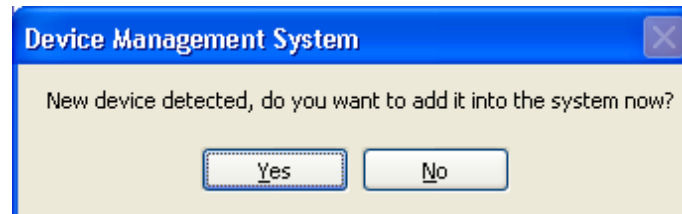
The web interface for DL151AN is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.15 PL-125-T2 / PL-125-T4

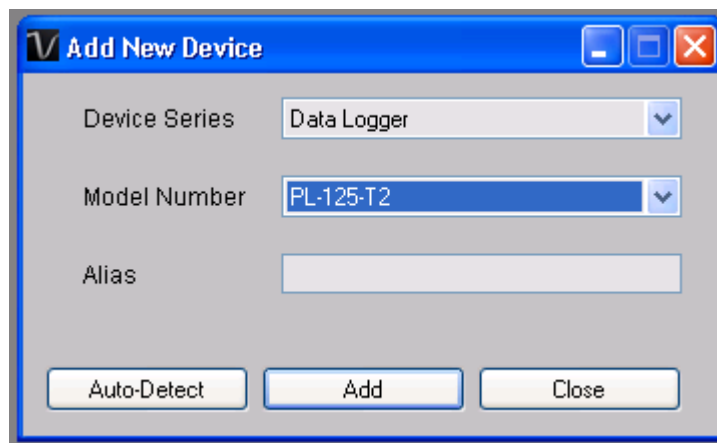
PL-125-T2 / PL-125-T4 are data loggers for storing temperature reading. PL-125-T2 has two channels while PL-125-T4 has four channels for measurement.

### 6.15.1 Add new PL-125-T2 / PL-125-T4

When Voltsoft detected a new PL-125-T2 / PL-125-T4 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

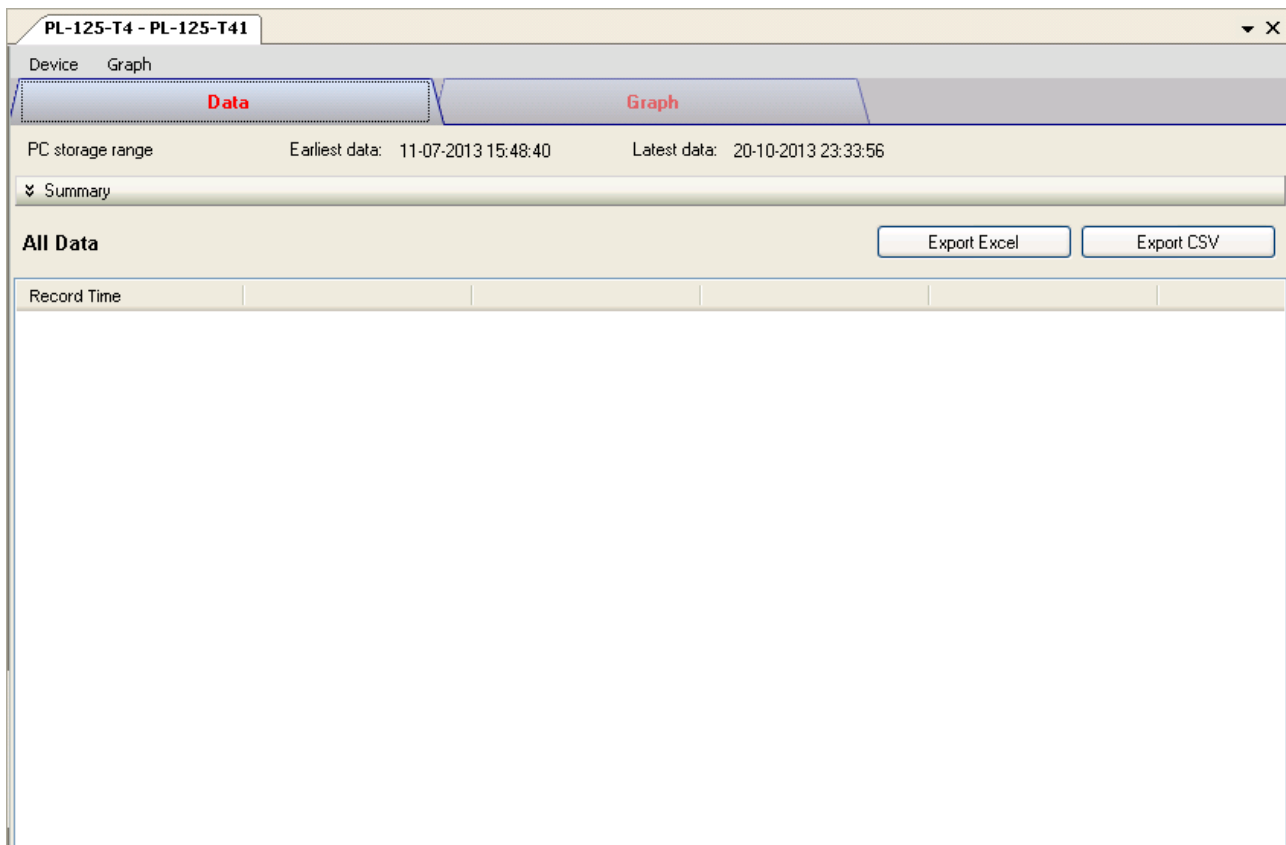


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.15.2 Remove PL-125-T2 / PL-125-T4

To remove PL-125-T2 / PL-125-T4, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

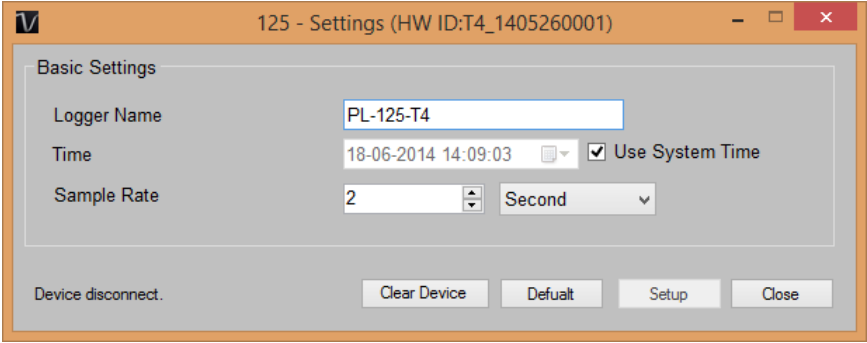
### 6.15.3 PL-125-T2 / PL-125-T4 – Device Control Panel



6.11.3 PL-125-T2 / PL-125-T4 contain follow items in menu:

1	Device -> Settings	This will launch the setting page of PL125-T2 / PL-125-T4.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

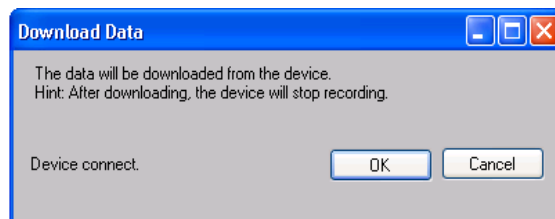
6.15.4 PL125-T2 / PL-125-T4 - Settings



1	Logger Name	Input the unique alias for that device.
2	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
3	Sample Rate	Instruct the logger to log readings at a specific rate.
4	Clear Device	Clear the memory on logger.
5	Default Button	Reload the factory default settings.
6	Setup Button	Save changes.
7	Close Button	Close this interface.

### 6.15.5 PL125-T2 / PL-125-T4 - Download Data

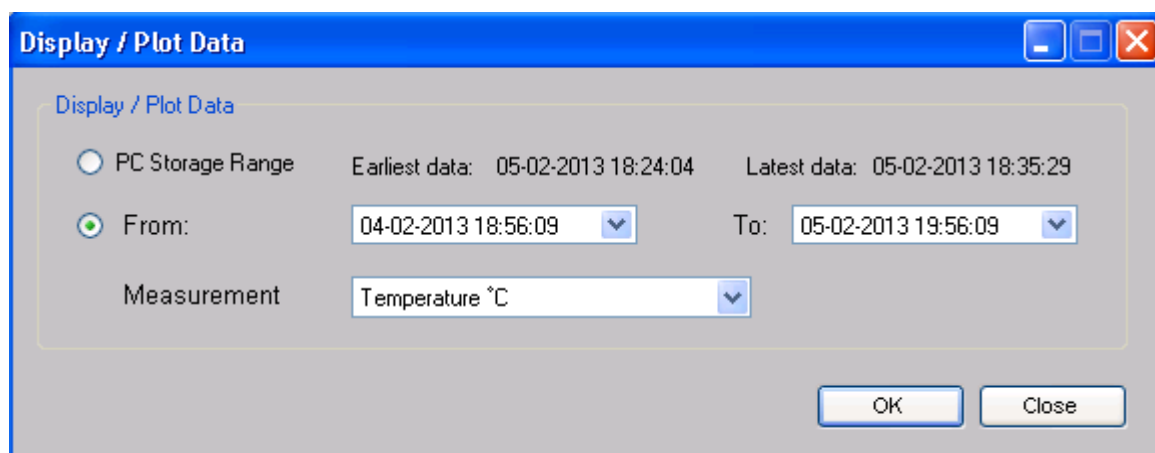
This module allows user to download the data from PL125-T2 / PL-125-T4.



Click "OK" button to stop the recording and start downloading.

### 6.15.6 PL125-T2 / PL-125-T4 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select Celsius or Fahrenheit record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 will be returned.)

## 6.15.7 PL125-T2 / PL-125-T4 – Data View

PL125-T2 / PL-125-T4 are both measuring template. PL125-T2 will have two measurements and PL125-T4 will have four measurements. Template unit can be Celsius or Fahrenheit, depending on the selection in download page.

PL-125-T4 - PL-125-T41

Device

Graph

Data

Graph

PC storage range

Earliest data: 11-07-2013 15:48:40

Latest data: 20-10-2013 23:33:56

Summary

All Data

Export Excel

Export CSV

Record Time	T1 (°C)	T2 (°C)	T3 (°C)	T4 (°C)
16-07-2013 18:23:15	25.8	25.5	25.5	25.1
16-07-2013 18:23:16	25.8	25.5	25.4	25.1
16-07-2013 18:23:17	25.8	25.5	25.4	25.2
16-07-2013 18:24:52	26.3	25.6	25.3	25.8
16-07-2013 18:24:53	26.3	25.6	25.3	25.8
16-07-2013 18:24:54	26.3	25.6	25.3	25.8
16-07-2013 18:24:55	26.2	25.6	25.3	25.7
16-07-2013 18:24:56	26.3	25.6	25.3	25.9
16-07-2013 18:24:57	26.3	25.6	25.3	25.9
16-07-2013 18:24:58	26.3	25.6	25.3	25.9
16-07-2013 18:24:59	26.3	25.8	25.5	25.9
16-07-2013 18:25:00	26.3	25.6	25.5	25.9
16-07-2013 18:25:01	26.3	25.6	25.5	25.9
16-07-2013 18:25:02	26.3	25.7	25.5	25.7
16-07-2013 18:25:03	26.3	25.7	25.5	25.7
16-07-2013 18:25:04	26.3	25.7	25.4	25.7
16-07-2013 18:25:05	26.2	25.6	25.4	25.7
16-07-2013 18:25:06	26.2	25.6	25.4	25.7
16-07-2013 18:25:07	26.2	25.6	25.4	25.7
16-07-2013 18:25:08	26.2	25.6	25.2	25.7
16-07-2013 18:25:09	26.2	25.6	25.2	25.7
16-07-2013 18:25:10	26.2	25.6	25.2	25.7
16-07-2013 18:25:11	26.2	25.6	25.2	25.7
16-07-2013 18:25:12	26.2	25.7	25.2	25.7

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.



## 6.15.8 PL125-T2 / PL-125-T4 – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.15.9 PL125-T2 / PL-125-T4 –Web Interface

Please refer to section 5.6 on how to launch the web interface.

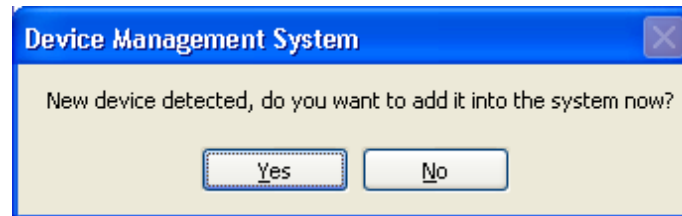
The web interface for 6.11.9PL125-T2 / PL-125-T4 is the same as Windows version, except the downloaded data can only have 10,000 reading in a single download.

## 6.16 IR 1200-50D

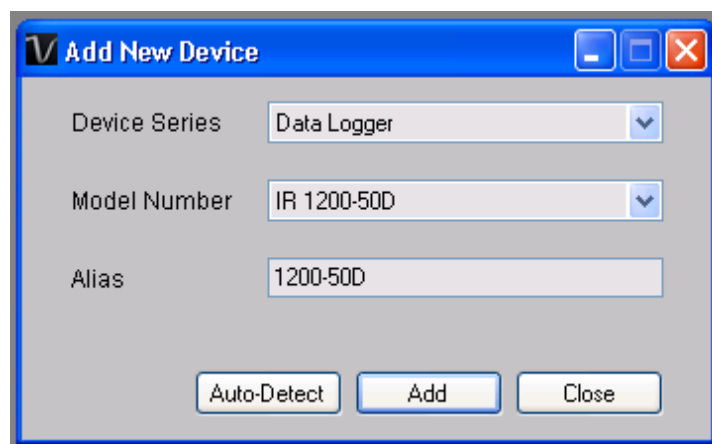
IR 1200-50D is a data logger for measuring temperature.

### 6.16.1 Add new IR 1200-50D

When Votsoft detected a new IR 1200-50D attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

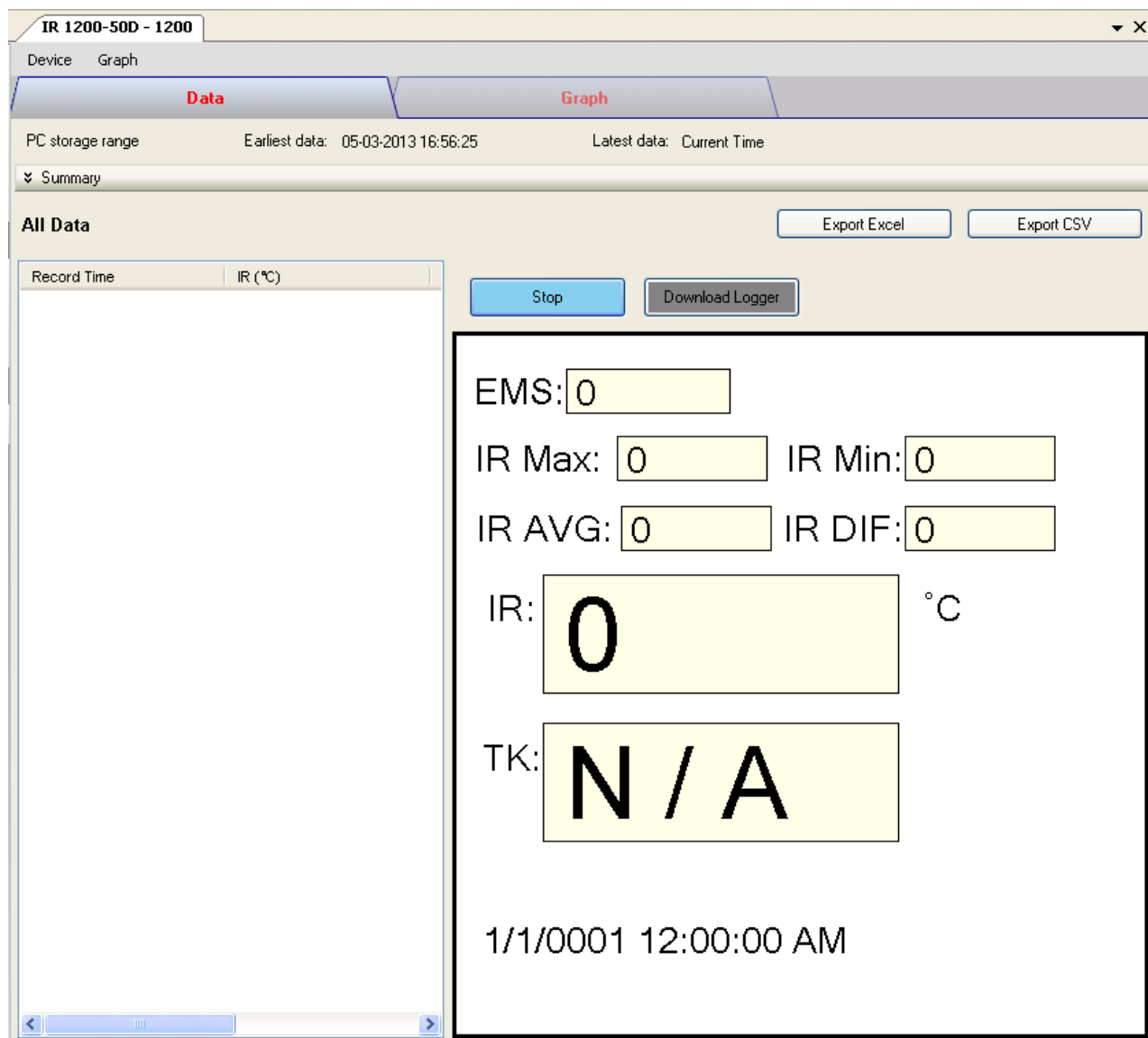


Enter a unique alias for this device, click "Add" will add the device into Votsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.16.2 Remove IR 1200-50D

To remove IR 1200-50D, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

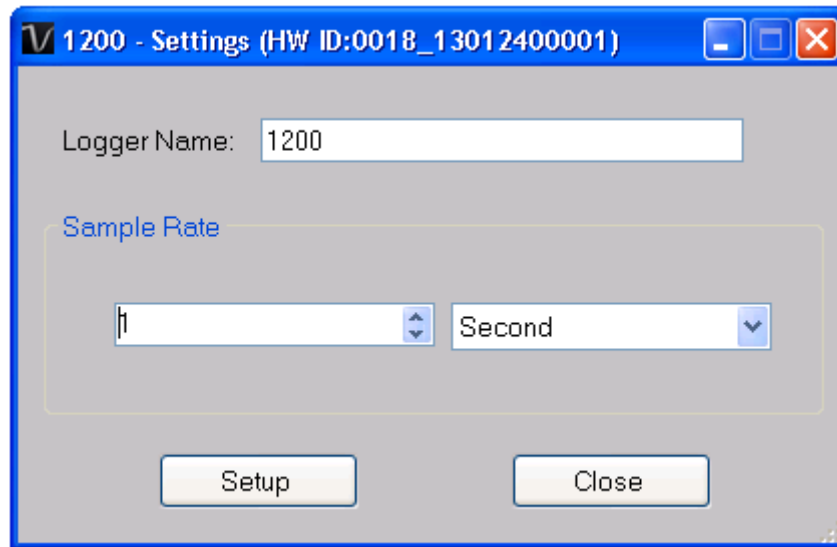
### 6.16.3 IR 1200-50D – Device Control Panel



The IR 1200-50D Device Control Panel contains the follow items in menu:

1	Device -> Settings	This will launch the setting page of IR 1200-50D.
2	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
3	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
4	Graph -> Background Colour	Change the background colour of the graph to either black or white.
5	Graph -> Grid	Control whether to show / hide the grid on the graph area.
6	Graph -> Line	Control whether to show / hide the line on the graph area.
7	Graph -> Points Indicator	Control whether to show / hide the points indicator.
8	Graph -> Print	Prints the generated chart.
9	Graph -> Save Image As	Save the image in the chosen file format.
10	Graph -> Zoom Out	Zoom out one level.
11	Graph -> Zoom To Fit	Undo all zoom in and out.

