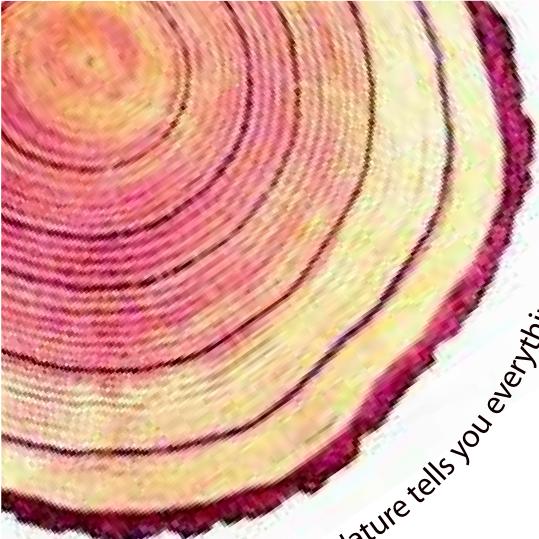


# Help File



Mother Nature tells you everything

## LMViewXSE006 Software



Manufacturers of :  
Circular Chart Recorders  
• Inkless Recorders  
• Paperless Recorders  
• Scanners & Data Loggers  
• Networked Data Loggers  
• Application Software  
• WHO PQS Qualified Data Loggers  
• Vaccine Series Data Loggers

### G-TEK CORPORATION PVT. LTD.

"Gunaji House"  
Plot No. 25/1, Besides Status Bungalow,  
Padra Road, Vadodara – 391410.  
tel.: +91-98245 24140  
e-mail: [info@gtek-india.com](mailto:info@gtek-india.com)  
url: [www.gtek-india.com](http://www.gtek-india.com)

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# 1. About G-Tek

G-Tek Corporation Pvt. Ltd. started its journey about 25 years back in process measurement with a simple theme "Record it. Control it. Perfect it." Today we are one of the major players helping our customers monitor their vital process parameters, record them, analyse and help meet the compliance requirement. In fact, we have taken this mantra literally to every area of operations in our business. We believe that recording is the first step towards improving quality and performance. As a glimpse, we record the data of First Pass Yield (FPY) during all operations of manufacturing and quality. We take a perpetual inventory; we have daily randomized internal audit to ensure that every department and person is adhering to his/her quality objective. All these has helped us achieve more than 4s of reliability. Our designs follow a simple rule of "Simplify to a level that DIVYANGS\* can do DIVYA" - make it such user friendly - to produce, to test and finally for the customer that it is intuitive and easy to handle without making mistakes. And the testimony is, we have 10% of our employees who are deaf and mute, who work in all areas of production, QC and store. Our designs follow the Tagus Method of Robust Design along with Quality Function Deployment (QFD) to arrive at customer needs to product features to design requirements and control parameters. It is this passion for Recording, Controlling and Perfecting that is leading us to be "Better by Performance".

# 2. LMViewXS E006 Help

This help is organized in 2 sections.

- [Getting Started](#)
- [LMViewXS E006 Application](#)

# 3. Getting Started

- [Welcome](#)
- [LMViewXS E006 basics](#)
- [LMViewXS E006 Workspace tour](#)

## 3.1 Welcome

Welcome

- [What is New in LMView-XS](#)
- [LMView-XS Support Service](#)

### 3.1.1 What is New in LMViewXS E006

The enhanced layout tools, feature improvements, redesigned user interface, and improved workflow can boost your work efficiency and give you a more enjoyable work experience.

#### Updated user interface

Attempts have been made to introduce new icons, menus, and controls within the application to create a fresh look and provide a more intuitive working environment. Graphics and reporting capabilities have been greatly improved.

#### Batch with Time zone Info

Batch data as per selected time zone during download batch process. Now batch data date-time comes as per selected time zone.

#### Tags information of device

Captures the tag events in addition to normal data along with remarks.

### 3.1.2 LMViewXS E006 Support Service

For any support you can mail us at [service@gtek-india.com](mailto:service@gtek-india.com) or [sales@gtek-india.com](mailto:sales@gtek-india.com)

We shall try to answer your query within 24 hours.

### 3.2 LMViewXS E006 basics

- [LMViewXS E006 terms](#)
- [Mathematical Calculations](#)
- [System Requirement](#)

### 3.2.1 LMViewXS E006 terms

Before you get started with LMViewXS E006, please familiarize yourself with the terms being used.

<u>Term</u>	<u>Description</u>
LM	Little Master device - LM-XS Pro E006 data logger.
MKT	Mean Kinetic Temperature

Temperature(°C)	Temperature in Degree Celsius
Temperature(°F)	Temperature in Degree Fahrenheit
Temperature(°K)	Temperature in Degree Kelvin
Online	When LM is physically connected to PC. User can perform various activities like configuring the batch or downloading the stored data. User can also see the current data as measured by LM.
Offline	When LM is physically not connected to the PC. User can perform activities like viewing, reporting and exporting the previously stored data.
Date set	Date set is event which comes in case of LM-XS device date has changed from keyboard.
Time set: old time Hr: Mn	Time set is event which comes in case of LM-XS device time updated from keyboard.
Alarm Triggered	Alarm Triggered event comes when reading goes out of range (alarm high/low limit).
Alarm Reset	Alarm Reset event comes when reading comes back within range (alarm high/low limit).
Sensor Open	This event occurs when sensor is open or broken (reading goes beyond specified temperature range for the sensor).
Pause Data	Pause event halts data statistics of alarm, min/max of the device for 15 minutes.
Resume From Pause	Normal recording is resumed after 15 minutes of pause event.

### 3.2.2 Mathematical Calculations

#### **MKT(Mean Kinetic Temperature):**

It is a simplified way of expressing the overall effect of temperature fluctuations during storage or transit of perishable goods. In other words, MKT is a calculated, single temperature that is analogous to the effects of temperature variations over a period. The formula for Mean Kinetic Temperature is as follows:

$$T_K = \frac{\frac{\Delta H}{R}}{-\ln \left( \frac{e^{\frac{-\Delta H}{RT_1}} + e^{\frac{-\Delta H}{RT_2}} + \dots + e^{\frac{-\Delta H}{RT_n}}}{n} \right)}$$

Where:

$T_K$  is the mean kinetic temperature in kelvin

$\Delta H$  is the activation energy (typically within 60-100 kJ·mol<sup>-1</sup> for solids or liquids)

$R$  is the gas constant

$T_1$  to  $T_n$  are the temperatures at each of the sample points in kelvins

$n$  is the number of temperature sample points

#### Mean +/- Std Deviation:

The mean and standard deviation of a set of data are usually reported together. A low std deviation indicates that the data points tend to be very close to the mean; a high std deviation indicates that the data points are spread out over a large range of values.

$$SD = \sqrt{\frac{\sum (T_i - \bar{x})^2}{N}}$$

Where:

$SD$  Standard deviation for total no. of temperature data.

$\bar{x}$  Mean of total no. of temperature data points.

$T_i$  Temperature data from  $i = 1$  to  $i = N$

$N$  The number of temperature data points

### 3.2.3 System Requirements

Operating Systems: Windows Vista; Windows 7; Windows 8; Windows 10;

Windows Server 2003; Windows Server 2008

Processor: 800 MHz Pentium processor or equivalent (Minimum);

1GHz Pentium processor or equivalent (Recommended)

RAM :1 GB (Minimum);

Hard Disk: Up to 5 GB of available space may be required

CD or DVD Drive: Not required

Display: 800 x 600, 256 colors (Minimum); 1024 x 768 high color, 32-bit (Recommended)

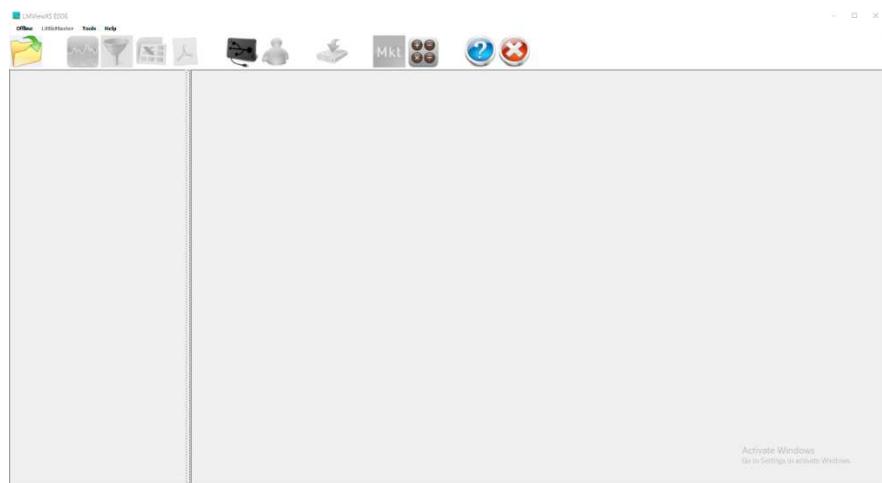
## 3.3 LMViewXS E006 Workspace tour

- [Application Window](#)
- [Workspace tools](#)

### 3.3.1 Application Window

When you launch *LMViewXS E006*, the application window opens containing a main window. Although more than one main window can be opened, you can apply commands to the active main window only.

The *LMViewXS E006* application window is seen as below:



Part	Description
1. Title bar	The area displaying the title of the application name and mode.
2. Menu bar	The area containing pull-down menu options
3. Toolbar	A detachable bar that contains shortcuts to menu and other commands
4. Working Panel	The panel is called a working panel which will convert into different panels as per the current activity e.g. Device Identification Panel, Table Data Panel etc.

### 3.3.2 Workspace tools

Application commands are accessible through the menu bar, toolbars, and toolbox.

## Main Toolbar

<u>Image</u>	<u>Command Name</u>	<u>Command Work</u>
	Open Downloaded Batch	Open the previously Downloaded Batch and display the selected batch data in tabular form.
	View Graph	Open the graphical view of tabular data being displayed
	Filter Tabular Data	Use this button to filter displayed tabular data giving new start time and stop time.
	Export to CSV	Exports the displayed data as comma separated values which can be easily opened using an Excel like spreadsheet application.
	Export to PDF	Export the displayed data in PDF format to the specified file.
	Connect to LM-XS Pro E006	Open the connection dialog to communicate to LM.
	Go Offline	While in Online mode use this button of the toolbar to disconnect the LM and to continue work in offline mode. This can also be used to connect another device after disconnecting from first device.
	Download stored batch from LM	Opens the save dialog to Download and save stored data from the LM to the PC.
	Calculate MKT	Calculates Mean Kinetic Temperature for the current tabular data.
	Unit Conversion	Converts temperature from one unit to another.
	Help	Help file for quick reference.
	Exit	Closes the application.

## Graph Toolbar

<u>Image</u>	<u>Command Name</u>	<u>Command Work</u>
	Save	Save Graph as PNG, JPG file.
	Print	Print Graph using installed printer.
	Transfer Axis	Transfer a channel's Y axis from Y to Y2 or Y2 to Y.
	Alarm On	Display alarm limits of selected channel.
	Select Channels	Displays selected channels on graph.
	Graph Properties	Opens the Graph Properties dialog box.
	Close Window	Exit graph view.
	Zoom In Both Axis	Zoom both the axis.
	Zoom-in X	Zoom X axis.
	Zoom-in Y	Zoom Y axis.
	Zoom Out Both Axis	Zoom Out both the axis.
	Zoom-out Y	Zoom Out Y axis.

## 4. LMViewXS E006 Application

LMViewXS E006 application is divided in four major parts.