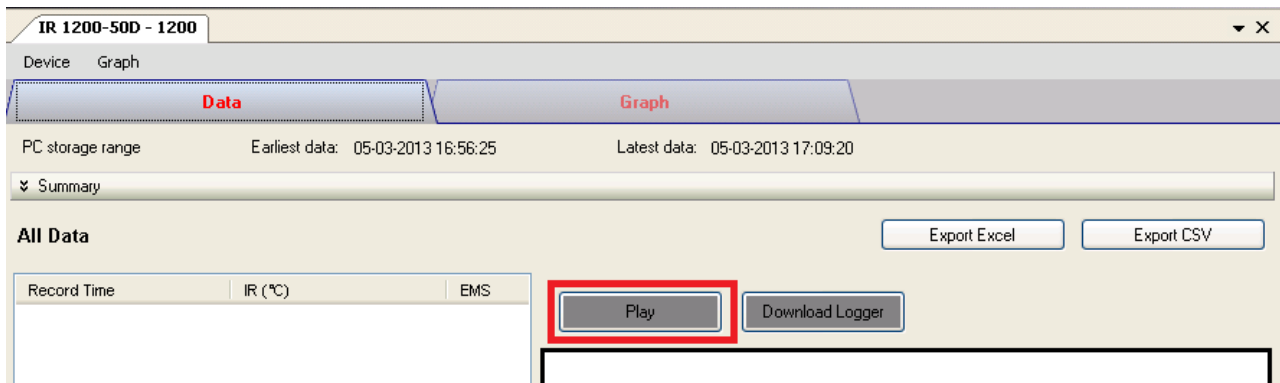
## 6.16.4 IR 1200-50D – Settings



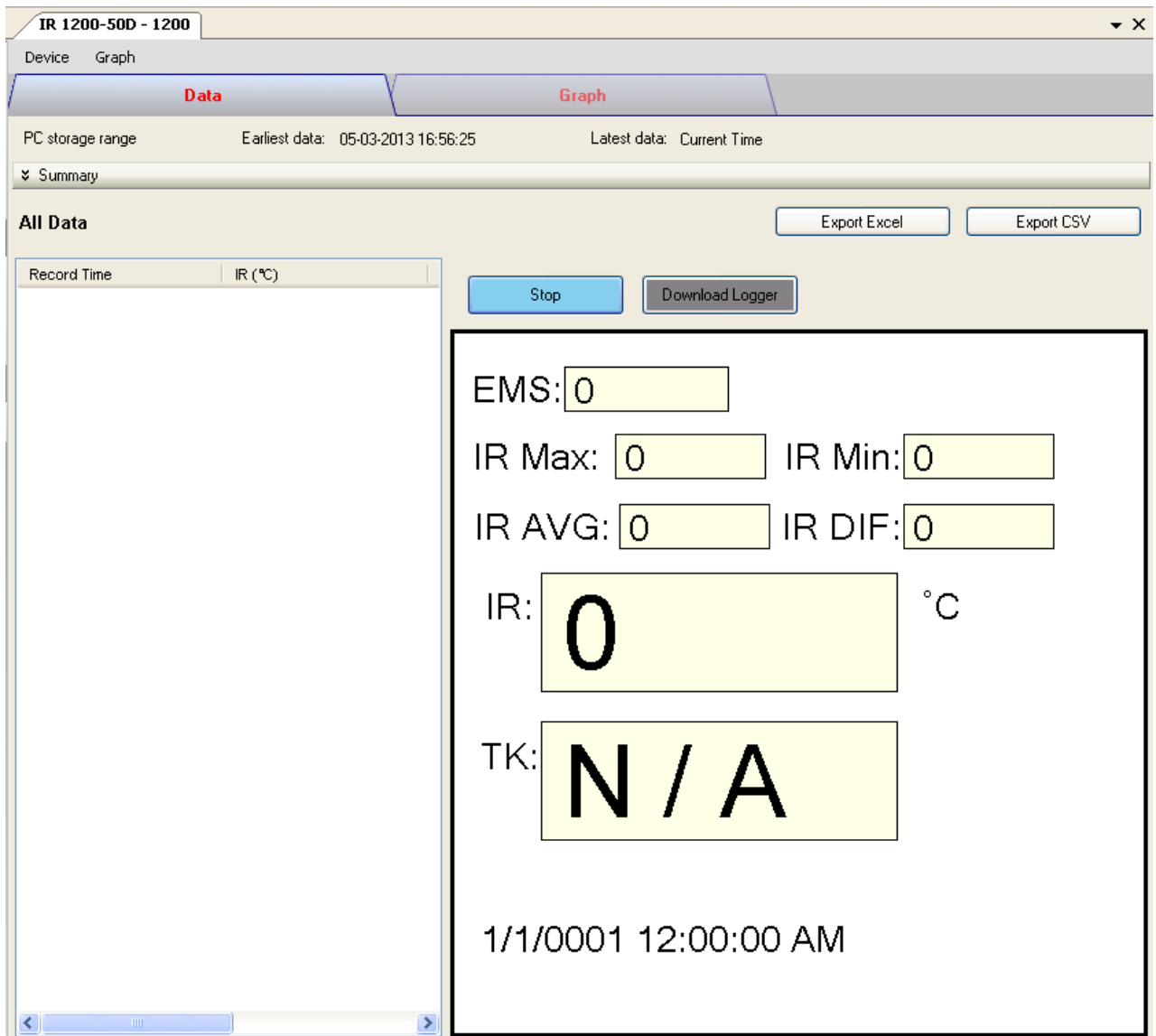
1	Logger Name	Input the unique alias for that device.
2	Sample Rate	Instruct the data logger to log readings at a specific rate (for real time mode only).
3	Setup Button	Save changes.
4	Close Button	Close this interface.

## 6.16.5 IR 1200-50D – Play (Real Time Mode)

Click the "Play" button in device control panel will switch IR 1200-50D into real time mode and the button label will become "Stop", click it again to leave real time mode.

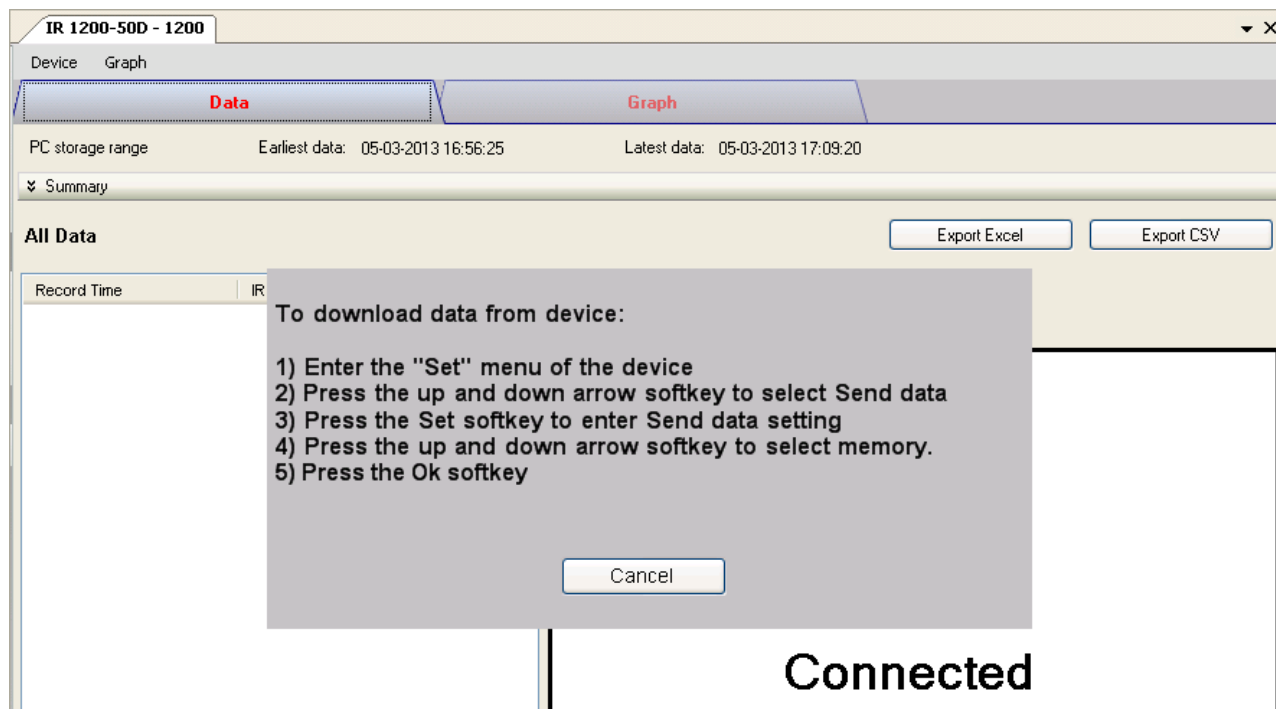


In real time mode, pressing the trigger on the device will start sending data to PC, no data will be sent if the trigger is not pressed.

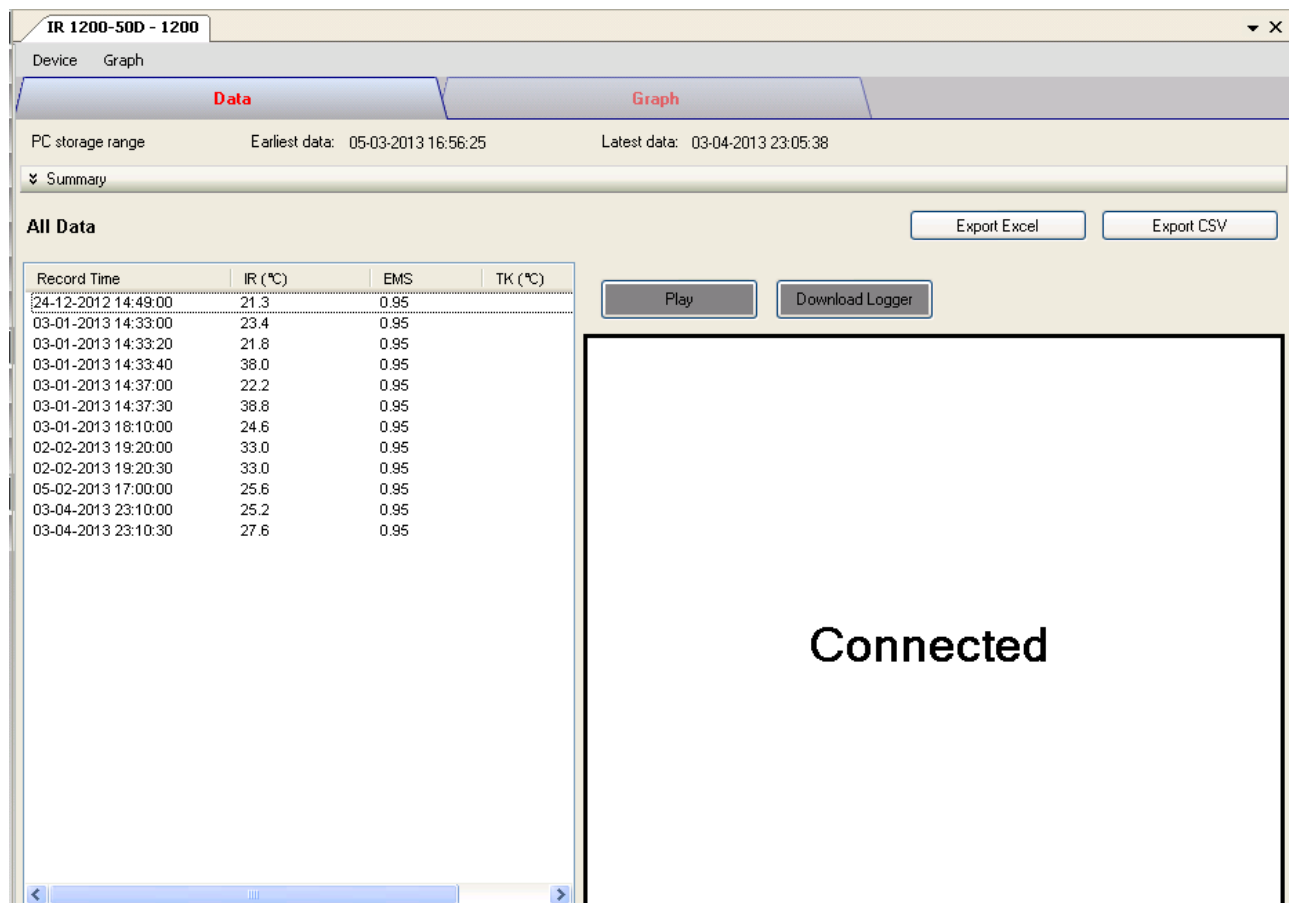


## 6.16.6 IR 1200-50D – Download Store Data

Click the "Download Logger" button in the device control panel will trigger the download data action, and the following dialog will be popped up:



Follows the instructions displayed, if success, the dialog will dismiss and data will be displayed.



## 6.16.7 IR 1200-50D – Display / Plot Data

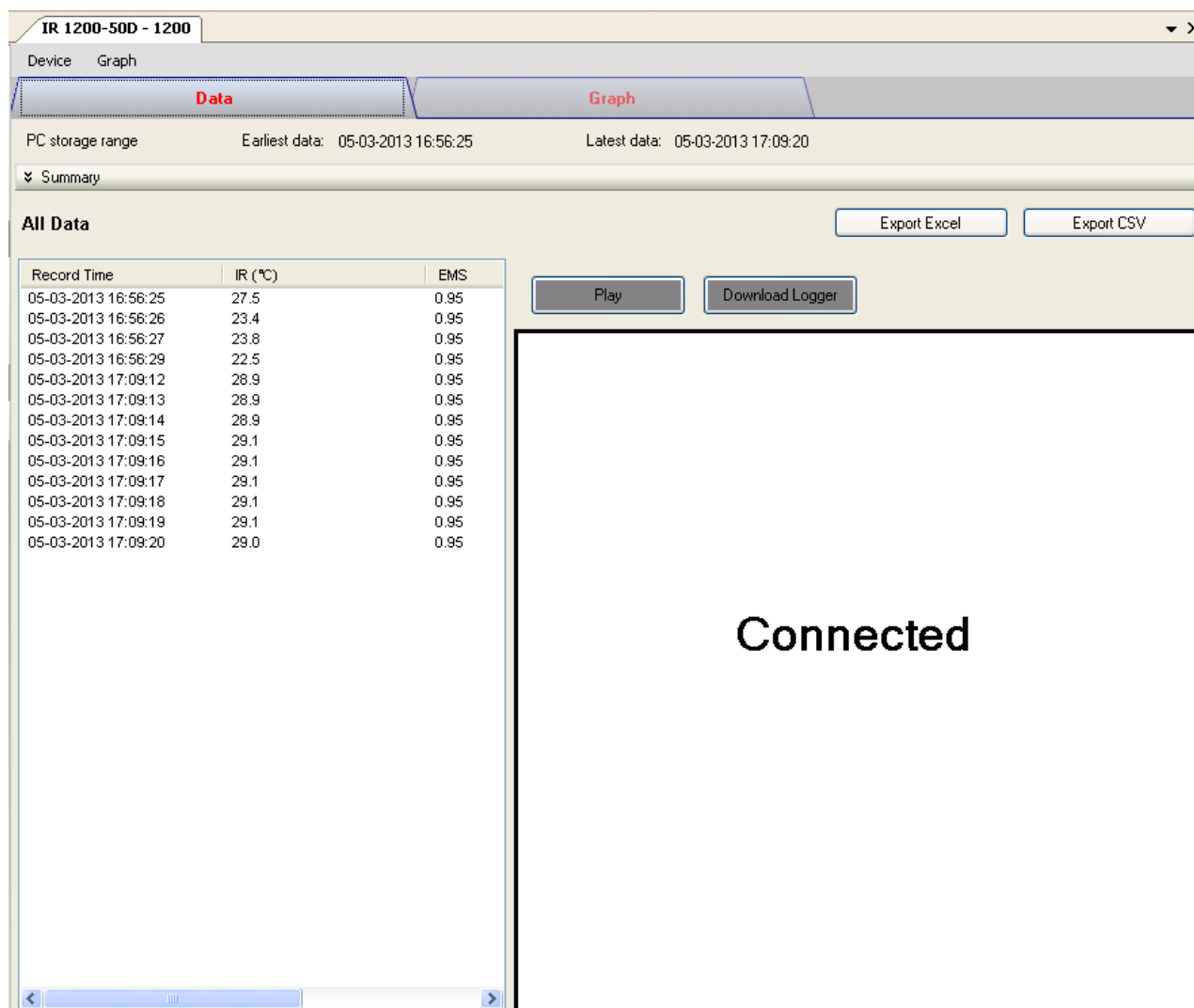
This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement unit to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

### 6.16.8 IR 1200-50D – Data View

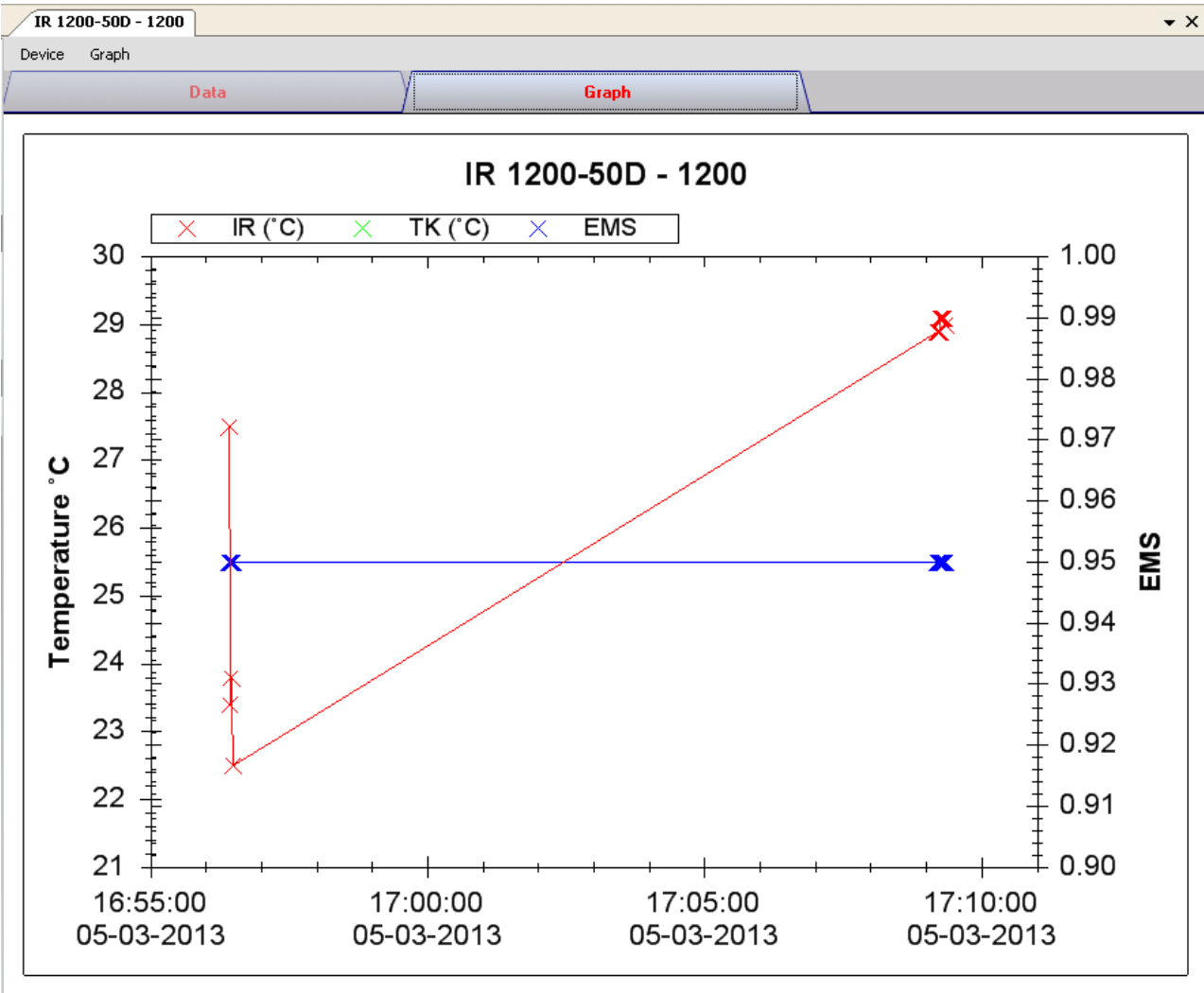
IR 1200-50D contains one measurement (Temperature) only, its unit can be Celsius or Fahrenheit, can be selected in Display / Plot Data dialog.



1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.
3	Play	Enter the real time mode.
4	Download Logger	Download stored data in device.



6.16.9 IR 1200-50D – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

6.16.10 IR 1200-50D – Web Interface

Please refer to section 5.6 on how to launch the web interface.

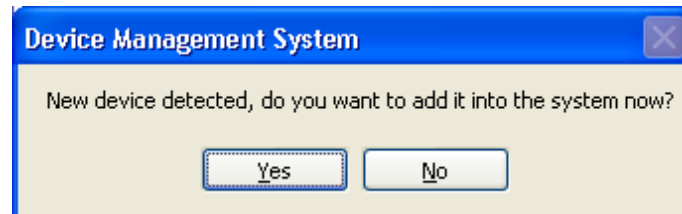
The web interface for IR 1200-50D is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 6.17 SL451

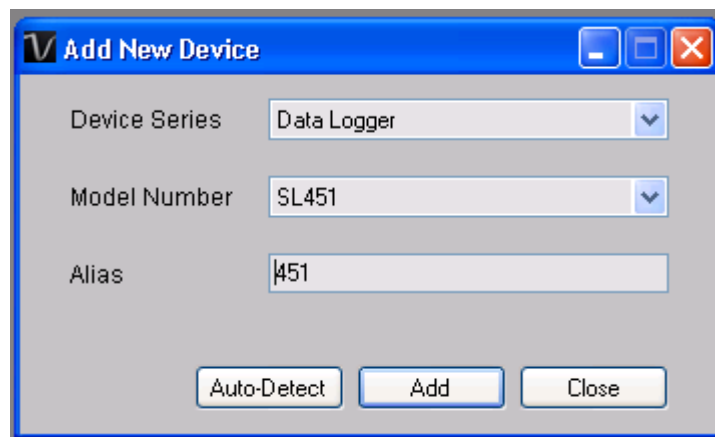
SL451 is a data logger for storing sound level reading. SL451 support real time measurement.

### 6.17.1 Add new SL451

To add SL451 to Voltsoft, first connect SL451 to PC via USB port, press the "SETUP" button on the device until the circle icon (on lower left corner) disappears. When Voltsoft detected a new SL451 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

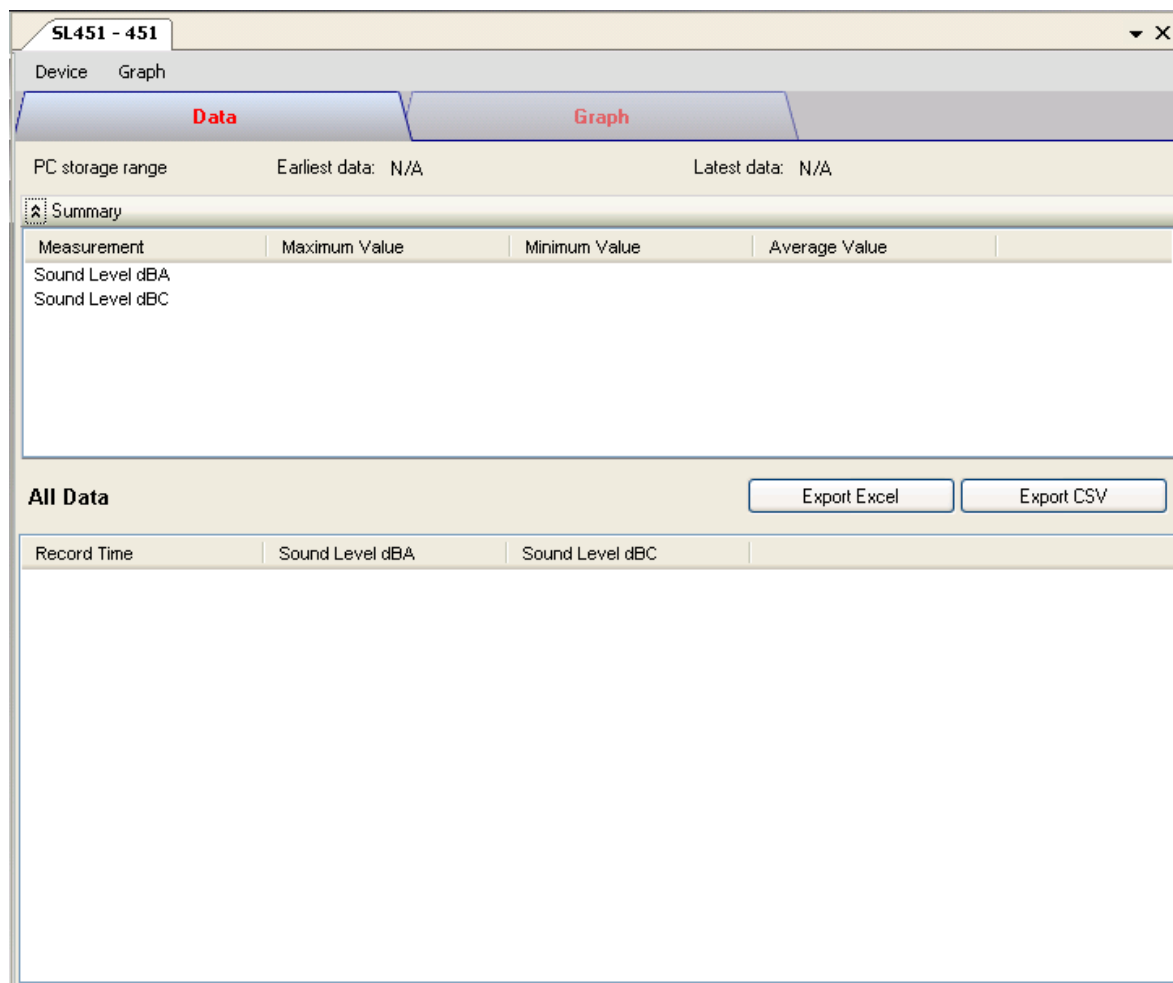


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.17.2 Remove SL451

To remove SL451, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

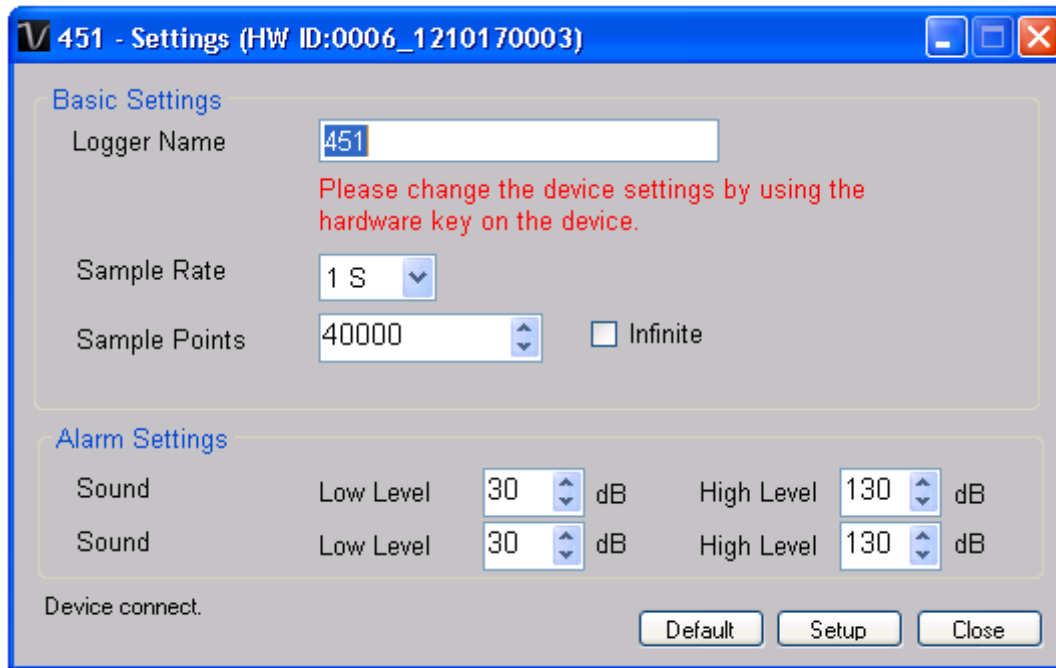
### 6.17.3 SL451 – Device Control Panel



The SL451 Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of SL451.
2	Device -> Stop	Stop the real time data download.
3	Device -> Download Data	Download reading from device.
4	Device -> Display / Plot Data	Select the time range that the device reading should be retrieved.
5	Device -> Email Alert	This will launch the email alert module. (Available in Professional version only)
6	Device -> Calibration	Launch the calibration module.
7	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
8	Graph -> Background Colour	Change the background colour of the graph to either black or white.
9	Graph -> Grid	Control whether to show / hide the grid on the graph area.
10	Graph -> Line	Control whether to show / hide the line on the graph area.
11	Graph -> Points Indicator	Control whether to show / hide the points indicator.
12	Graph -> Print	Prints the generated chart.
13	Graph -> Save Image As	Save the image in the chosen file format.
14	Graph -> Zoom Out	Zoom out one level.
15	Graph -> Zoom To Fit	Undo all zoom in and out.
16	Graph -> View All Data	Zoom out the graph to view all data.

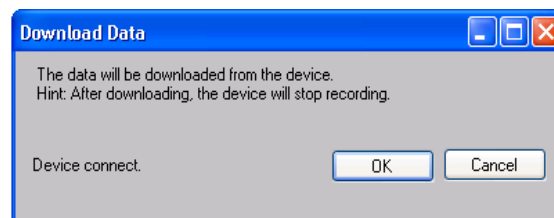
## 6.17.4 SL451 – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Rate	Instruct the data logger to log readings at a specific rate.
3	Sample Points	Configure the data logger sample points.
4	Infinite	For real time mode only, the download will not stop until the user stopped the download.
5	Low / High Alarm for dBA	Configure the sound level (at unit dBA) for the low / high alarm level.
6	Low / High Alarm for dBC	Configure the sound level (at unit dBC) for the low / high alarm level.
7	Default Button	Load the factory default settings.
8	Setup Button	Save changes.
9	Close Button	Close this interface.

## 6.17.5 SL451 - Download Data

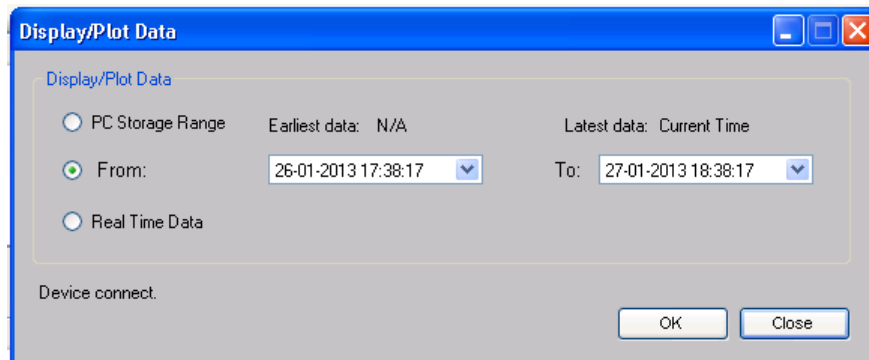
This module allows user to download the data from SL451, it will download the data when user pressed the "REC" button on the device.



Click "OK" button to stop the recording and start downloading.

## 6.17.6 SL451 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Real Time Data	Download real time data, will only enable if the device in real time mode. (by press the "Setup" button in Settings)
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

## 6.17.7 SL451 – Data View

SL451 contains two measurements (sound level in dBA and sound level in dBC), the device can record only one measurement at any specific unit of time (by press the "A/C" button on device).