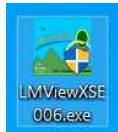
- [LMViewXS E006](#)
- [LMViewXS E006 Online](#)
- [LMViewXS E006 Offline](#)
- [LMViewXS E006 Graph](#)
- [LMViewXS E006 Report](#)
- [Log Data Bin File](#)

## 4.1 LMViewXS E006

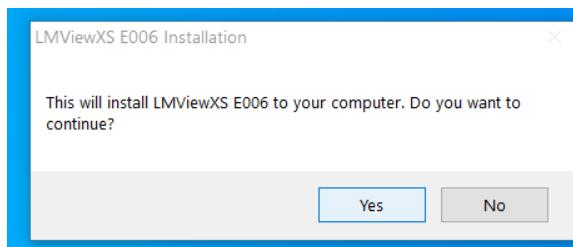
- [Installation](#)
- [Overview](#)
- [Starting LMViewXS E006](#)

### 4.1.1 Installation

This section describes the interactive installation guide that will take you through the installation process.



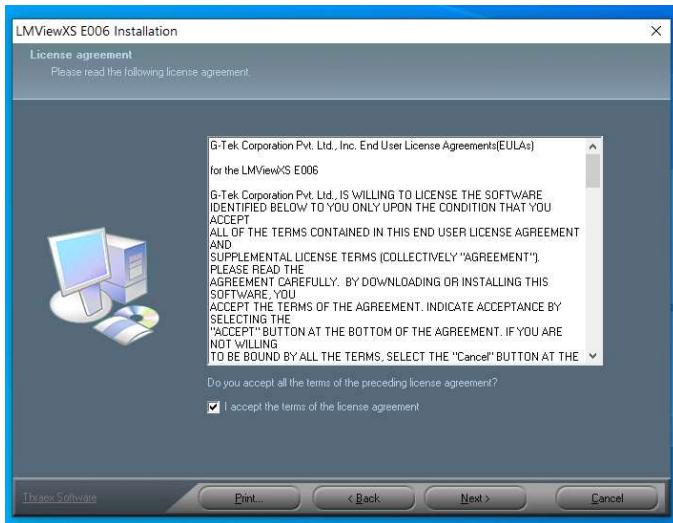
Double click on the above file, you will be asked for administrator permission. Click on "Yes" option to proceed for installation.



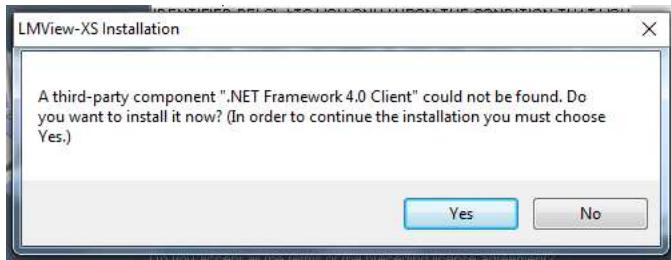
Please read the license agreement. If you agree to the terms, then check on the accept terms. If you disagree, you have an option to click "cancel" and exit the setup program.

Once you accept the terms click on "**Next**" to proceed further.

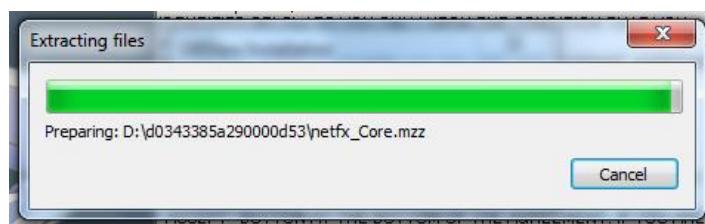
## LMViewXSE006



The software requires the installation of .NET Framework 4.0. If the software does not find it, it will display the message. If you chose "**Yes**" then it starts to install ".Net Framework 4.0". If you chose "**No**" then it skips this process and continues with application installation readme process. If .Net Framework 4.0 is already installed into machine then it does not display this message and continues with application installation process.



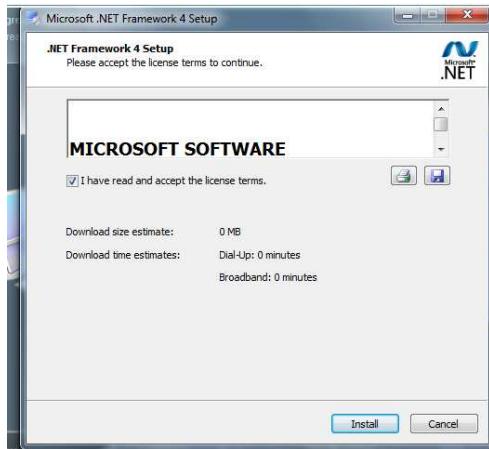
Start extracting file from Microsoft .Net Framework 4.0 installation.



After that Microsoft .Net Framework 4.0 setup wizard opens, click "**Next**" to proceed further.

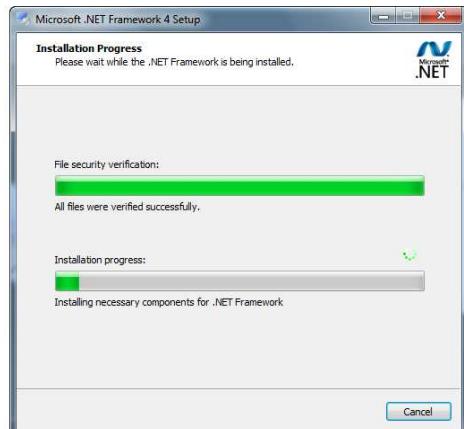


Accept the "End-User License Agreement" and click "**Install**" to start the installation process.

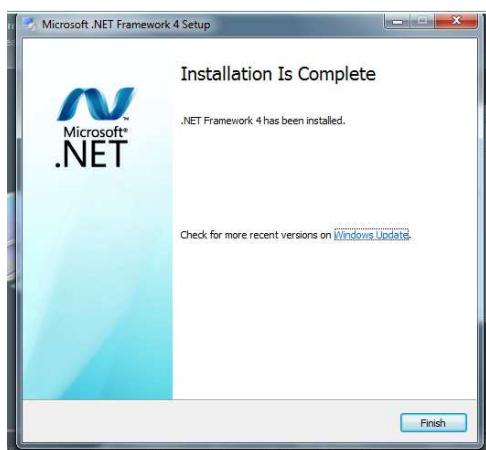


Setup will need to configure few things before it starts installation process. This may take few minutes.

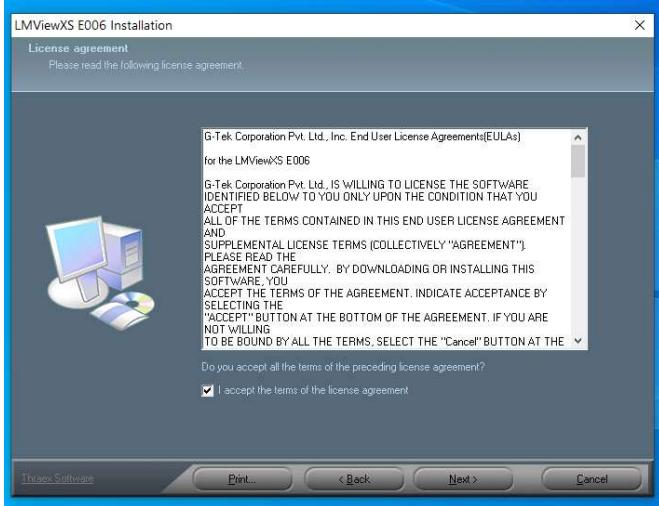
After completing the configuration process, it will start to install components. This may also take some time.



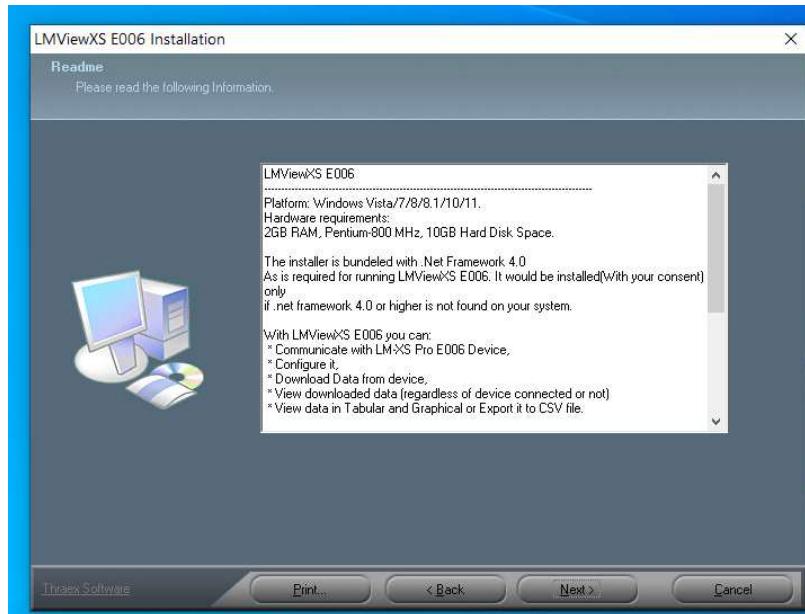
After completion of all setup process, click on "**Finish**" to continue with installation of LMViewXS E006.



Please read the application information and Click on "Next" to proceed.



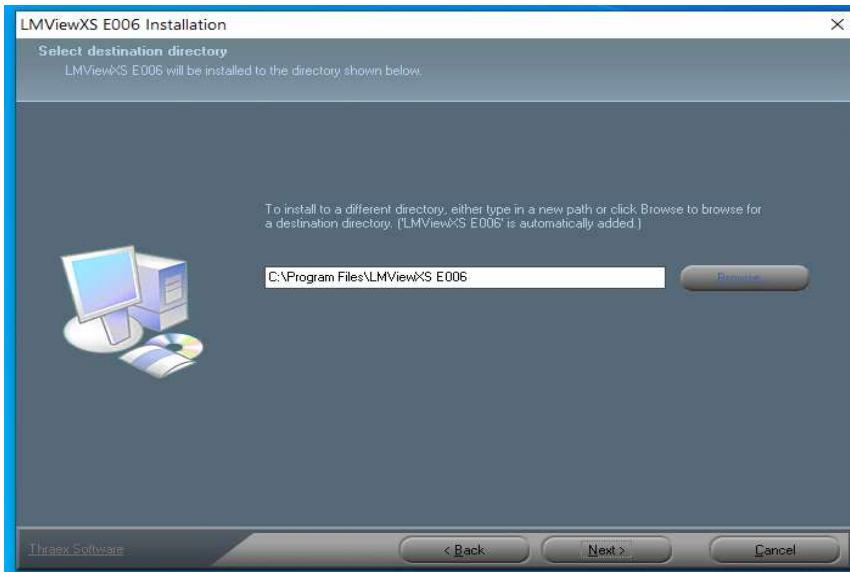
The System requirement specification is displayed. Please ensure that your configuration is equal or better than Minimum configuration required. Click "**Next**" to proceed.



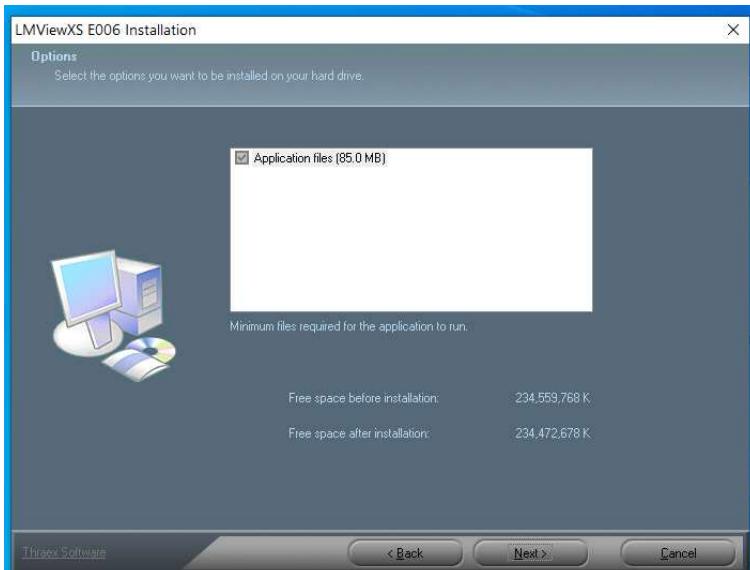
The default directory where the application will be installed is displayed. If you want to change the location, click on "Browse" and point to the directory where you want to install.