SL451 - 451

Device Graph

**Data** Graph

PC storage range Earliest data: 27-01-2013 22:58:14 Latest data: 27-01-2013 22:58:45

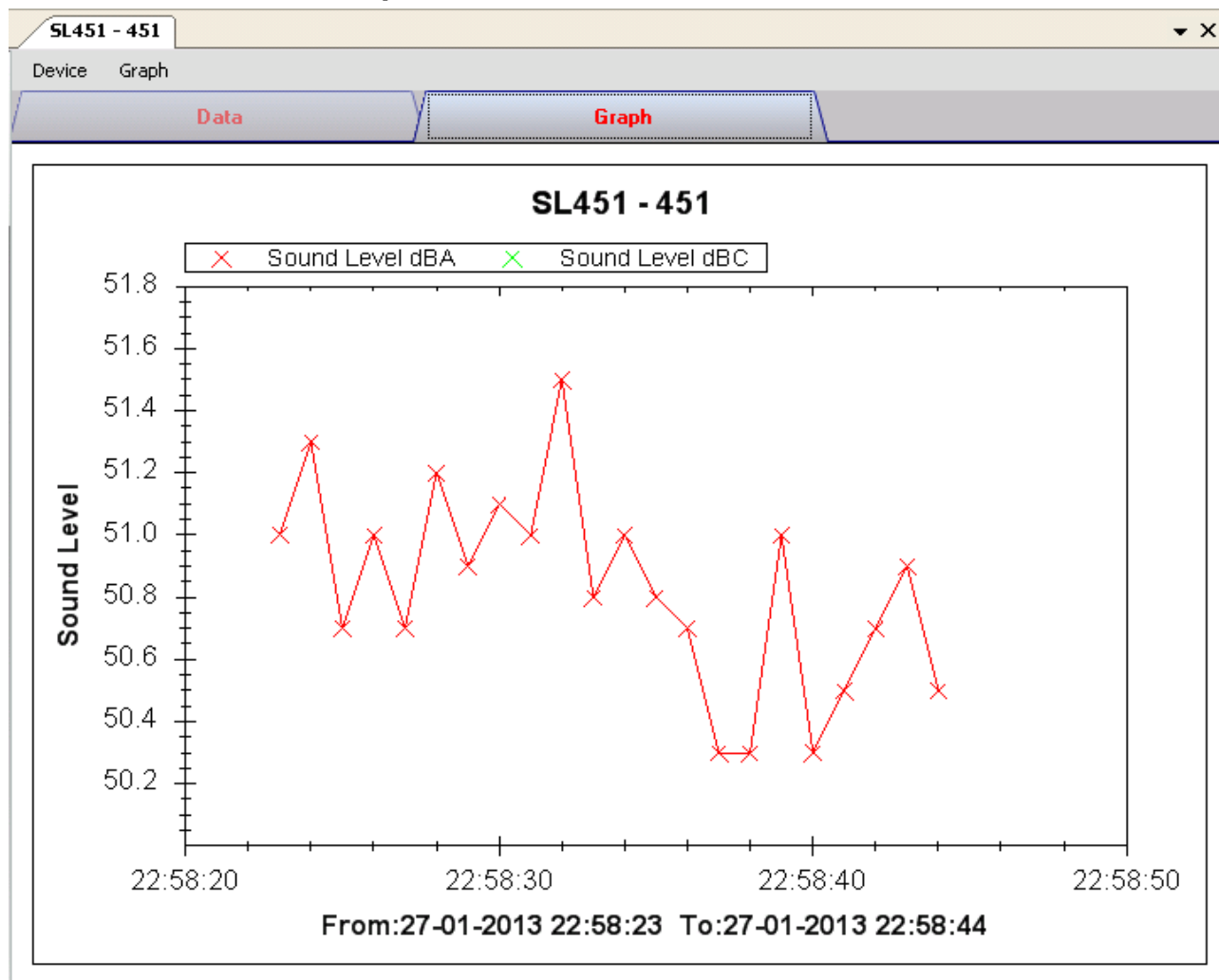
Summary

**All Data** Export Excel Export CSV

Record Time	Sound Level dBA	Sound Level dBC
27-01-2013 22:58:24	51.3	
27-01-2013 22:58:25	50.7	
27-01-2013 22:58:26	51	
27-01-2013 22:58:27	50.7	
27-01-2013 22:58:28	51.2	
27-01-2013 22:58:29	50.9	
27-01-2013 22:58:30	51.1	
27-01-2013 22:58:31	51	
27-01-2013 22:58:32	51.5	
27-01-2013 22:58:33	50.8	
27-01-2013 22:58:34	51	
27-01-2013 22:58:35	50.8	
27-01-2013 22:58:36	50.7	
27-01-2013 22:58:37	50.3	
27-01-2013 22:58:38	50.3	
27-01-2013 22:58:39	51	
27-01-2013 22:58:40	50.3	
27-01-2013 22:58:41	50.5	
27-01-2013 22:58:42	50.7	
27-01-2013 22:58:43	50.9	
27-01-2013 22:58:44	50.5	

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.

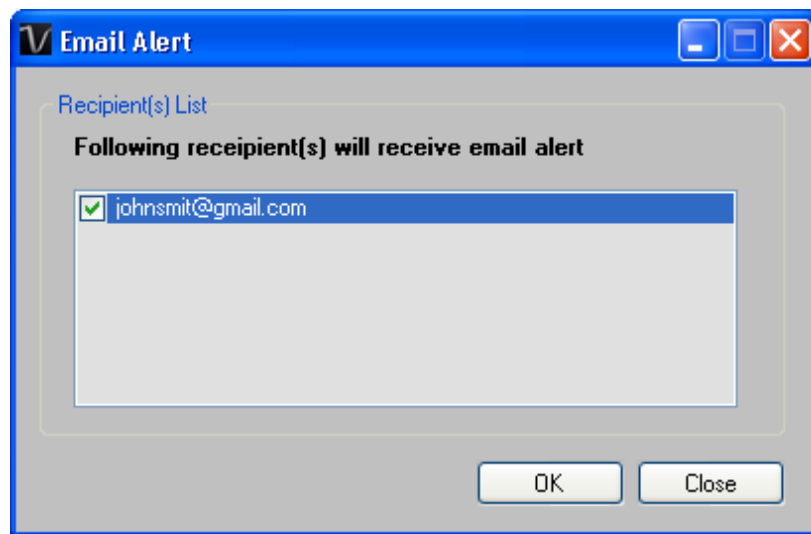
## 6.17.8 SL451 – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.17.9 SL451 – Email Alert



As SL451 supports real time measurement, therefore, it has an email alert feature, which will send out an email to the specified user when the device reading is above or below a certain level. The alert level can be configured in Setting.

User can use this module to select who will receive the email for the specific device.

## 6.17.10 SL451 – Web Interface

Please refer to section 5.6 on how to launch the web interface.

The web interface for SL451 is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

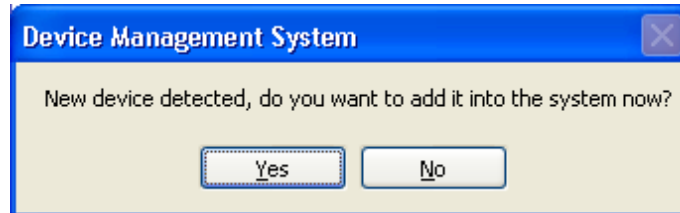


## 6.18 VC930 / VC950

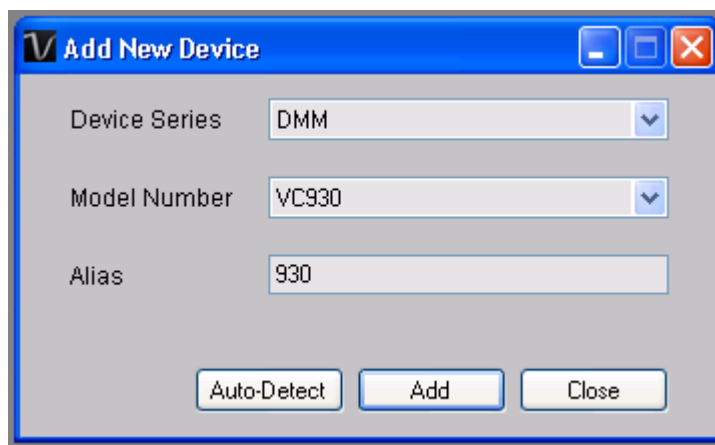
VC930 / VC950 are DMM devices which measure a number of different measurements.

### 6.18.1 Add new VC930 / VC950

When Voltsoft detected a new VC930 / VC950 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

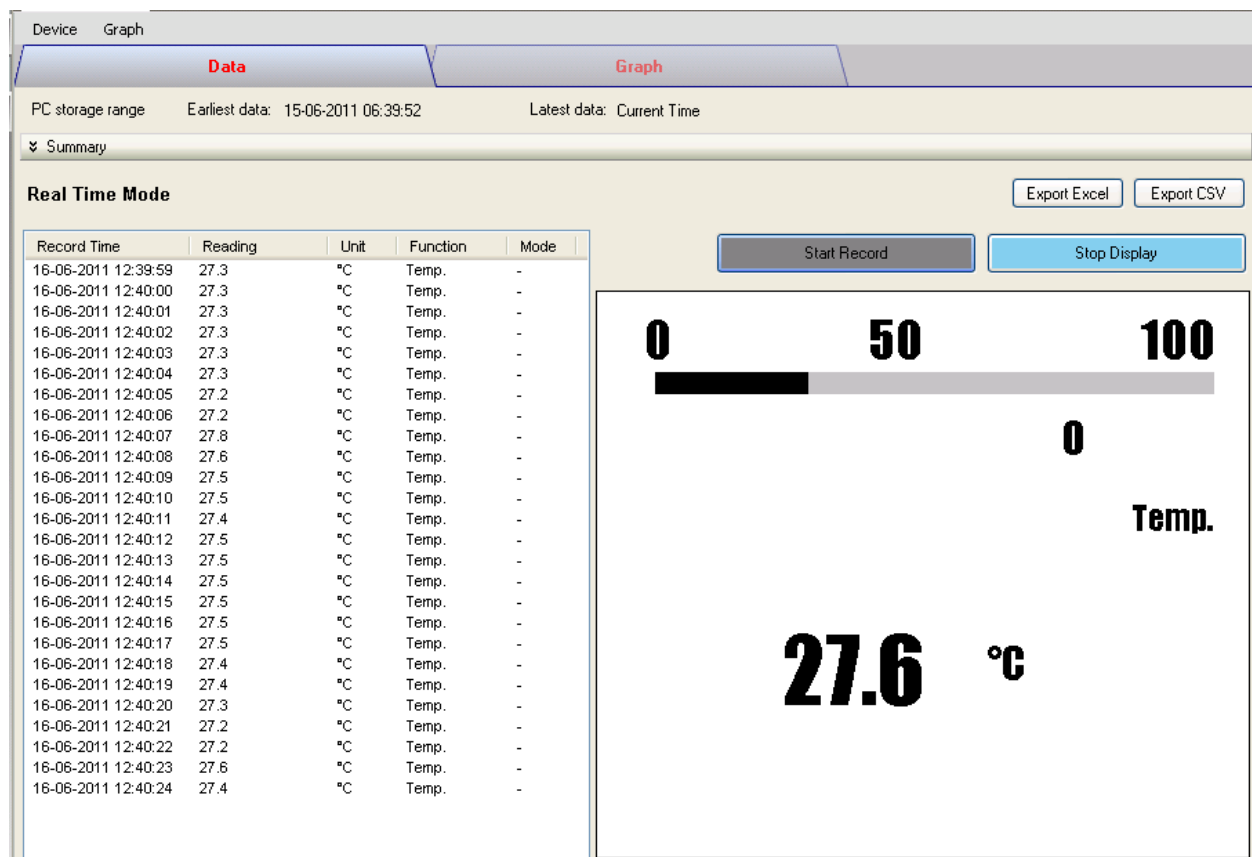


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.18.2 Remove VC930 / VC950

To remove VC930 / VC950, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.18.3 VC930 / VC950 – Device Control Panel

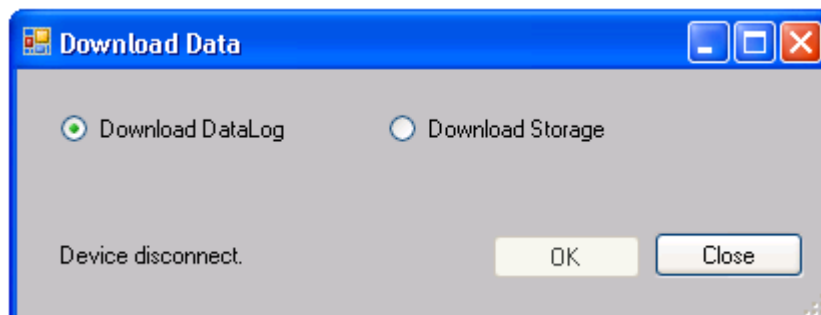


The VC930 / VC950 Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC930 / VC950.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Device -> Email Alert	This will launch the email alert module.  (Available in Professional version only)
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.

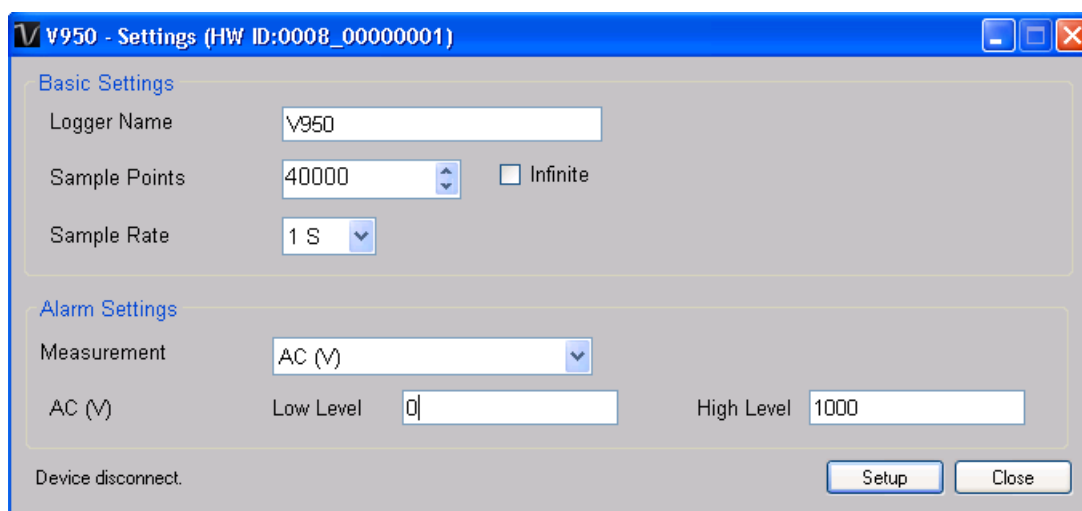
## 6.18.4 VC930 / VC950 - Download Data

This module allows user to download the data from VC930 / VC950.



Click "OK" button to stop the recording and start downloading.

## 6.18.5 VC930 / VC950 – Settings



1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stopped the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Alarm Settings*	Select the measurement column and alarm level.
6	Setup Button	Save changes.
7	Close Button	Close this interface.

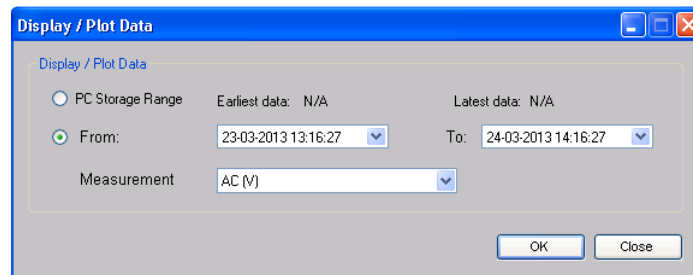
\* Note: The alarm can be configured in the following measurement ranges:

Unit	Function	Mode	Unit	Function	Mode
V	AC	-	%	mA AC	%
V	DC	-	%	mA DC	%
V	AC+DC	-	%	mA AC+DC	%
V	AC		A	AC	-
V	DC		A	DC	-

V	AC+DC		A	AC+DC	-
%	V AC	%	A	AC	
%	V DC	%	A	DC	
%	V AC+DC	%	A	AC+DC	
mV	AC	-	%	A AC	%
mV	DC	-	%	A DC	%
mV	AC+DC	-	%	A AC+DC	%
mV	AC		oC	Temp.	-
mV	DC		oC	Temp.	
mV	AC+DC		oC	Temp.	%
%	mV AC	%	oF	Temp.	-
%	mV DC	%	oF	Temp.	
%	mV AC+DC	%	oF	Temp.	%
mA	AC	-			
mA	DC	-			
mA	AC+DC	-			
mA	AC				
mA	DC				
mA	AC+DC				

## 6.18.6 VC930 / VC950 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

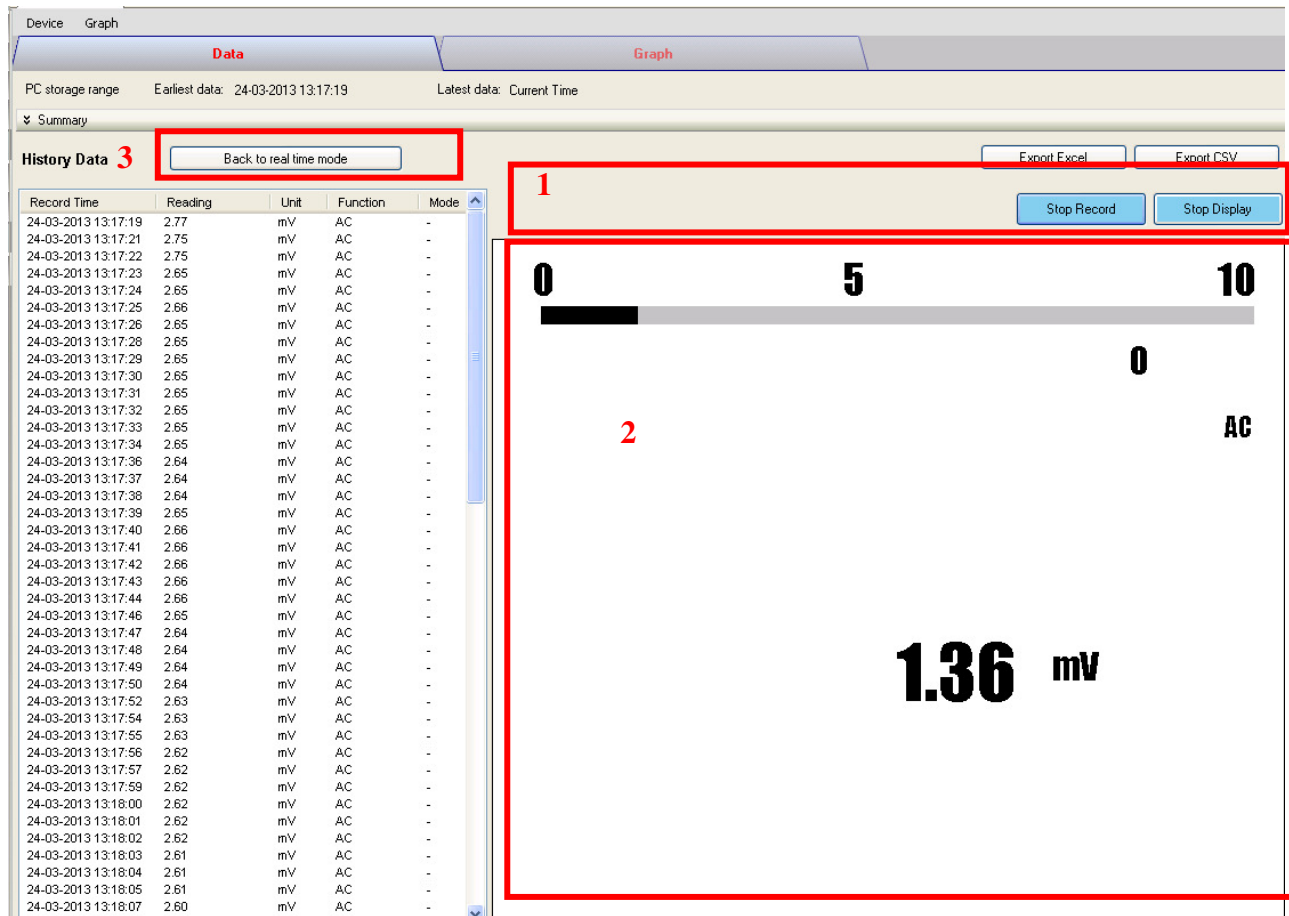


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

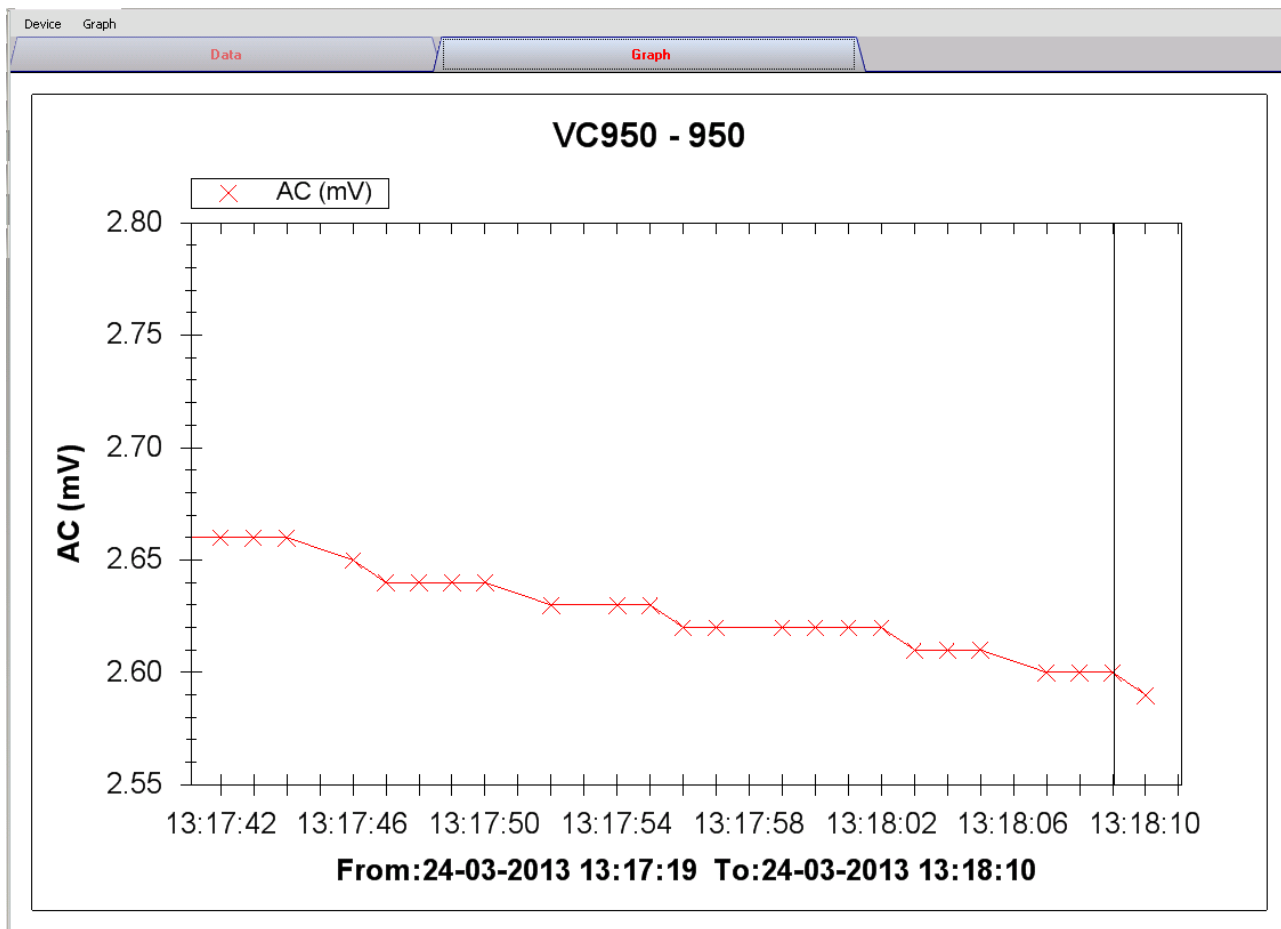
## 6.18.7 VC930 / VC950 – Data View

VC930 / VC950 contains many different measurements, you will need to specify which measurement (and unit) to download in "Display / Plot data" dialog.



1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B.</p> <p>i) If the device is in record mode this means it is also in display mode.</p> <p>ii) Stopping the display mode will also stop the record mode.</p>
2	Display Area	Display the measured value.
3	Back to real time mode	<p>This button will display when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to display real-time data.</p>

## 6.18.8 VC930 / VC950 – Graph View



Our graph supports the following operations

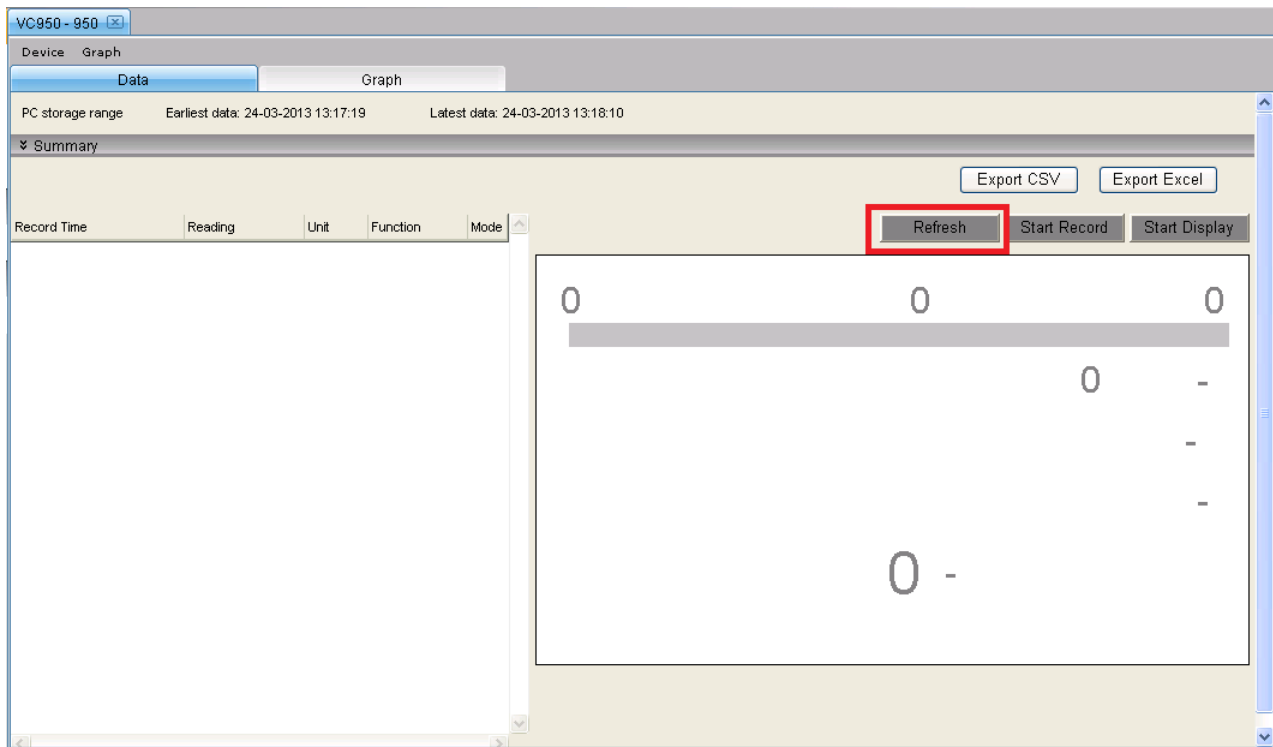
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

### 6.18.9 VC930 / VC950 – Web Interface

Please refer to section 5.6 on how to launch the web interface.

The web interface for VC930 / VC950 is similar to the Windows version, except two points:

1. Downloaded data can only have 10,000 readings in a single download.
2. The status of the “Record” and “Display” button will not be refreshed automatically. A “Refresh” button was therefore added, so click on the button to refresh the button status.



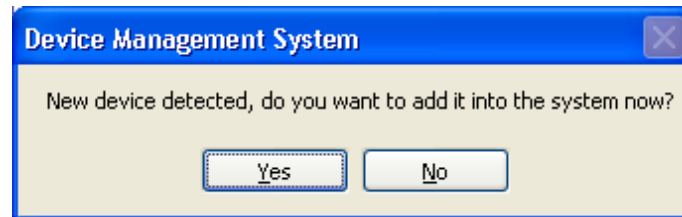


## 6.19 VC880 / VC650BT

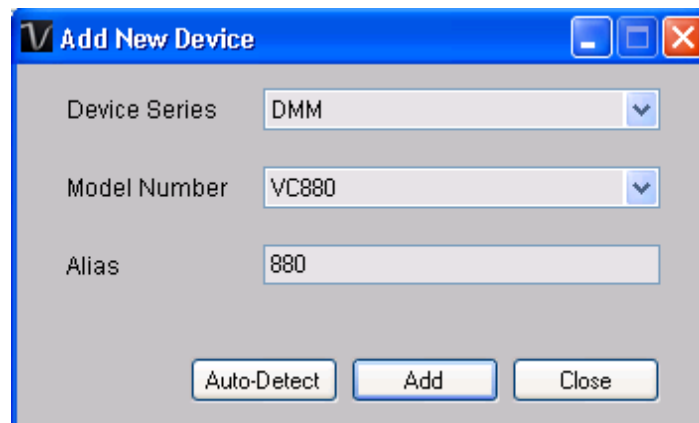
VC880 / VC650BT are DMM devices which measure a number of different measurements.

### 6.19.1 Add new VC880 / VC650BT

To add VC880 / VC650BT to Voltsoft, first connect the device to PC via USB port, press "REL / PC" button on the device until the PC icon appear. When Voltsoft detected a new VC880 / VC850 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

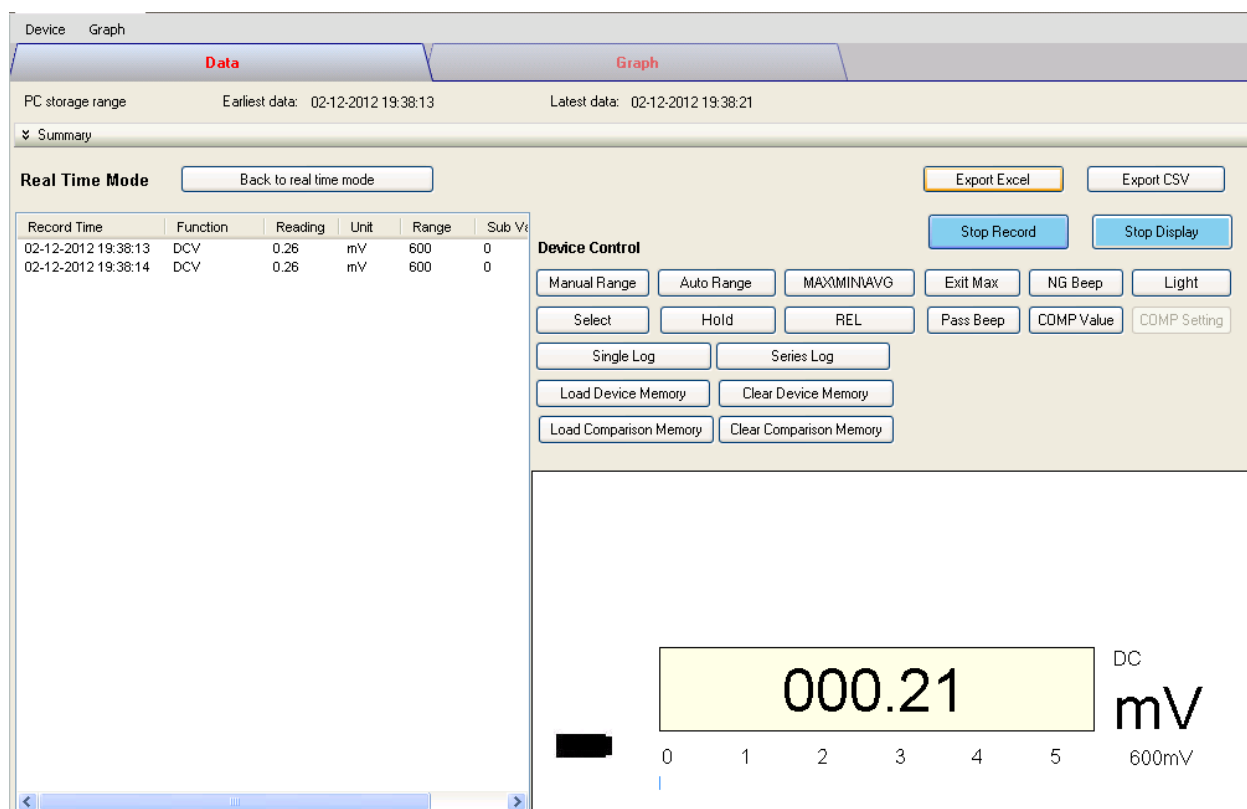


Enter a unique alias for this device, click "Add" will add the device into Voltsoft. User may also launch this module by selecting Device Management->Add New Device in menu.

### 6.19.2 Remove VC880 / VC650BT

To remove VC880 / VC850BT, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.19.3 VC880 / VC650BT – Device Control Panel



The VC880 / VC650BT Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC880 / VC650BT.
2	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
3	Device -> Email Alert	This will launch the email alert module.
4	Graph -> Plot Colour	(Available in Professional version only) This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.19.4 VC880 / VC650BT – Settings

**VC880 - Settings (HW ID:0009-000000000000507)**

**Basic Settings**

Logger Name:

Sample Points:  ☐ Infinite

Sample Rate:

☒ Skip repeat reading

**Alarm Settings**

Measurement:

Low Level:  High Level:

Device disconnect.

1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stops the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Skip repeat reading	System will not record a duplicate reading if this option was checked.
6	Alarm Settings*	Select the measurement column and alarm level.
7	Setup Button	Save changes.
8	Close Button	Close this interface.

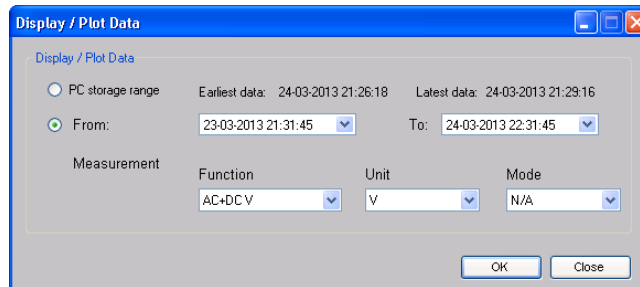
\* Note: The alarm can be configured in the following measurement ranges:

Function	Unit	Mode
AC+DC V	V	N/A
AC+DC V	V	Δ
ACV	V	N/A
ACV	V	Δ
DCV	V	N/A
DCV	V	Δ
DCV	mV	N/A
DCV	mV	Δ
ACA	μA	N/A
ACA	A	N/A
ACA	mA	N/A
ACA	μA	Δ
ACA	A	Δ
ACA	mA	Δ
Continuity	Ω	N/A

Diode	V	N/A
Duty Cycle	%	N/A
DCA	$\mu$ A	N/A
DCA	A	N/A
DCA	mA	N/A
DCA	$\mu$ A	$\Delta$
DCA	A	$\Delta$
DCA	mA	$\Delta$
Capacity	$\mu$ F	N/A
Capacity	mF	N/A
Capacity	nF	N/A
Capacity	$\mu$ F	$\Delta$
Capacity	mF	$\Delta$
Capacity	nF	$\Delta$
Freq	Hz	N/A
Freq	kHz	N/A
Freq	MHz	N/A
Impedance	$\Omega$	N/A
Impedance	k $\Omega$	N/A
Impedance	M $\Omega$	N/A
Temperature	$^{\circ}$ C	N/A
Temperature	$^{\circ}$ F	N/A
ACV Low-pass	V	N/A

## 6.19.5 VC880 / VC650BT – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

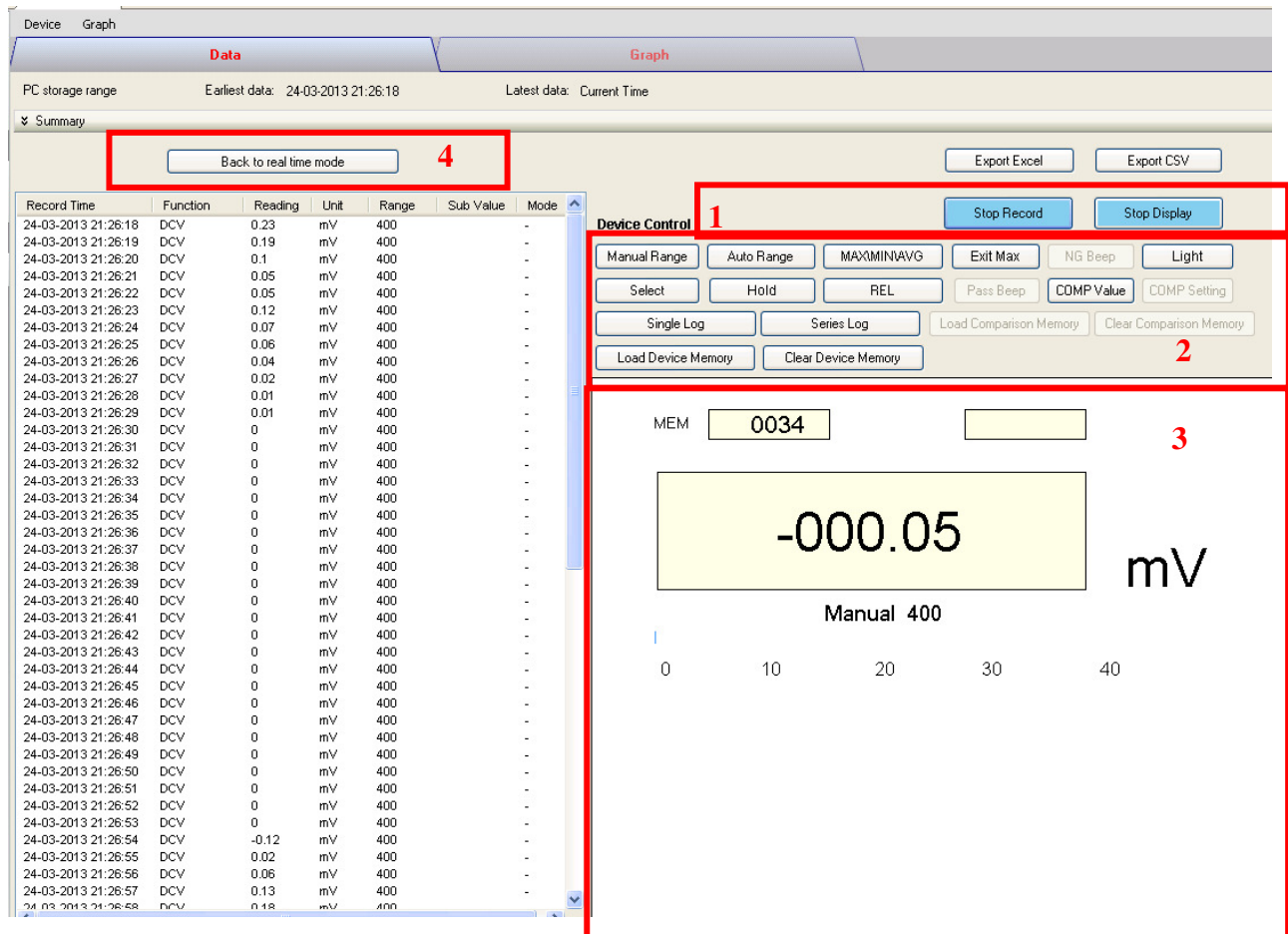


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

## 6.19.6 VC880 / VC650BT – Data View

VC880 / VC650BT contains many different measurements, you will need to specify which measurement (and unit) to download in "Display / Plot data" dialog.