It is recommended to install at the default location. Once the directory is selected, click on "Next" to proceed further.

## LMViewXSE006

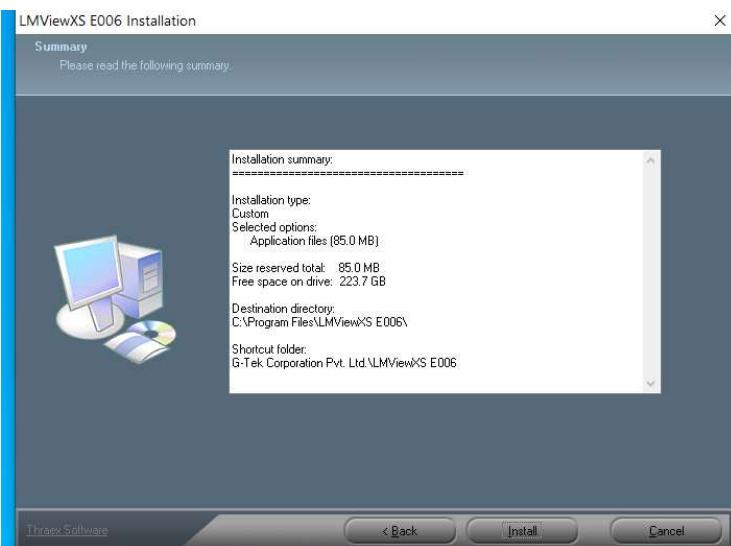


The required disk space and available disk space is displayed. Please ensure that you have sufficient disk space to install the program. Click on "Next" to continue.

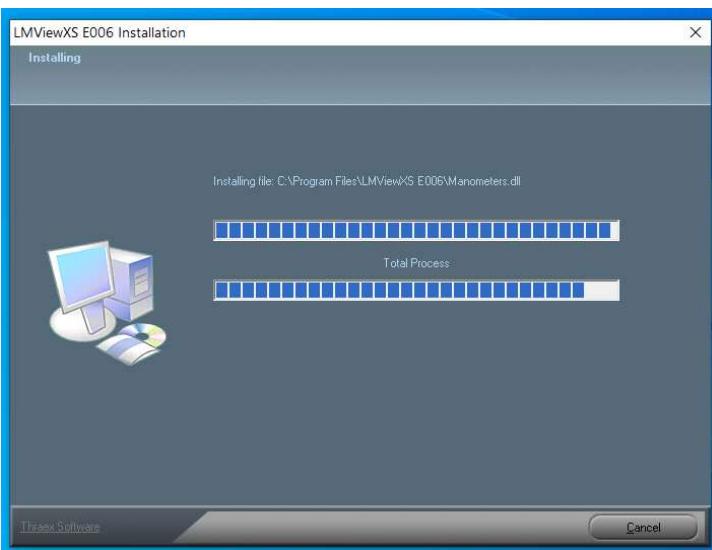


Review the installation summary and once satisfied, click on "**Install**" to start installation process.

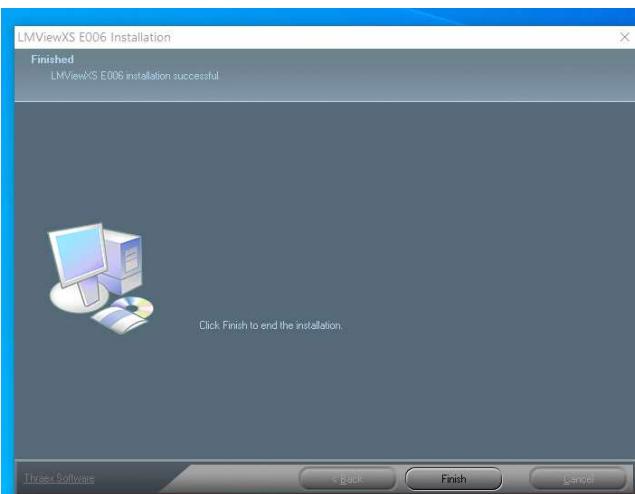
## LMViewXS E006



The progress bar indicates the installation process.



After successful installation it is recommended to restart the computer. If you select "Yes" here, and click on finish, the computer will be restarted automatically.



After Finishing the installation, shortcut for the LMViewXS E006 Application will appear on Desktop for access.



## Uninstallation

To Uninstall the application, you have two options.

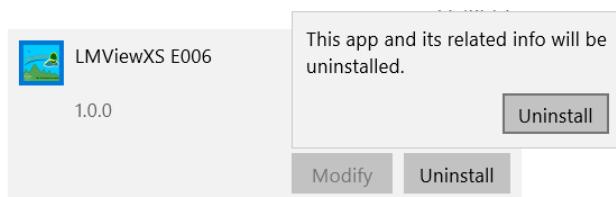
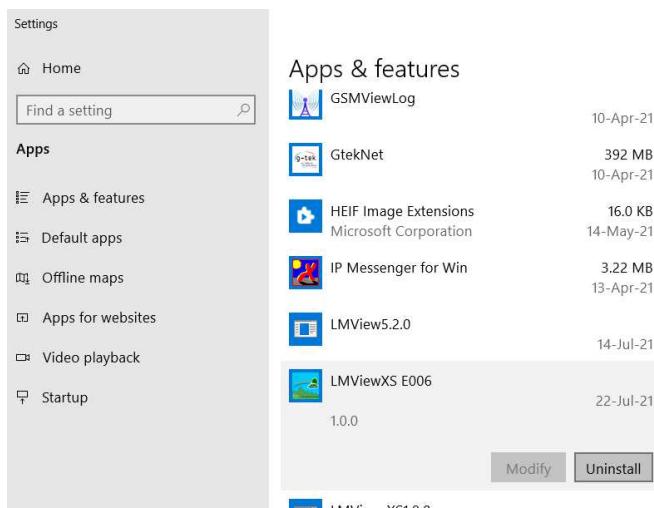
(1) Click on Start → Programs → G-Tek Corporation Pvt. Ltd. → LMViewXS E006 Uninstaller

This will uninstall the application automatically.

(2) From Start → Go to control panel and remove the application from there.

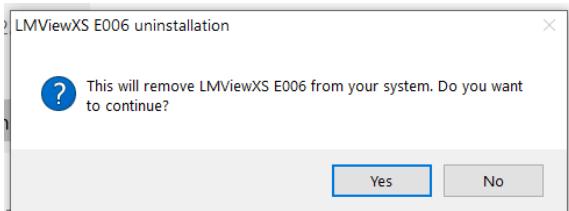
Click on Start → Control Panel → Add or Remove Programs.

In Add or Remove Programs select LMViewXS E006 and click "**Uninstall**" for uninstallation process.



Click on "Yes" option to remove LMViewXS E006 application from PC.

## LMViewXSE006



On applying either of the above two options, it will display following dialog. This dialog displays entire uninstallation process and after successful uninstallation click "Close" to exit.



Start installation by copying all files into your machine.

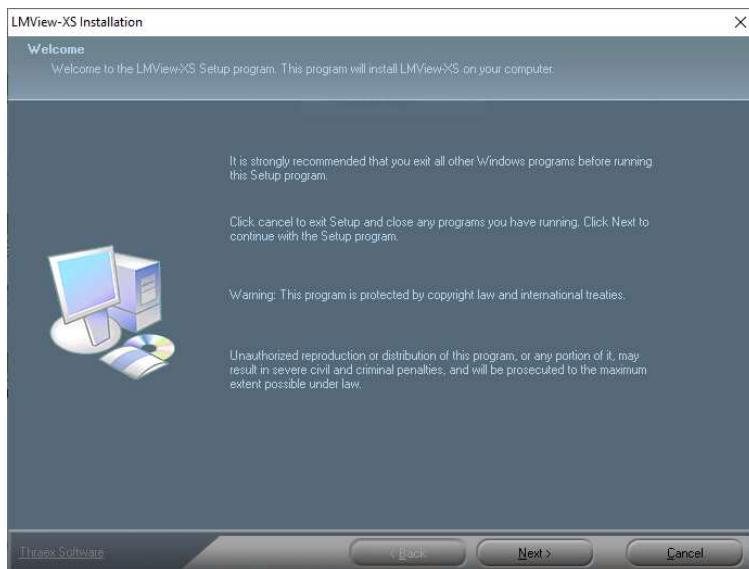


After completion of copying process it starts initializing which may take some time.

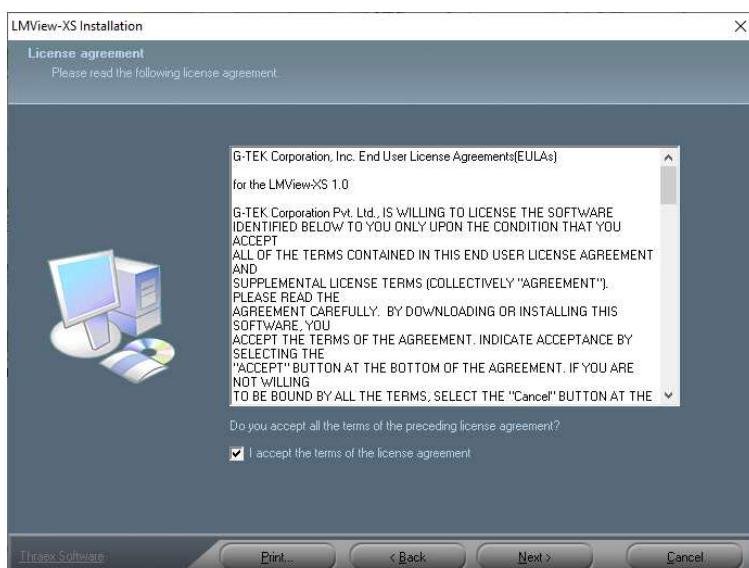


After initialization process is completed it starts to install application. In welcome dialog, click "**Next**" to proceed further.

## LMViewXSE006

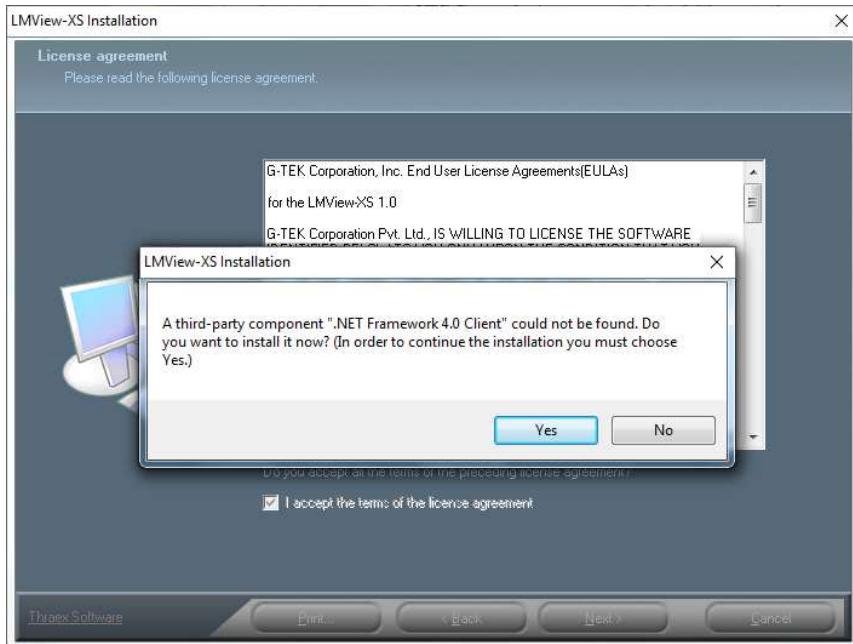


Please read the license agreement. If you agree to the terms, then check on the accept terms. If you disagree, you have an option to click "cancel" and exit the setup program. Once you accept the terms click on "**Next**" to proceed further.