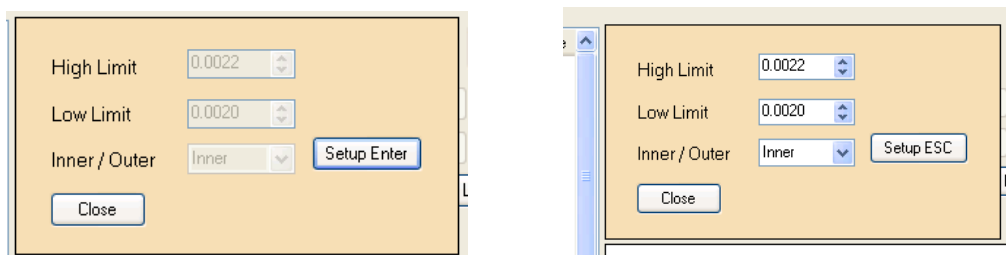


1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B.</p> <p>i) If the device is in record mode this means it is also in display mode.</p> <p>ii) Stopping the display mode will also stop the record mode.</p>
2	Command Button	Refer to below section.
3	Display Area	Display the measured value.
4	Back to real time mode	<p>This button will display when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to displaying real-time data.</p>

## Command Button

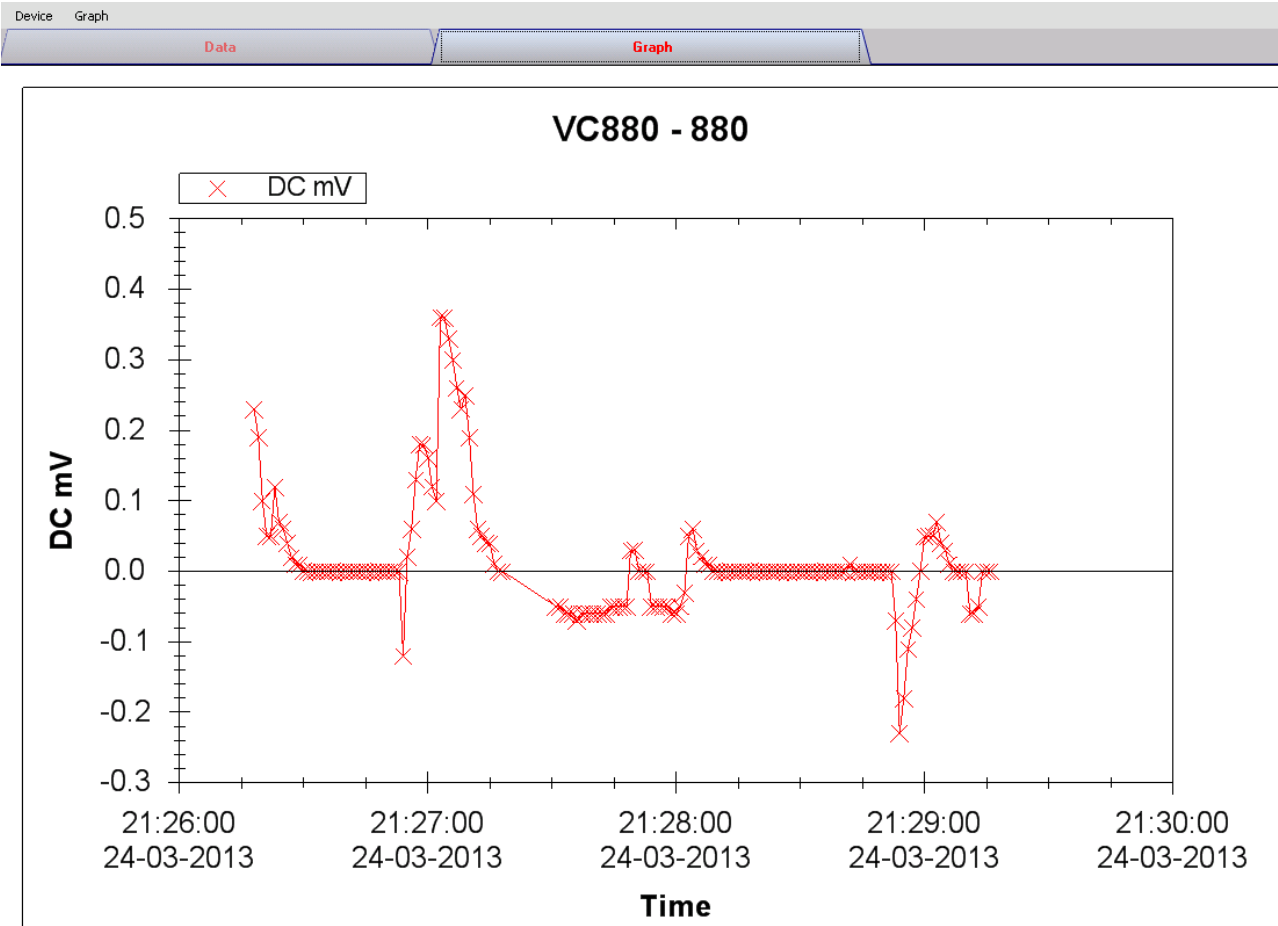
Manual Range	Click to send commands to make device entering the manual range.
Auto Range	Click to send commands to make device entering the auto range.
MAX / MIN / AVG	Click to send commands to enable maximum, minimum, average function.
Exit Max	Click to send commands to exit maximum, minimum, average function.
NG Beep	In the COMP VALUE mode, if failed, click button to turn the alarm on/off.
Light	Click to send commands to enable device backlight function, and then click the exit functions.
Select	Click to send commands to enable device function selection.
Hold	Click to send commands to enable device to maintain the function, and then click to exit maintain function.
REL	Click to send commands to enable the relative value function; then click to exit the function.
Pass Beep	In the COMP VALUE mode, if passed, click button to turn the alarm on/off.
COMP Value	Enter / Leave COMP value mode.
COMP Setting	Pop up Data Comparison dialog.
Single Log	Click to send commands to enable device to store a single data.
Series Log	Click to send commands to enable device to continuously store data, and then click to exit the function.
Load Comparison Memory	Click to send commands to send out the comparison data stored by device.
Clear Comparison Memory	Clear the comparison data in device.
Load Device Memory	Click to send commands to send out the no comparison data stored by device.
Clear Device Memory	Clear the no comparison data in device.

## Data Comparison dialog



**Setup Enter** : When button is pressed, the upper/lower limit and the mode can be modified; when button is up, the settings will be sent and saved in the device.

6.19.7 VC880 / VC650BT – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

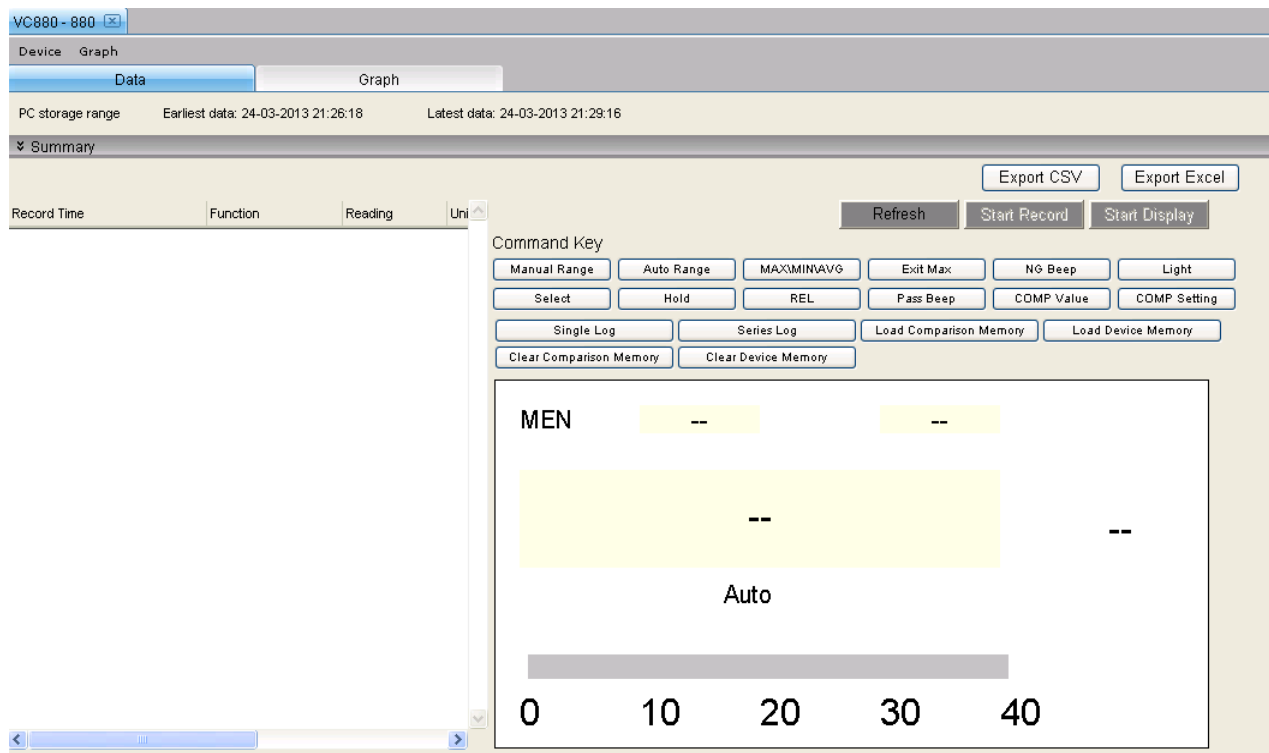


## 6.19.8 VC880 / VC650BT – Web Interface

Please refer to section 5.6 on how to launch the web interface.

The web interface for VC880 / VC650BT is the similar to Windows version, except two points:

1. Downloaded data can only have 10,000 readings in a single download.
2. The status of the "Record" and "Display" button will not be refreshed automatically. A "Refresh" button was therefore added, so click on the button to refresh the button status.

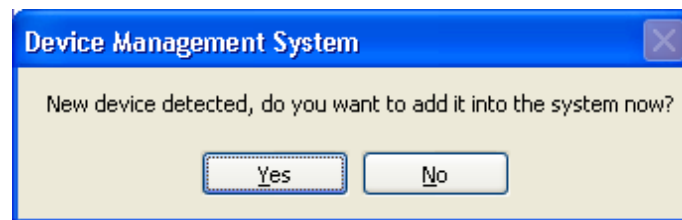


## 6.20 VC890

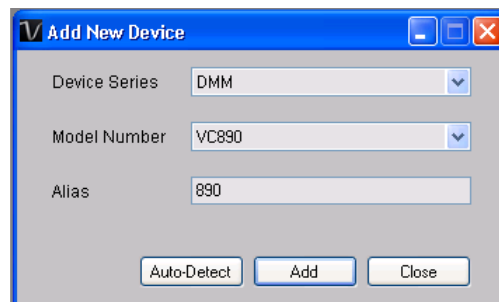
VC890 is a DMM device which measures a number of different measurements.

### 6.20.1 Add new VC890

To add VC890 to Votsoft, first connect the device to PC via USB port, press "REL / PC" button on the device until the PC icon appears. When Votsoft detected a new VC890 attached, the following dialog will be popped up:



Click "Yes", the following dialog will be displayed:

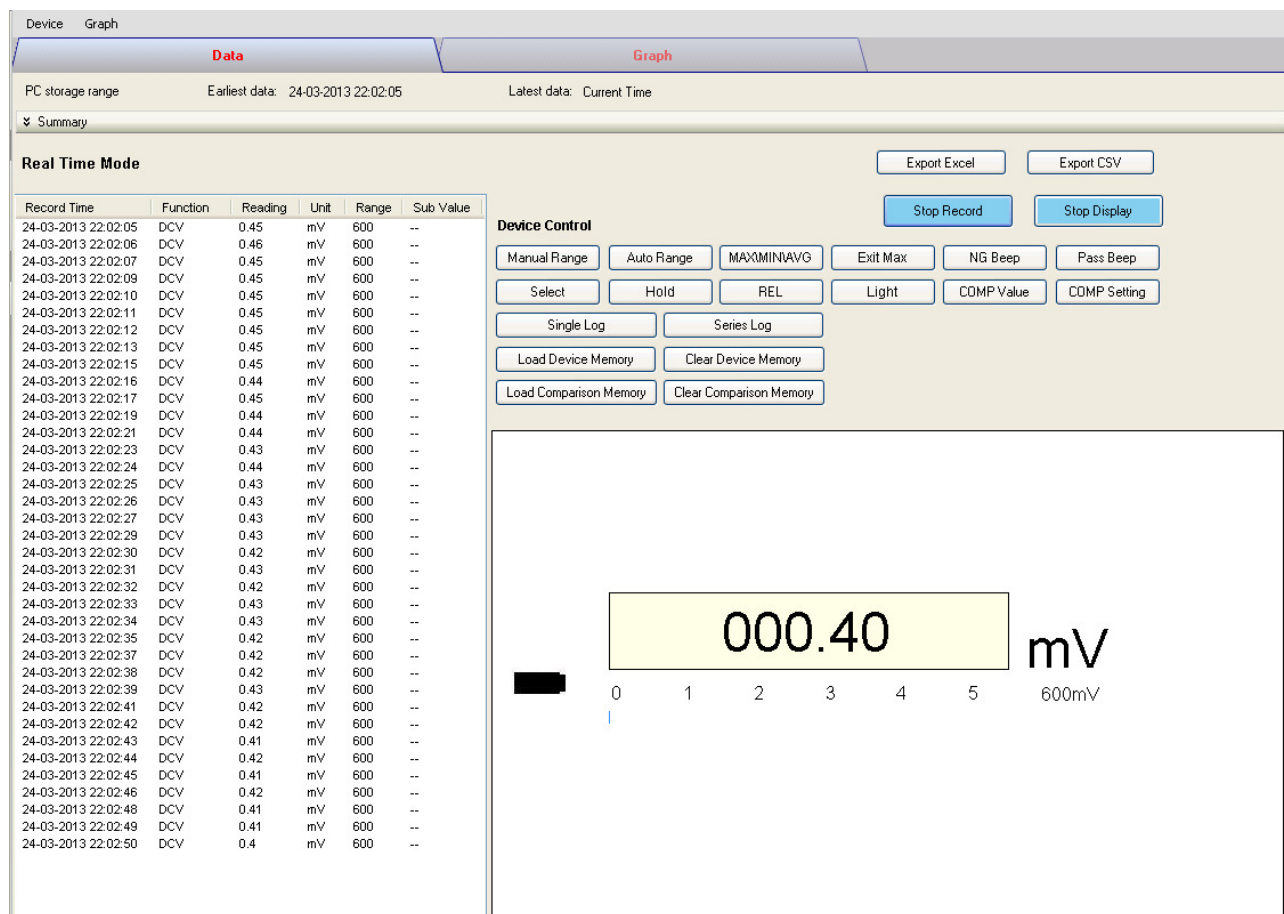


Enter a unique alias for this device, click "Add" will add the device into Votsoft. User may also launch this module by select Device Management->Add New Device in menu.

### 6.20.2 Remove VC890

To remove VC890, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

## 6.20.3 VC890 – Device Control Panel



The VC890 Device Control Panel contains the following items in menu:

1	Device -> Data Record Settings	This will launch the setting page of VC890.
2	Device -> Device Settings	Launch extra setting page of VC890.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Device -> Email Alert	This will launch the email alert module.  (Available in Professional version only)
5	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
6	Graph -> Background Colour	Change the background colour of the graph to either black or white.
7	Graph -> Grid	Control whether to show / hide the grid on the graph area.
8	Graph -> Line	Control whether to show / hide the line on the graph area.
9	Graph -> Points Indicator	Control whether to show / hide the points indicator.
10	Graph -> Print	Prints the generated chart.
11	Graph -> Save Image As	Save the image in the chosen file format.
12	Graph -> Zoom Out	Zoom out one level.
13	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.20.4 VC890 – Settings

**VC880 - Settings (HW ID:0009-000000000000507)**

**Basic Settings**

Logger Name:

Sample Points:  ☐ Infinite

Sample Rate:

☒ Skip repeat reading

**Alarm Settings**

Measurement:  Unit:  Mode:

Low Level:  High Level:

Device disconnect.

1	Logger Name	Input the unique alias for that device.
2	Sample Points	Configure the data logger sample points.
3	Infinite	For real time mode only, the download will not stop until the user stopped the download.
4	Sample Rate	Instruct the data logger to log readings at a specific rate.
5	Skip repeat reading	System will not record a duplicate reading if this option was checked.
6	Alarm Settings*	Select the measurement column and alarm level.
7	Setup Button	Save changes.
8	Close Button	Close this interface.

\* Note: The alarm can be configured in the following measurement ranges:

Function	Unit	Mode
AC+DC V	V	N/A
AC+DC V	V	Δ
ACV	V	N/A
ACV	V	Δ
DCV	V	N/A
DCV	V	Δ
DCV	mV	N/A
DCV	mV	Δ
ACA	μA	N/A
ACA	A	N/A
ACA	mA	N/A
ACA	μA	Δ
ACA	A	Δ
ACA	mA	Δ
Continuity	Ω	N/A

Diode	V	N/A
Duty Cycle	%	N/A
DCA	$\mu$ A	N/A
DCA	A	N/A
DCA	mA	N/A
DCA	$\mu$ A	$\Delta$
DCA	A	$\Delta$
DCA	mA	$\Delta$
Capacity	$\mu$ F	N/A
Capacity	mF	N/A
Capacity	nF	N/A
Capacity	$\mu$ F	$\Delta$
Capacity	mF	$\Delta$
Capacity	nF	$\Delta$
Freq	Hz	N/A
Freq	kHz	N/A
Freq	MHz	N/A
Impedance	$\Omega$	N/A
Impedance	k $\Omega$	N/A
Impedance	M $\Omega$	N/A
Temperature	$^{\circ}$ C	N/A
Temperature	$^{\circ}$ F	N/A
ACV Low-pass	V	N/A

## 6.20.5 VC890 – Device Setting

Extra settings are available for VC890, the user can launch them via Device -> Device Setting.

**Device Setting**

**Time**

05-01-2013 14:11:57 Use System Time ☐ **Set** <sup>1</sup>

**Other Setting**

Battery ☒ Alkaline ☐ Li-Akku (Lithium battery) <sup>2</sup>

Logger Memory ☒ Fix ☐ Overwrite <sup>3</sup>

Logger data display ☒ Activate ☐ Deactivate <sup>4</sup>

Auto brightness ☒ Activate ☐ Deactivate <sup>5</sup>

Logger sampling rate 1s <sup>6</sup>

Auto Power Off ☒ 5 mins ☐ 15 mins ☐ 30 mins ☐ Never <sup>7</sup>

**Set**

Device connect. **Close**

1	Time	Configure the device date time value. The user can specify a defined time or use the system date time.
2	Battery	Configure the device current using Alkaline or Lithium battery.
3	Logger Memory	Configure logger memory to be fixed or overwritten when full.
4	Logger data display	Configure the battery saving mode to activate or not during data logging.
5	Auto brightness	Configure the battery saving mode to activate or not during normal operation.
6	Logger sample rate	Configure logger sample rate.
7	Auto Power Off	Configure the auto power option

## 6.20.6 VC890 - Download Data

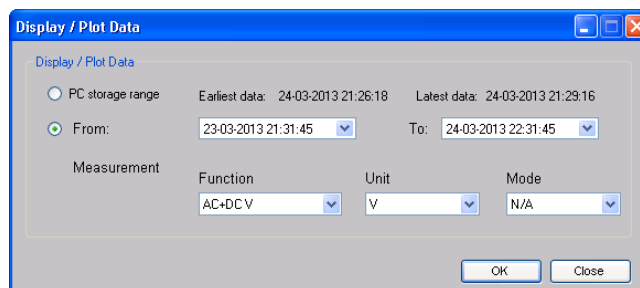
This module allows user to download the storage data from VC890.



Click "OK" button to stop the recording and start downloading.

## 6.20.7 VC890 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.

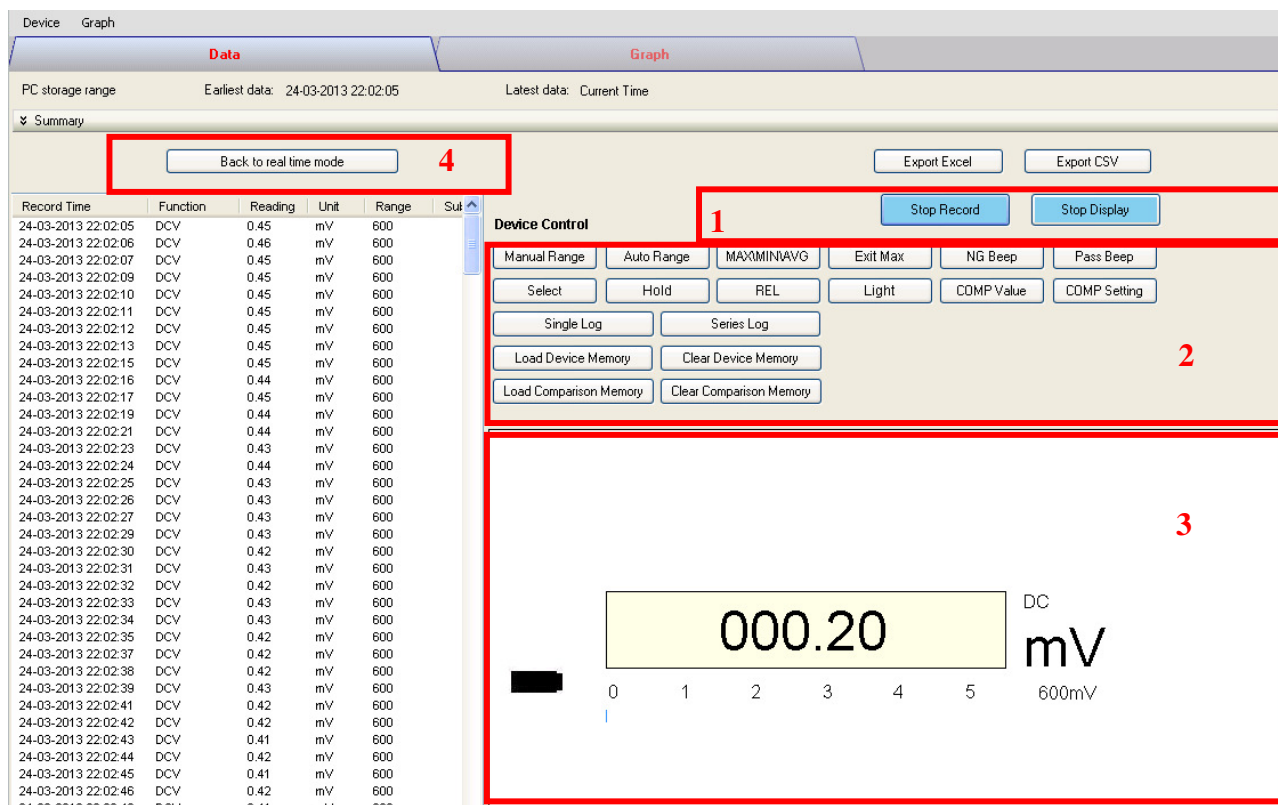


1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	Measurement	User can select which measurement record to download.
4	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
5	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

## 6.20.8 VC890 – Data View

VC890 contains many different measurements, you will need to specify which measurement (and unit) to download in “Display / Plot data” dialog.



1	Record / Display Button	<p>Use these two buttons to toggle between display and record mode.</p> <p>In display mode, the reading measured by the device will be displayed in the display area.</p> <p>In record mode, the reading measured will not only display in the display area, but also be stored in the database for future use.</p> <p>N.B.</p> <p>i) If the device is in record mode this means it is also in display mode.</p> <p>ii) Stopping the display mode will also stop the record mode.</p>
2	Command Button	Refer to below section.
3	Display Area	Display the measured value.
4	Back to real time mode	<p>This button will be displayed when the device is in real time mode but the interface is not showing real-time data (e.g. downloading log data / historical data).</p> <p>Clicking this button can return the interface to displaying real-time data.</p>

### Command Button

Manual Range

Click to send commands to make device entering the manual range.

Auto Range

Click to send commands to make device entering the



MAX / MIN / AVG	auto range. Click to send commands to enable maximum, minimum, average function.
Exit Max	Click to send commands to exit maximum, minimum, average function.
NG Beep	In the COMP VALUE mode, if failed, click button to turn the alarm on/off.
Light	Click to send commands to enable device backlight function, and then click the exit functions.
Select	Click to send commands to enable device function selection.
Hold	Click to send commands to enable device to maintain the function, and then click to exit maintain function.
REL	Click to send commands to enable the relative value function; then click to exit the function.
Pass Beep	In the COMP VALUE mode, if passed, click button to turn the alarm on/off.
COMP Value	Enter / Leave COMP value mode.
COMP Setting	Pop up Data Comparison dialog.
Single Log	Click to send commands to enable device to store a single data.
Series Log	Click to send commands to enable device to continuously store data, and then click to exit the function.
Load Comparison Memory	Click to send commands to send out the comparison data stored by device.
Clear Comparison Memory	Clear the comparison data in device.
Load Device Memory	Click to send commands to send out the no comparison data stored by device.
Clear Device Memory	Clear the no comparison data in device.

### Data Comparison dialog

High Limit 100

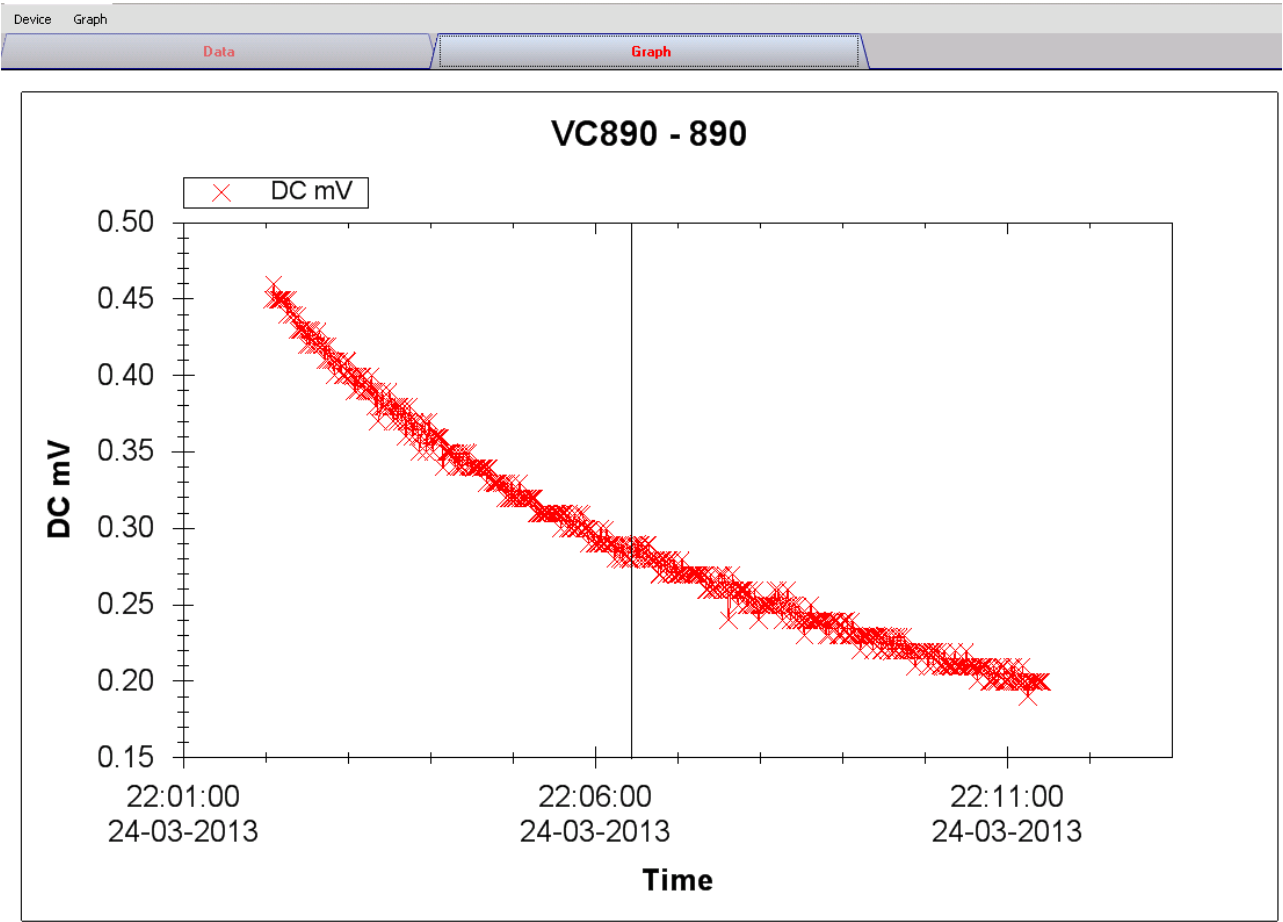
Low Limit 0

Inner / Outer Outer Setup Enter

Close

**Setup Enter** : When button is pressed, the settings will be sent and saved in the device.

6.20.9 VC890 – Graph View



Our graph supports the following operations

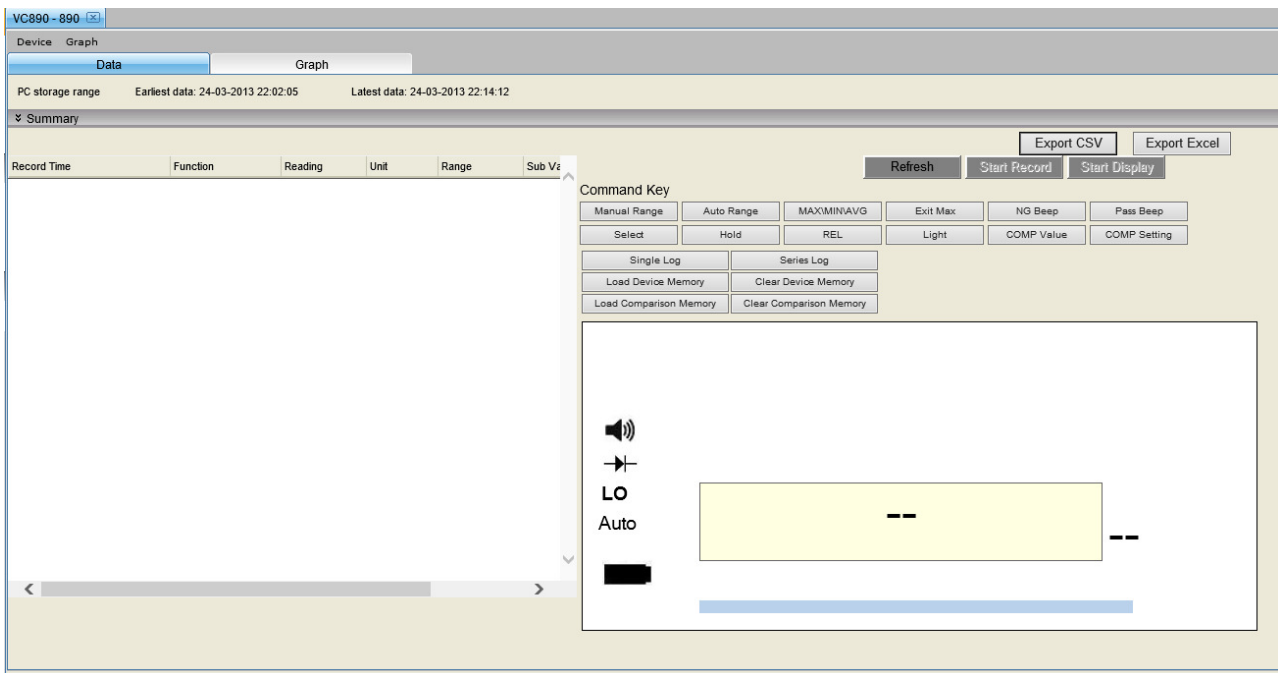
1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.20.10 VC890 – Web Interface

Please refer to section 5.6 on how to launch the web interface.

The web interface for VC890 is similar to Windows version, except two points:

1. Downloaded data can only have 10,000 readings in a single download.
2. The status of the "Record" and "Display" button will not be refreshed automatically. A "Refresh" button was therefore added, so click on the button to refresh the button status.

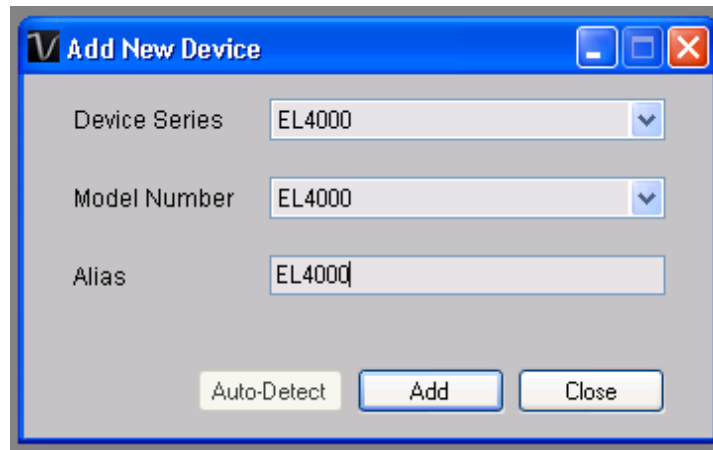


## 6.21 EL4000

EL4000 is a data logger which measures the power consumption of different electronic devices.