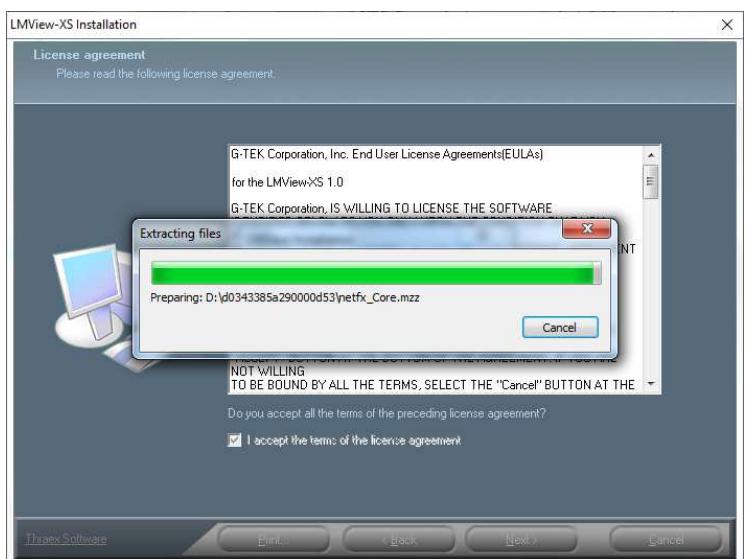


The software requires the installation of .NET Framework 4.0. If the software does not find it, it will display the message. If you chose "**Yes**" then it starts to install ".Net Framework 4.0". If you chose "**No**" then it skips this process and continues with application installation readme process. If .Net Framework 4.0 is already installed into machine then it does not display this message and continues with application installation process.

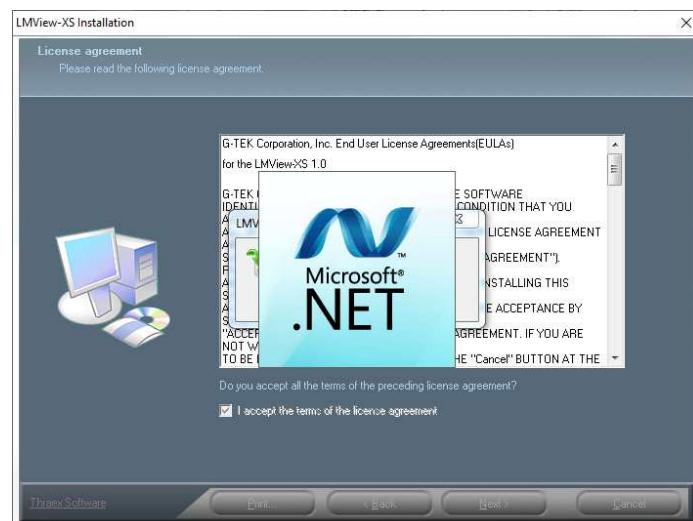
## LMViewXSE006



Start extracting file from Microsoft .Net Framework 4.0 installation.

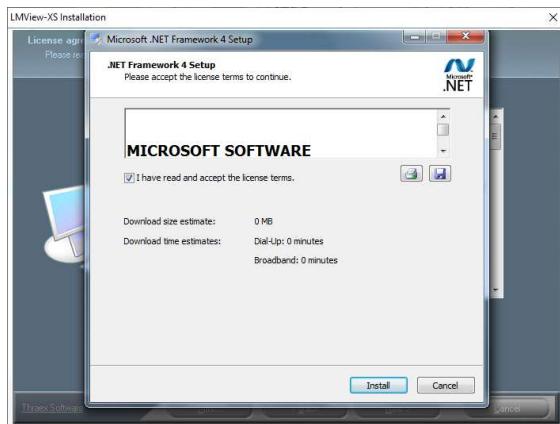


After that Microsoft .Net Framework 4.0 setup wizard opens, click "**Next**" to proceed further.

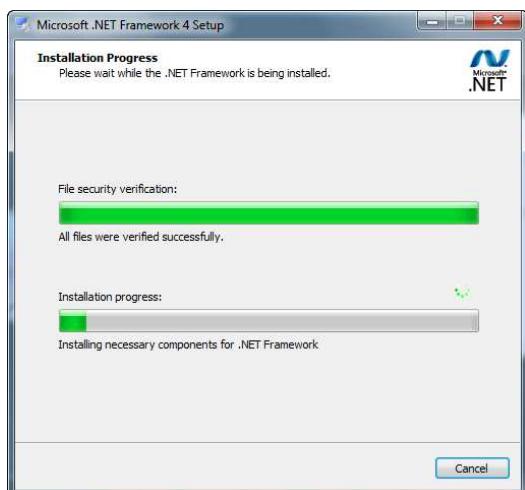


## LMViewXSE006

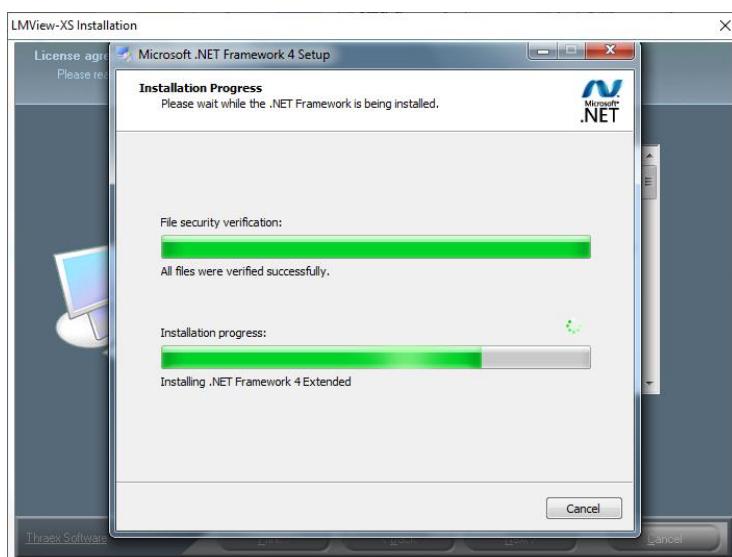
Accept the "End-User License Agreement" and click "**Install**" to start the installation process.



Setup will need to configure few things before it starts installation process. This may take few minutes.

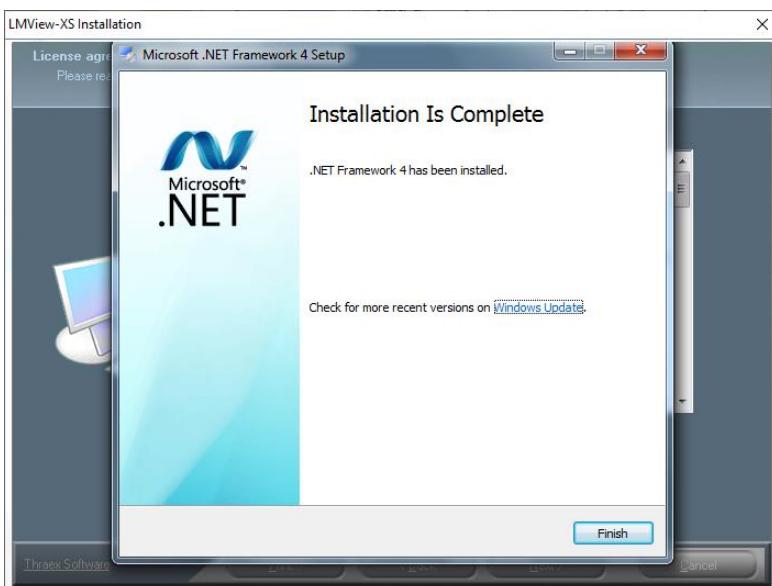


After completing the configuration process, it will start to install components. This may also take some time.

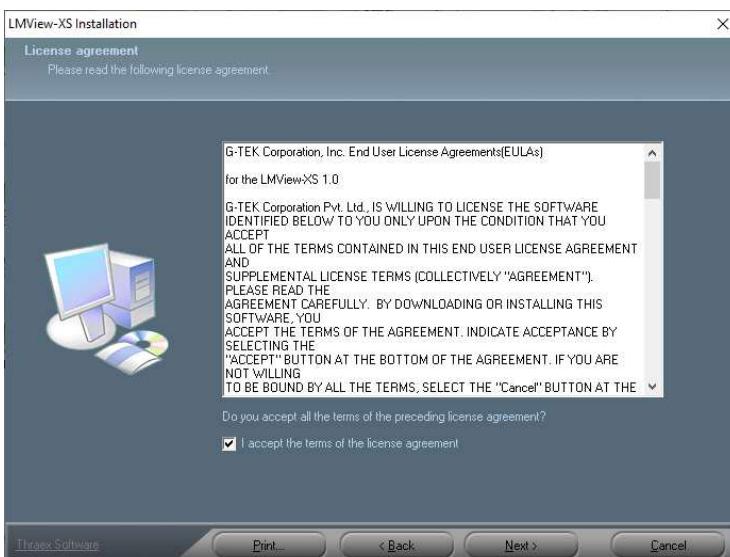


After completion of all setup process, click on "**Finish**" to continue with installation of LMView-XS.

## LMViewXSE006



Please read application information and click "**Next**" to proceed.

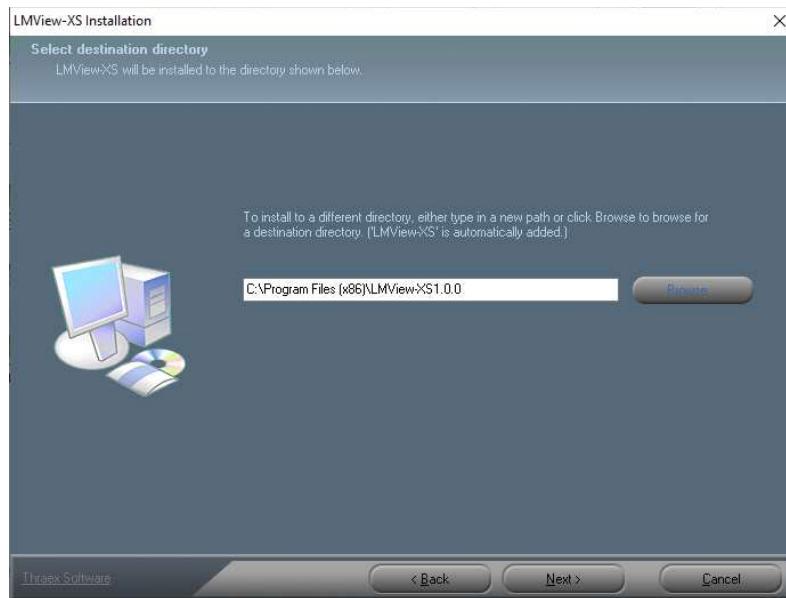


The System requirement specification is displayed. Please ensure that your configuration is equal or better than Minimum configuration required. Click "**Next**" to proceed.

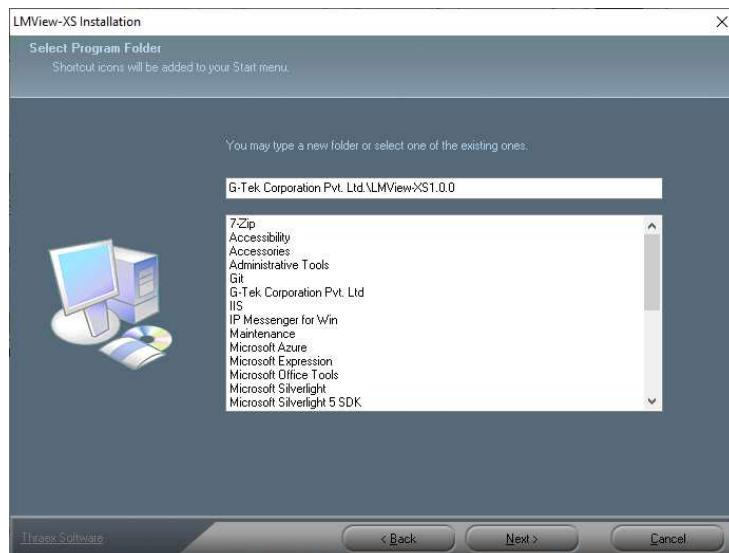


## LMViewXSE006

The default directory where the application will be installed is displayed. If you want to change the location, click on "Browse" and point to the directory where you want to install. It is recommended to install at the default location. Once the directory is selected, click on "Next" to proceed further.

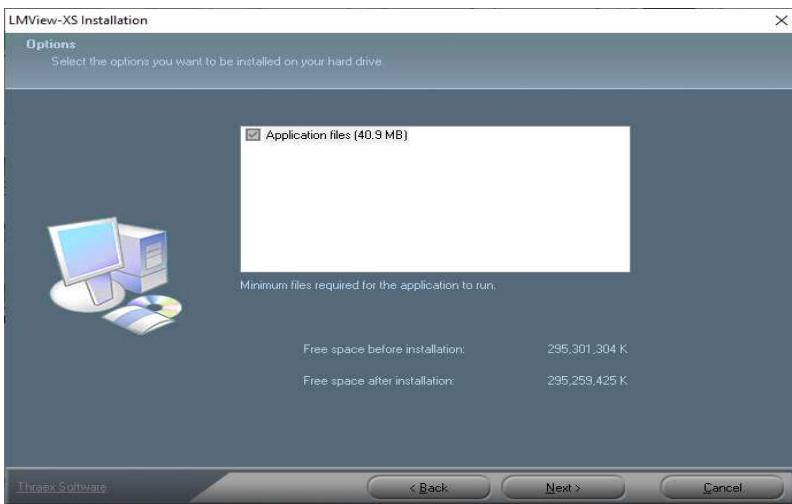


The default path where the program will be resident, is displayed. This is the path you will see in your start menu. It is recommended to keep the default path and proceed further by clicking on "Next".

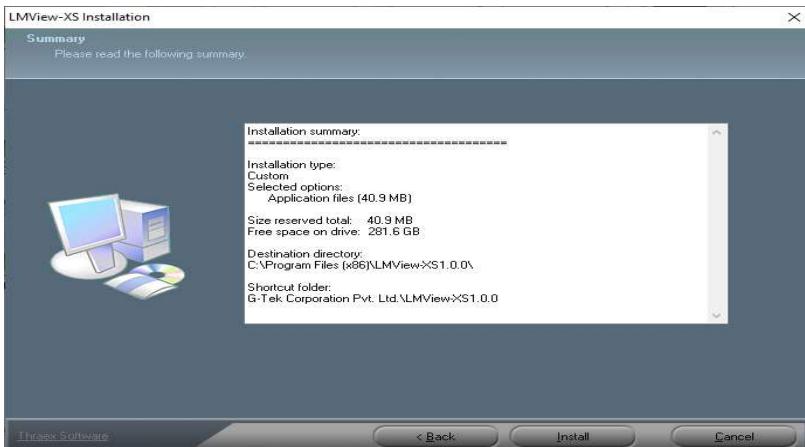


The required disk space and available disk space is displayed. Please ensure that you have sufficient disk space to install the program. Click on "Next" to continue.

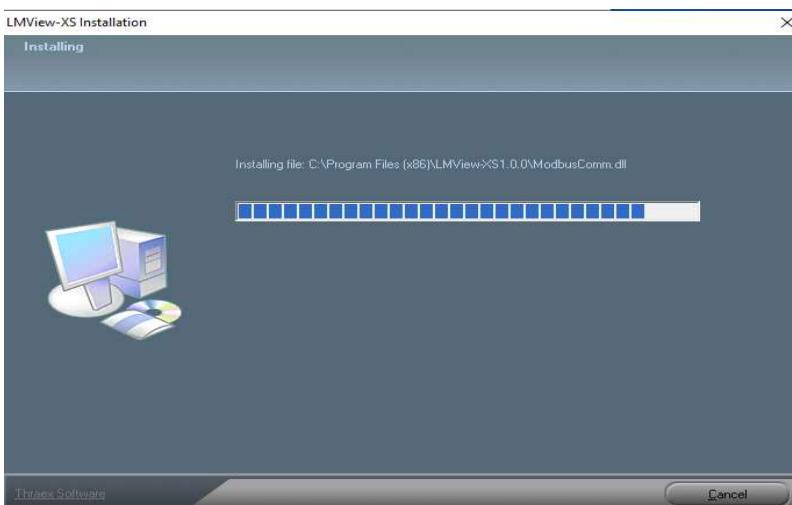
## LMViewXSE006



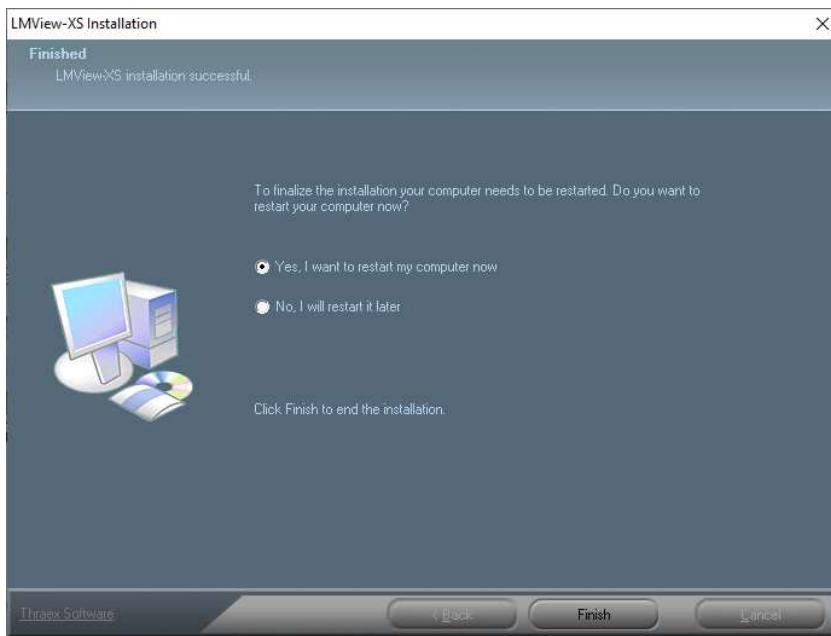
Review the installation summary and once satisfied, click on "**Install**" to start installation process.



The progress bar indicates the installation process.



After successful installation it is recommended to restart the computer. If you select "Yes" here, and click on finish, the computer will be restarted automatically. If you plan to restart later, please select "No" and click on finish to complete the installation process.



## Uninstallation

To Uninstall the application you have two options.

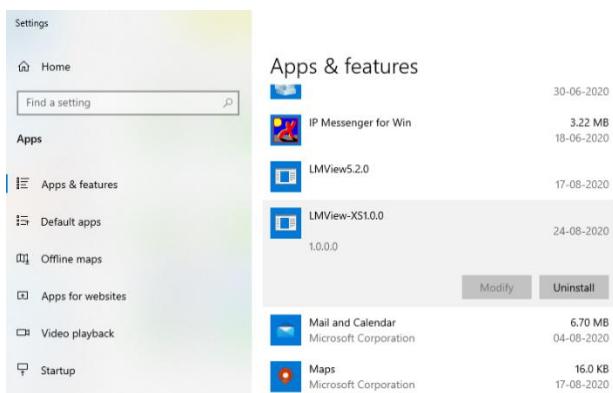
(1) Click on Start → Programs → G-Tek Corporation Pvt. Ltd. → LMView-XS Uninstaller

This will uninstall the application automatically.

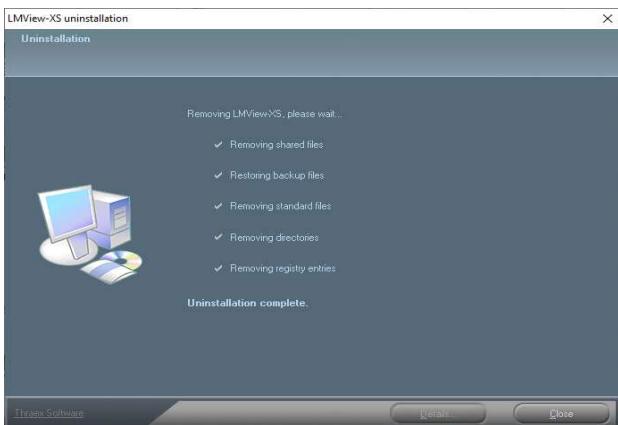
(2) From Start → Go to control panel and remove the application from there.

Click on Start → Control Panel → Add or Remove Programs.

In Add or Remove Programs select LMView-XS1.0.0 and click "**Uninstall**" for uninstallation process.



On applying either of the above two options, it will display following dialog. This dialog displays entire uninstallation process and after successful uninstallation click "Close" to exit.



## 4.1.2 Overview

The **LMViewXS E006 software** is designed to program the various parameters for data recording of LM-XS Pro E006 devices. It also helps to download the stored data to PC and view, analyse, print and export the stored data.

User can download stored batch data, view data in tabular and graphical formats. He can also see the minimum, maximum and average values for a batch in tabular format. User can also filter the tabular data giving new start and stop time. The software can calculate MKT (mean kinetic temperature) for specified activation energy. User can view the data in graphical format on click of a Graph button. Zoom in and zoom out facility are provided in graphical format. User can change various parameters like title, axis colours, axis scales etc.

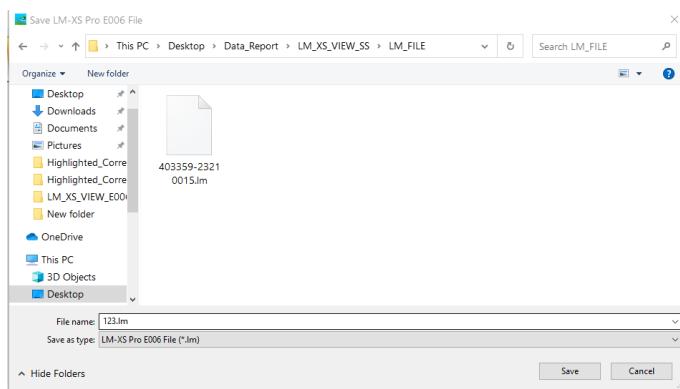
An export to CSV format is provided to view or process the data in more generic spreadsheet editor like Excel or it can be imported to any other user defined database. A utility to convert the temperature from one unit to another unit is also provided.

The most common tasks and commands are available as buttons on the main toolbar.

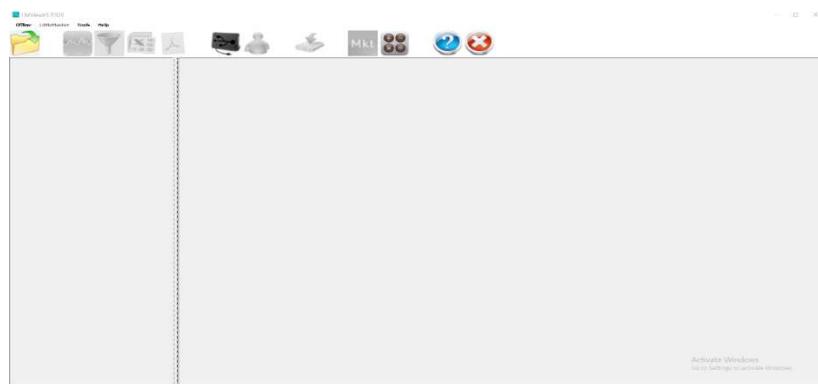
## 4.1.3 Starting LMViewXS E006

1. To start LMViewXS E006, click on the shortcut icon on desktop or select G-Tek Corporation Pvt. Ltd. -> LMViewXS E006 from Start Menu.
2. Application will always start in online mode.
3. Once LMViewXS E006 is started and connected with device then it shows the file save dialog to download data.
4. If device is not connected then it shows main window with two blank panels - Left and right.
5. After downloading the data from device, Left panel of display will show device information and Right panel of display will contain tabular Data of device.