### 6.21.1 Add new EL4000

As EL4000 will not be physically connected to computer, therefore, to create a new EL4000 in Votsoft, user is required to select Device Management->Add New Device in menu.

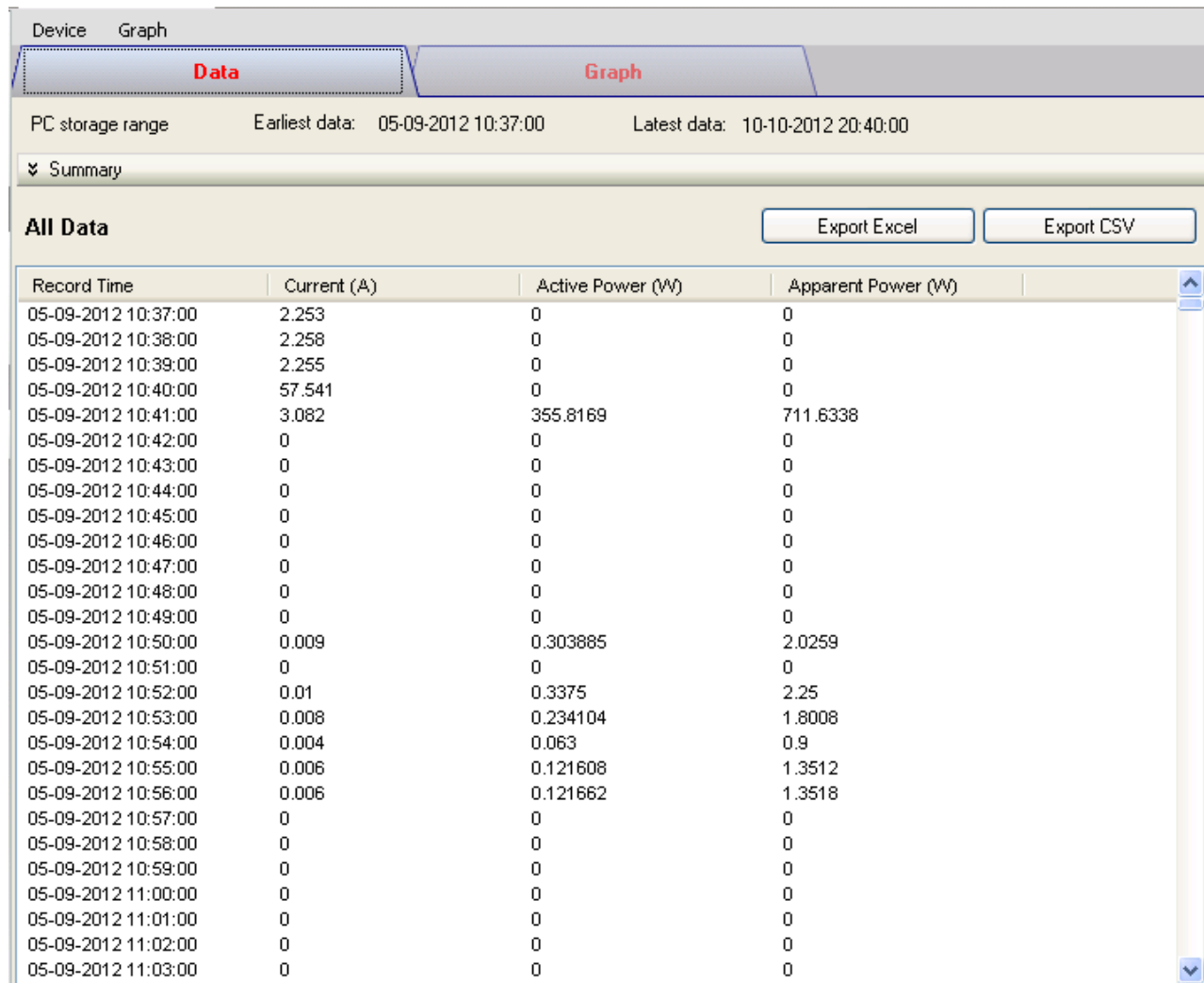


Select "EL4000" in device series, "EL4000" in model number, enter a unique device alias and click the "Add" button.

### 6.21.2 Remove EL4000

To remove EL4000, go to Device Management -> Remove Existing Device and its PC data Storage, select the device you want to remove and click the "Remove" button.

### 6.21.3 EL4000 – Device Control Panel



The EL4000 Device Control Panel contains the following items in menu:

1	Device -> Settings	This will launch the setting page of EL4000.
2	Device -> Download Data	Download reading from device.
3	Device -> Display / Plot Data	Select the time range that the device reading should retrieve.
4	Graph -> Plot Colour	This will launch the Plot Colour module to change the colour of the individual lines.
5	Graph -> Background Colour	Change the background colour of the graph to either black or white.
6	Graph -> Grid	Control whether to show / hide the grid on the graph area.
7	Graph -> Line	Control whether to show / hide the line on the graph area.
8	Graph -> Points Indicator	Control whether to show / hide the points indicator.
9	Graph -> Print	Prints the generated chart.
10	Graph -> Save Image As	Save the image in the chosen file format.
11	Graph -> Zoom Out	Zoom out one level.
12	Graph -> Zoom To Fit	Undo all zoom in and out.

## 6.21.4 EL4000 – Settings

**Setting**

**Basic Settings**

Time: 17-03-2012 04:06 ☒ Use System Time

Date Format: ☒ dd/mm/yyyy ☐ mm/dd/yyyy

Time Format: ☒ 24-hour ☐ 12-hour

Logger Name: 4000

Logger ID: 0

Currency: Pound

Tariff1: 0.00

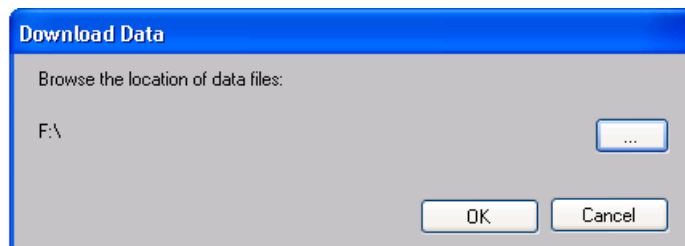
Tariff2: 0.00

Default Save Setup Close

1	Time	Configure the device data time value. The user can specify a defined time or use the system date time.
2	Date Format	Select either dd/mm/yyyy or mm/dd/yyyy
3	Time Format	Select either 24 / 12 hour format.
4	Logger Name	Input the unique alias for that device.
5	Logger ID	Select logger ID, from 0 – 9.
6	Currency	Select the currency, for calculation.
7	Tariff 1	Price for Period 1
8	Tariff 2	Price for Period 2
9	Default	Restore the default value
10	Save Button	Save setting changes
11	Setup Button	Save changes and export the configuration file.
12	Close Button	Close this interface.

### 6.21.5 EL4000 - Download Data

This module allows user to download the storage data from EL4000.

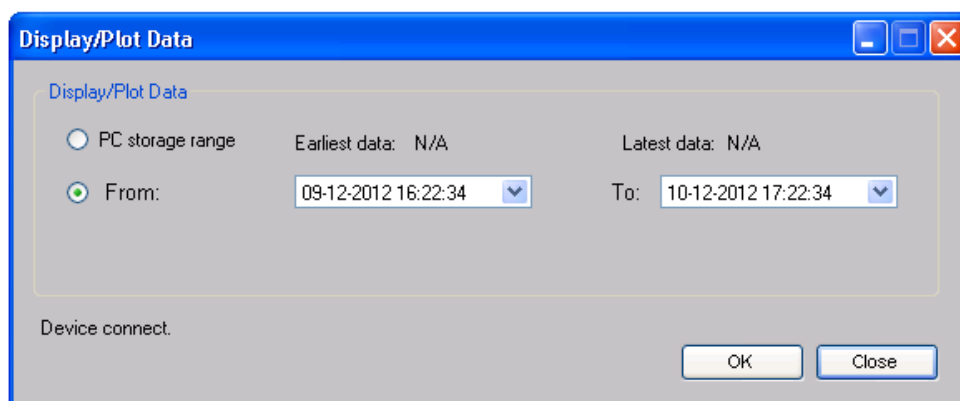


To download data, click "...", select the location of data files, and then click the "Download" button to start downloading.

Please note that the logger ID of the data file must be the same of the logger ID configured in setting, otherwise download will not be allowed.

### 6.21.6 EL4000 – Display / Plot Data

This module allows user to select a range for the device readings from the device and display them in the data tab and graph tab.



1	PC Storage Range	Download all data stored in the database.
2	Time Range	Select the data reading range.
3	OK	Click OK to accept the input and display the selected reading in the data and graph tabs.
4	Cancel	Close this module.

The loading time will increase when more data is retrieved; therefore, the system will be limited to return the first 100,000 records which meet your selection criteria. (For the Web version, only the first 10,000 records will be returned.)

## 6.21.7 EL4000 – Data View

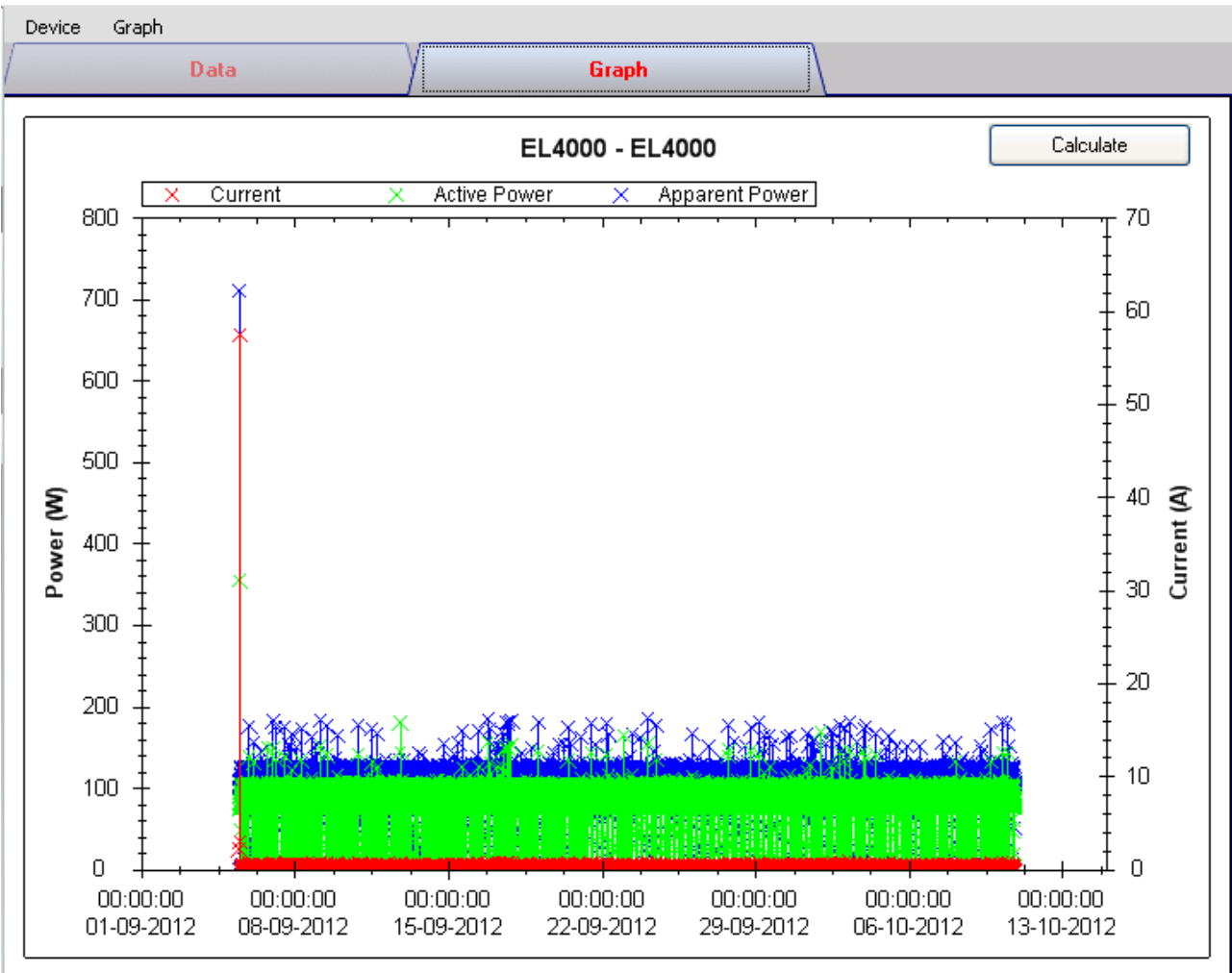
EL4000 contains three measurements (Current, Active Power and Apparent Power),

Device		Graph	
Data		Graph	
PC storage range		Earliest data: 05-09-2012 10:37:00	Latest data: 10-10-2012 20:40:00
Summary			
All Data		Export Excel	Export CSV
Record Time	Current (A)	Active Power (W)	Apparent Power (W)
05-09-2012 10:37:00	2.253	0	0
05-09-2012 10:38:00	2.258	0	0
05-09-2012 10:39:00	2.255	0	0
05-09-2012 10:40:00	57.541	0	0
05-09-2012 10:41:00	3.082	355.8169	711.6338
05-09-2012 10:42:00	0	0	0
05-09-2012 10:43:00	0	0	0
05-09-2012 10:44:00	0	0	0
05-09-2012 10:45:00	0	0	0
05-09-2012 10:46:00	0	0	0
05-09-2012 10:47:00	0	0	0
05-09-2012 10:48:00	0	0	0
05-09-2012 10:49:00	0	0	0
05-09-2012 10:50:00	0.009	0.303885	2.0259
05-09-2012 10:51:00	0	0	0
05-09-2012 10:52:00	0.01	0.3375	2.25
05-09-2012 10:53:00	0.008	0.234104	1.8008
05-09-2012 10:54:00	0.004	0.063	0.9
05-09-2012 10:55:00	0.006	0.121608	1.3512
05-09-2012 10:56:00	0.006	0.121662	1.3518
05-09-2012 10:57:00	0	0	0
05-09-2012 10:58:00	0	0	0
05-09-2012 10:59:00	0	0	0
05-09-2012 11:00:00	0	0	0
05-09-2012 11:01:00	0	0	0
05-09-2012 11:02:00	0	0	0
05-09-2012 11:03:00	0	0	0

1	Export Excel	Export the reading to Excel (.xls) format.
2	Export CSV	Export the reading to Excel (.csv) format.



6.21.8 EL4000 – Graph View



Our graph supports the following operations

1	Mouse wheel	Zoom-in / Zoom-Out
2	Mouse click and drag	Zoom-in
3	Shift + mouse click	Pan
4	Mouse over on point	Display reading values

## 6.21.9 EL4000 – Calculate

User can calculate the price for power consumption by using this module.

**Calculation**

**Price Settings**

**From** 1  
05-09-2012 10:37

**To**  
10-10-2012 20:40

**Price 1** 2  
From: 08:00  
To: 19:59  
Price:(£ ) 0.100 /kWh

**Price 2**  
From: 20:00  
To: 07:59  
Price:(£ ) 0.200 /kWh

**Results**  
Consumption: 13.42 kWh  
Cost: £ 1.96

**Forecast**  
**Monthly**  
Consumption: 11.369 kWh  
Cost: £ 1.66  
**Yearly**  
Consumption: 138.323 kWh  
Cost: £ 20.17

Calculate Close

1	From / To	Define the record period
2	Price 1 / Price 2	Unit price for different time period

Click the "Calculate" button to calculate the price.

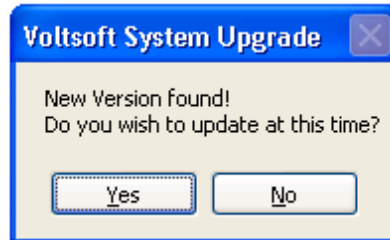
## 6.21.10 EL4000 –Web Interface

Please refer to section 5.6 on how to launch the web interface.

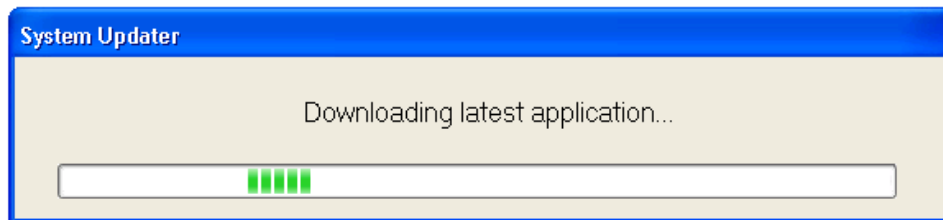
The web interface for EL4000 is the same as Windows version, except the downloaded data can only have 10,000 readings in a single download.

## 7 Auto Upgrade

Voltsoft will perform version checking every time when it starts up, and if there is a new version available, the following dialog box will be displayed:



User can click "Yes" to perform an upgrade or "No" to skip the upgrade. In order to enjoy the new features of Voltsoft, it is highly recommended to perform the upgrade.



The system will continue to launch once the upgrade is completed.

## 8 Appendix

### 8.1 Real-Time device list

Only the following devices will have real-time features:

Family	Model Number
Data Logger	DL131G
	DL161S
	SL400
DMM	VC 930 / VC950
DMM	VC 880 / VC650BT / VC890

Remarks: The speed of data logging (i.e. sample rate) much depends on the capacity of your computer and its performance will be affected when 2 or more sets of real-time devices are running at the same time.

### 8.2 Internet Explorer 10

Current version of Voltsoft web version do not support Internet Explorer 10 (I.E. 10), to access Voltsoft by I.E. 10, please select "Tools"->"F12 developer tools" in user menu, then select "Internet Explorer 9" for Browser Mode.