## LMViewXSE006



In case, if the LM-XS Pro E006 Data logger is not connected, then following window will appear.



There are two modes of LMViewXS E006 - Online and Offline

**Online:** When LM-XS Pro E006 device is physically connected to PC. User can perform various activities like downloading the stored data, configure device, reset device.

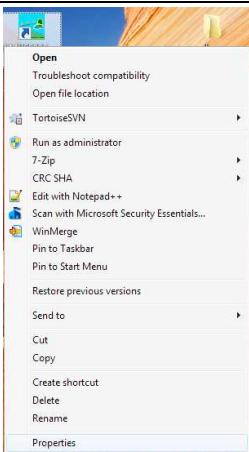
**Offline:** When LM-XS Pro E006 device is physically not connected to the PC. User can perform activities like viewing, reporting and exporting the previously stored data.

Let us first discuss about online activities.

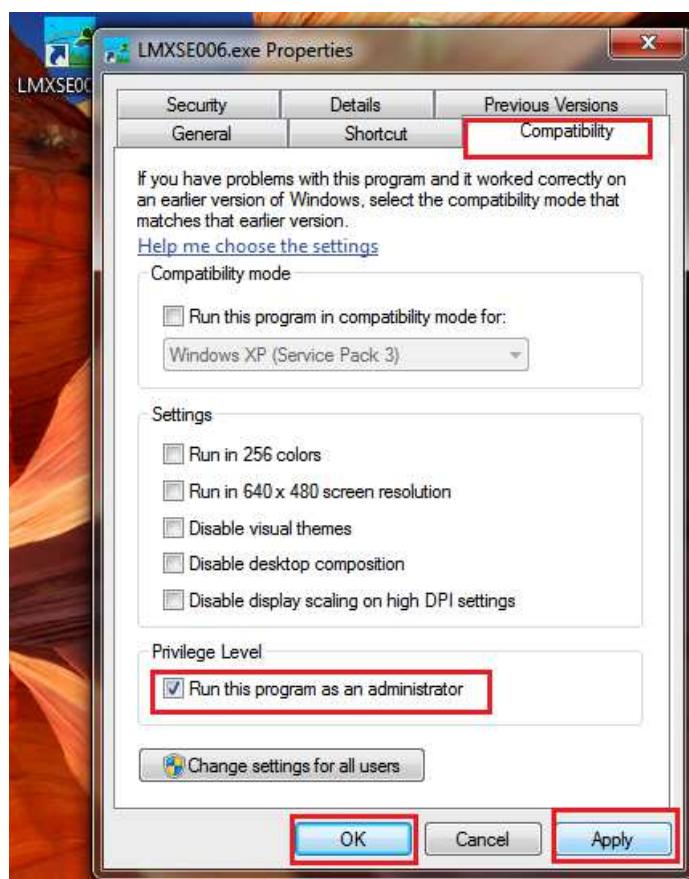
**Note:**

**To run LMViewXS E006 application on Windows Vista or Windows 7 OS. First time do below process.**

**Right click on LMViewXSE006.exe from desktop or Start -> G-Tek Corporation Pvt. Ltd. -> LMViewXS E006 or C:\Program Files\LMViewXSE006\LMXSVIEWE006.exe and click on properties like below.**



**Above command open below LMViewXS E006 Properties window in which select Compatibility tab. In Compatibility tab check 'Run this program as an administrator' properties and then click 'Apply' button and at last click 'OK' button to complete process.**



**Now run LMViewXSE006 application in normal way, no need to follow above instructions each time.**

## 4.2 LMViewXS E006 Online

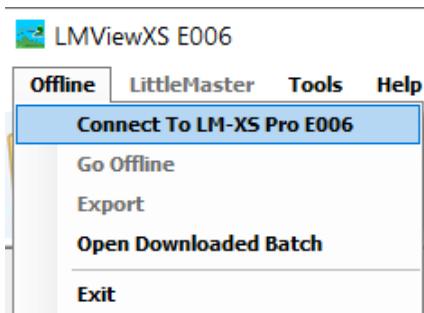
- [Connect To LM-XS Pro E006](#)
- [Go Offline](#)
- [Download Batch from LM-XS Pro E006](#)

### 4.2.1 Connect To LM-XS Pro E006

Connect LM-XS Pro E006 data logger to any of the available USB port of the PC.

LMViewXS E006 always starts in an online mode.

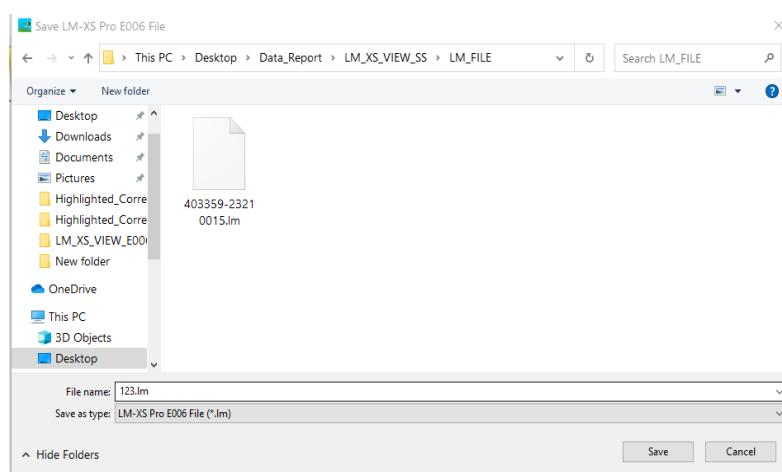
1. Click on File  Connect to LM-XS Pro E006

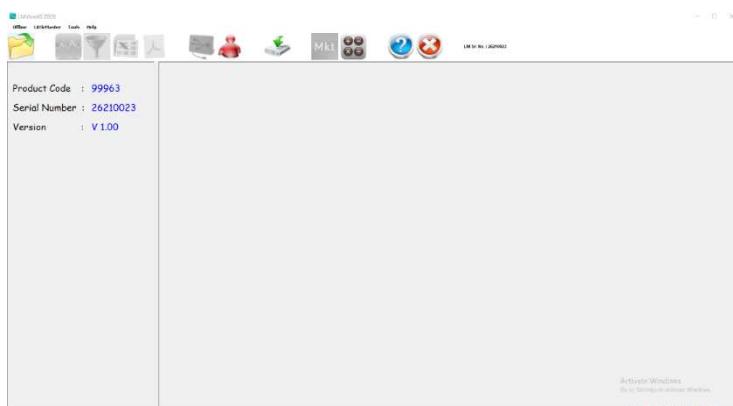


OR Click on the Icon  to open the connect dialog box.

2. LMViewXS E006 tries to connect with LM-XS Pro E006 device, if it fails to connect then Error message will pop up (Please refer [Error Messages](#) for details).

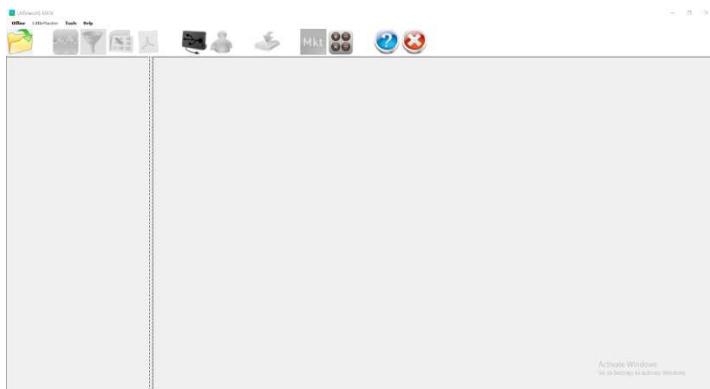
3. If application is connected with the device, then it shows save file dialog for download data of device.





4. After downloading the data, left hand side panel shows Device information- Product code, Serial No. & the firmware Version of the device; right hand side panel shows downloaded data in tabular form.

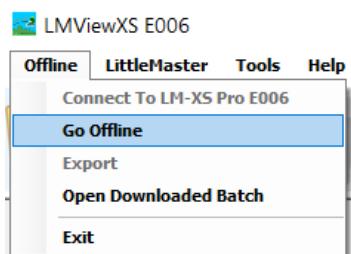
5. If application is not connected with device, then it shows offline mode of application.



## 4.2.2 Go Offline

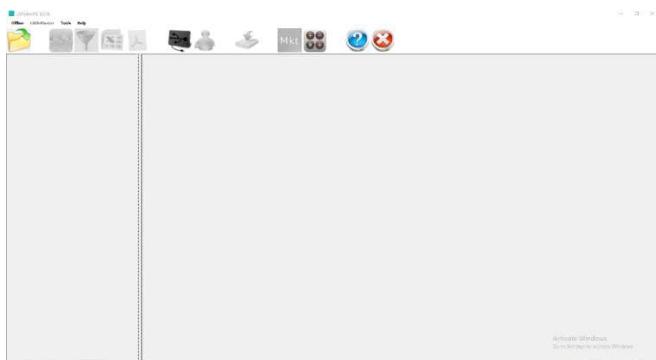
"Go Offline" command is enabled when LMViewXS E006 is in online mode.

Click on File → Go Offline



OR Click on the Icon  to go into offline mode.

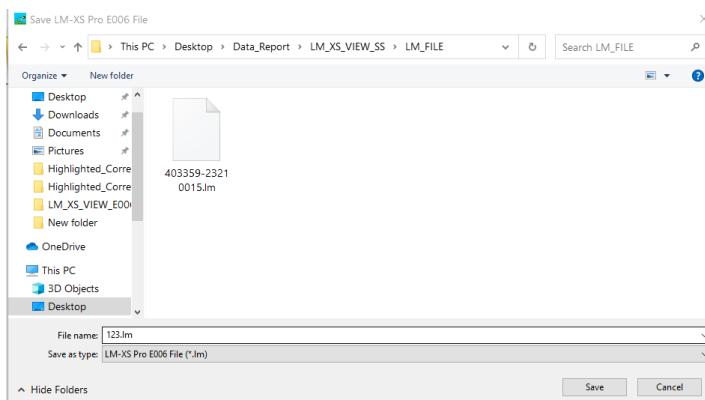
When offline command is applied, LM-XS Pro E006 device gets disconnected and LMViewXS E006 is in offline mode the user will get the following screen. To communicate with LM-XS Pro E006 Device again, user has to get "Online" (Connect to LM-XS Pro E006) again. In offline mode, user can open downloaded batch in tabular form for viewing.



## 4.2.3 Download Batch From LM-XS Pro E006

Once the LM-XS Pro E006 device is found, the LMViewXS E006 application automatically goes into download batch sequence after following screen to save downloaded file.

Select the appropriate location and name of the file to save the data.



From application, download the stored batch by clicking the Download stored batch

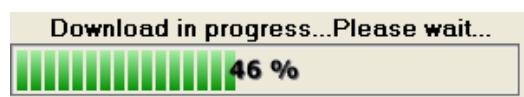


icon

OR click the following menu from menu bar.



The progress bar will show how much percentage of the file has been downloaded.



After the download is over it will give a message "Download Successful". Click on "OK" to see the downloaded file data in tabular form.



In download data number of readings count depend on current time of device and start time of batch and it depends when you download data.

On download if device current time greater then batch stop time then no. of reading will be batch no. of readings (Max memory of device) which was preconfigured.

On download if device current time less then batch stops time then no. of readings will be calculate as below.

No. of Readings = ((current time - start time) / Interval) + 1

## 4.3 LMViewXS E006 Offline

- [Open Downloaded Batches](#)
- [Filter Tabular Data](#)
- [Format Tabular Data](#)
- [Calculate MKT](#)
- [Unit Conversion](#)

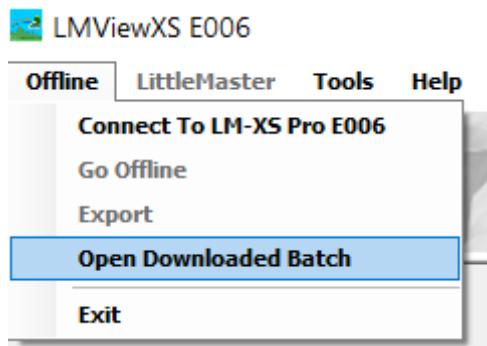
### 4.3.1 Open Downloaded Batches

To show Downloaded Batch data into tabular form click the Open

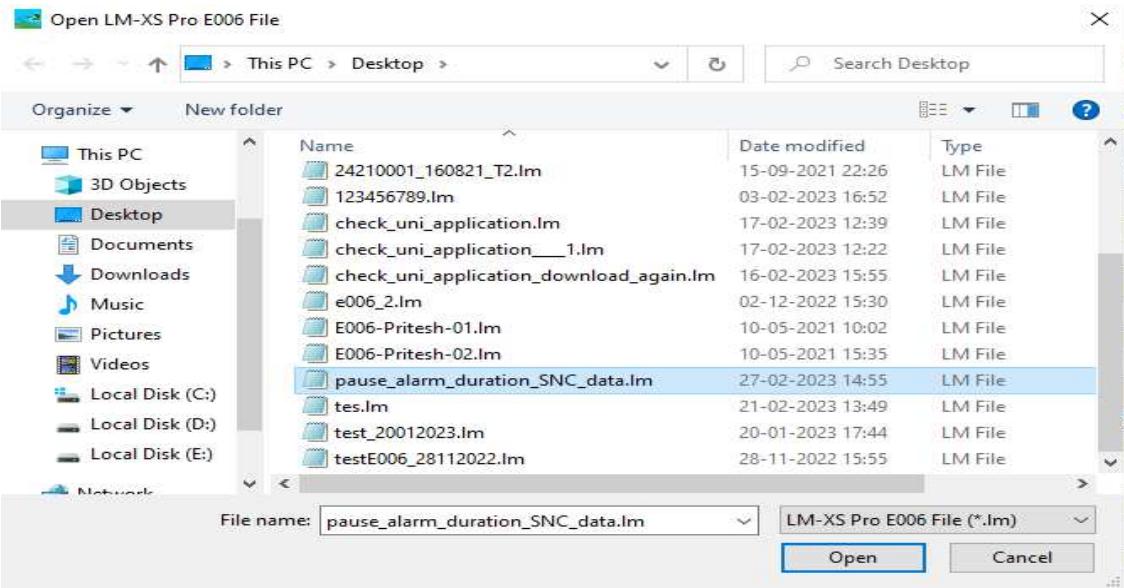


Downloaded Batches icon.

OR click the following menu from menu bar.



Select LM file which you want to open.



After selecting file click Open to see data into tabular form on main window.

## Tabular View :

After the file is opened, the tabular data will appear on the right panel with the Minimum, Maximum, Average and MKT values.

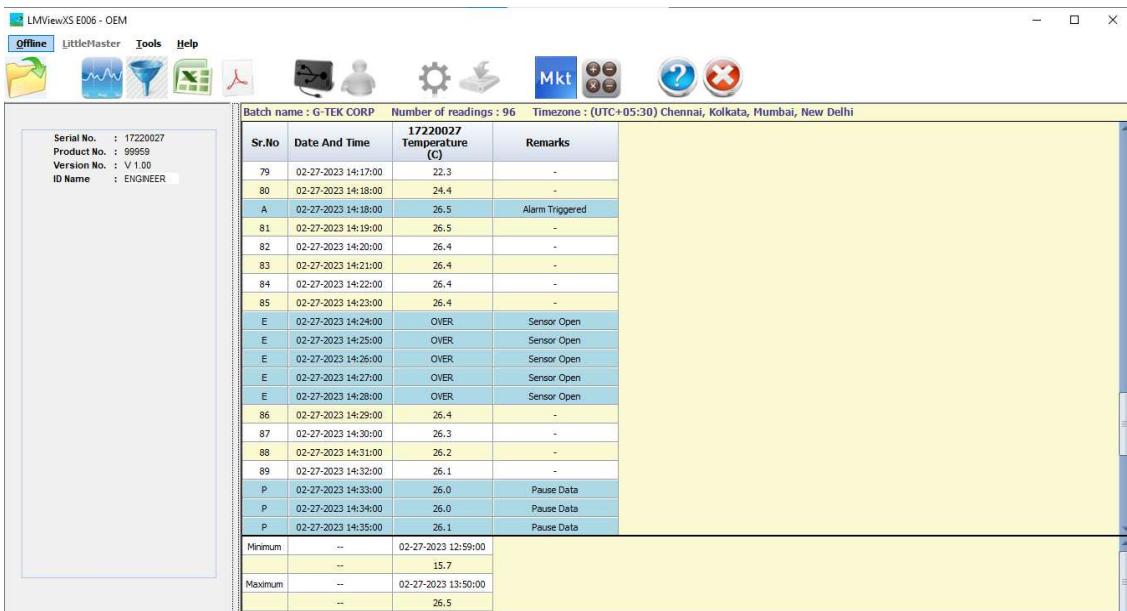
Sr.No	Date And Time	17220027 Temperature (C)	Remarks
21	02-27-2023 13:19:00	26.1	-
22	02-27-2023 13:20:00	26.2	-
23	02-27-2023 13:21:00	26.3	-
24	02-27-2023 13:22:00	26.3	-
25	02-27-2023 13:23:00	26.3	-
26	02-27-2023 13:24:00	26.2	-
27	02-27-2023 13:25:00	26.1	-
28	02-27-2023 13:26:00	26.1	-
29	02-27-2023 13:27:00	26.0	-
30	02-27-2023 13:28:00	26.0	-
31	02-27-2023 13:29:00	26.0	-
32	02-27-2023 13:30:00	26.0	-
33	02-27-2023 13:31:00	26.0	-
34	02-27-2023 13:32:00	26.1	-
35	02-27-2023 13:33:00	26.1	-
36	02-27-2023 13:34:00	26.2	-
37	02-27-2023 13:35:00	26.2	-
38	02-27-2023 13:36:00	26.3	-
39	02-27-2023 13:37:00	26.2	-
40	02-27-2023 13:38:00	26.2	-
Minimum	--	02-27-2023 12:59:00	
	--	15.7	
Maximum	--	02-27-2023 13:50:00	
	--	26.5	

In the left panel it shows device information like Serial Number, Product Number, Version No and ID Name in which ID Name comes from batch configuration. Edited ID, Name are reflected in CSV file.

### Tabular View with Tagged Data :

Tagged data display into tabular form with tagged time, data and remarks. In tabular data events are shown in different colour row with remarks information. In events, each character defines event type as below:

<u>Tag ID</u>	<u>Remarks for Tag Event</u>
D	Date set
T	Time set: old time Hr: Mn
A	Alarm Triggered
R	Alarm Reset
E	Sensor Open
P	Pause Data
S	Resume From Pause



### 4.3.2 Filter Tabular Data

Let us say you want to view / plot only selected part of the data and get the PDF report for the same. Right click on the tabular data or click on filter icon to open filter window.

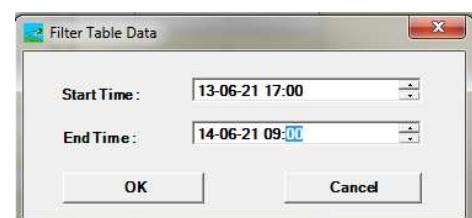
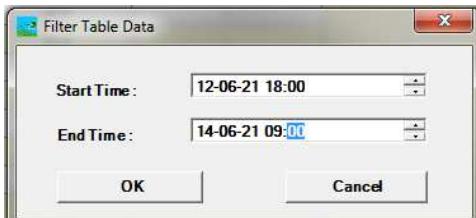
Filter Table Data option is enabled when data is displayed in tabular form in main window. For filter data, required parameters are new Start Time and End Time. If

## LMViewXSE006

user enters the start and/or end date-time which is beyond the range of original data, the error message will be generated.

Sr.No	Date And Time	23210015 Temperature (C)	Remarks
1	12-06-21 18:02	28.3	-
2	12-06-21 18:07	28.3	-
3	12-06-21 18:12	28.2	-
4	12-06-21 18:17	28.2	-
5	12-06-21 18:22	28.6	-
6	12-06-21 18:27	28.9	-
7	12-06-21 18:32	29.0	-
8	12-06-21 18:37	29.4	-
9	12-06-21 18:42	28.9	-
10	12-06-21 18:47	28.9	-
11	12-06-21 18:52	28.8	-
12	12-06-21 18:57	28.9	-
13	12-06-21 19:02	28.8	-
14	12-06-21 19:07	28.8	-
15	12-06-21 19:12	28.7	-
16	12-06-21 19:17	28.8	-
17	12-06-21 19:22	28.8	-
18	12-06-21 19:27	28.8	-
19	12-06-21 19:32	28.9	-
20	12-06-21 19:37	28.9	-
Minimum	--	12-06-21 18:17	
	--	28.2	
Maximum	--	14-06-21 06:39	
	--	32.1	

In the above batch there are 481 readings with start time as 12-06-21 18:00 and stop time as 14-06-21 09:00.



Click "Filter Table Data" command and let us change Start Time as 13-06-21 7:00(indicated in above figure) and press "**OK**". The tabular data will be seen as below:

Sr.No	Date And Time	23210015 Temperature (C)	Remarks
1	13-06-21 17:02	31.9	-
2	13-06-21 17:07	31.9	-
3	13-06-21 17:12	31.9	-
4	13-06-21 17:17	31.9	-
5	13-06-21 17:22	31.9	-
6	13-06-21 17:27	31.9	-
7	13-06-21 17:32	31.9	-
8	13-06-21 17:37	31.9	-
9	13-06-21 17:42	31.9	-
10	13-06-21 17:47	31.9	-
11	13-06-21 17:52	31.9	-
12	13-06-21 17:57	31.9	-
13	13-06-21 18:02	32.0	-
14	13-06-21 18:07	31.9	-
15	13-06-21 18:12	31.9	-
16	13-06-21 18:17	31.9	-
17	13-06-21 18:22	31.9	-
18	13-06-21 18:27	31.9	-
19	13-06-21 18:32	31.9	-
20	13-06-21 18:37	31.9	-
Minimum	--	13-06-21 19:47	
	--	31.9	
Maximum	--	14-06-21 06:39	
	--	32.1	

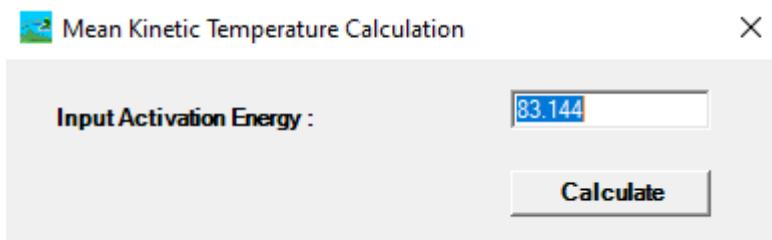
It is important to know that the data are not deleted from the file. Whenever you open the file again, the total data will be displayed.

### 4.3.3 Calculate MKT



To calculate the MKT, click on **Mkt** MKT icon, and enter the desired activation energy. The MKT is calculated and displayed in the box. It is also exported in .csv format and all other report.

Minimum	--	13-06-21 19:47
	--	31.9
Maximum	--	14-06-21 06:39
	--	32.1
Average	--	32.0
MKT	--	NaN



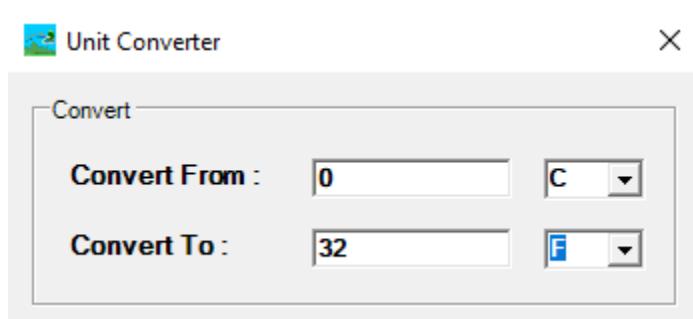
Minimum	--	13-06-21 19:47
	After selecting "Calculate" button, table shows MKT for the given no. of data values in table.	31.9
	--	
Maximum	--	14-06-21 06:39
	--	32.1
Average	--	32.0
MKT	--	32.0

#### 4.3.4 Unit Conversion



Click on  to convert the temperature from one unit to another.

OR click the following menu from menu bar.



In above dialog input temperature value into convert from input box and its unit. Select the desired unit you want to convert to. The converted temperature will be displayed.

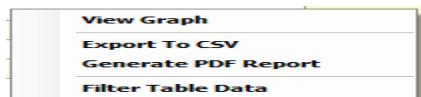
## 4.4 LMViewXS E006 Graph

- [View Graph](#)
- [Zoom In/Zoom Out Graph](#)
- [Save Graph](#)
- [Print Graph](#)
- [Transfer Axis](#)
- [Alarm On](#)
- [Select Channels](#)
- [Graph Properties](#)
- [Exit](#)

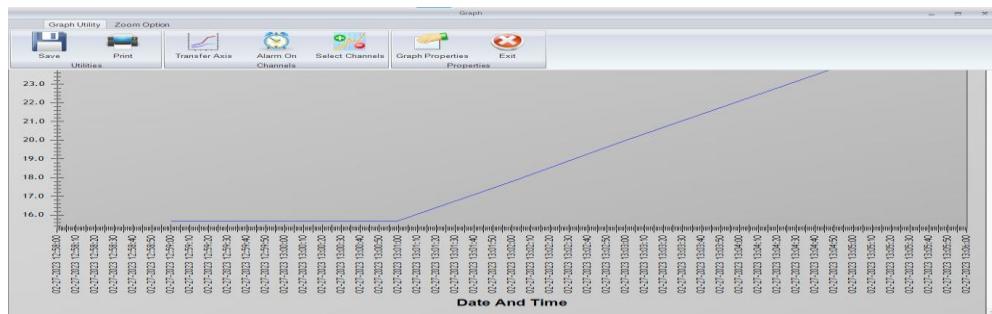
### 4.4.1 View Graph



Click on the icon and the graph for all the displayed columns in table will be displayed in a new window. Alternatively, Graph can also be opened from the menu by right clicking on tabular data.



Graph window appears as shown below:

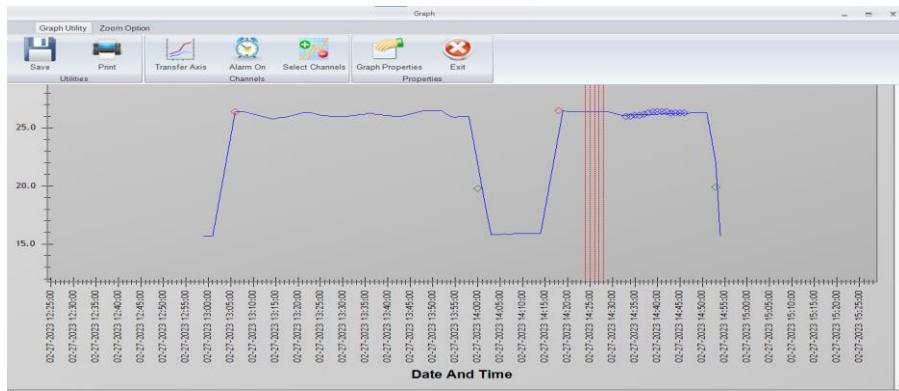


#### Part Description

1. Menu bar The area containing pull-down menu options.
2. Toolbar A detachable bar that contains shortcuts to menu and other commands.
3. Chart The chart area to view data in graphical format.

## Graphical View:

Display batch data and tagged data (if any) in graphical view as below.



In above graph, Legend display consists - horizontal blue line to represent batch data and markers for different tag names as per the batch data

## 4.4.2 Zoom In / Zoom Out Graph

You can change the view of a graph by zooming in to get a closer look. You can experiment with a variety of Zoom In options like Zoom in Both Axis, X Axis and Y Axis to determine the amount of detail you want.



### Both Axis:



From the Zoom Option menu click on the icon will zoom in graph from its centre position or drag the cursor diagonally from left to right to select the area you want to magnify. Release the mouse button to zoom in both axis to the selected area.

### X Axis:



On the Zoom Option menu click on Zoom In > icon will zoom in X Axis of graph from its centre position.

### Y Axis:



On the Zoom Option menu click on Zoom In > icon will zoom in Y Axis of graph from its centre position.

## Zoom Out Graph

You can change the view of a graph by zooming out to get a previous view. You can experiment with a variety of Zoom Out options like Zoom Out Both Axis, X Axis and Y Axis to determine the amount of detail you want.

### Both Axis:



On the Zoom Option menu click on  icon will zoom out graph and show its Both Axis on its original position.

### X Axis:



On the Zoom Option menu click on Zoom Out >  will zoom out X Axis of graph and set X Axis to its original position.

### Y Axis:

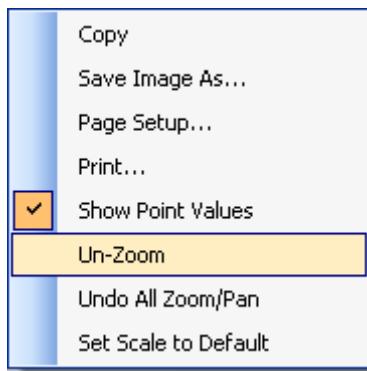


On the Zoom Option menu click on Zoom Out >  will zoom out Y Axis and set Y Axis to its original position.

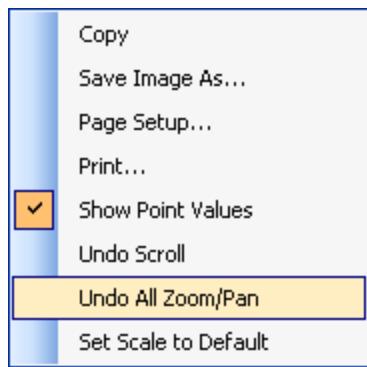
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## Un Zoom:

When mouse cursor is on graph and right button on mouse is pressed, then following pop up window will open. If you choose Un-Zoom from this popup window, graph will show in its previous zooming position.



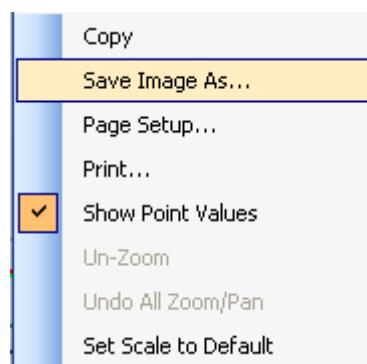
And if you choose Undo All Zoom/Pan from the pop-up window, graph will show in its original position.



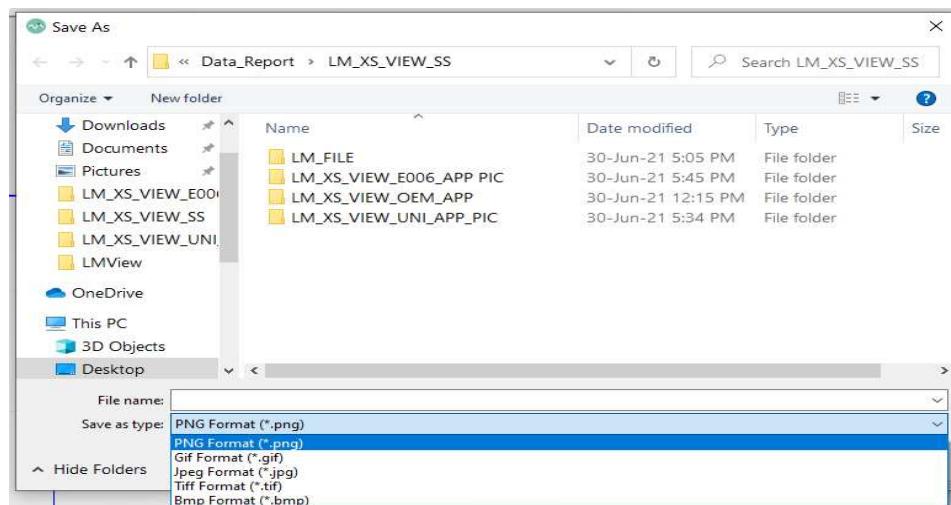
### 4.4.3 Save Graph



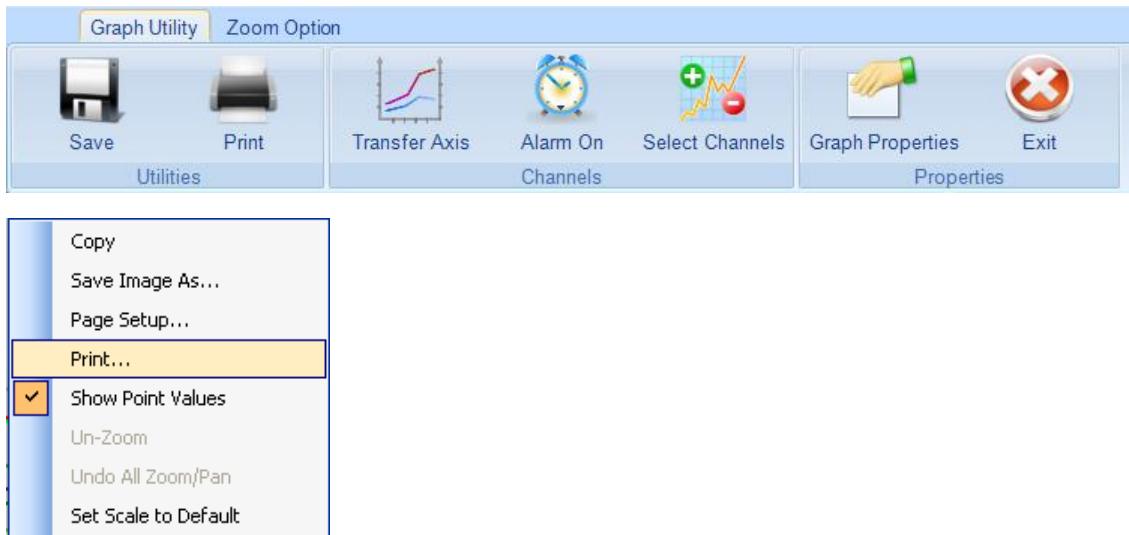
From the Graph utilities menu click on save icon or right click on graph menu, click Save Image As



It will open following Save graph window. You can give appropriate file name and also select type of file(.png/.gif/.jpg/.tif/.bmp) and after clicking on Save button graph image will saved at your desired location and name.

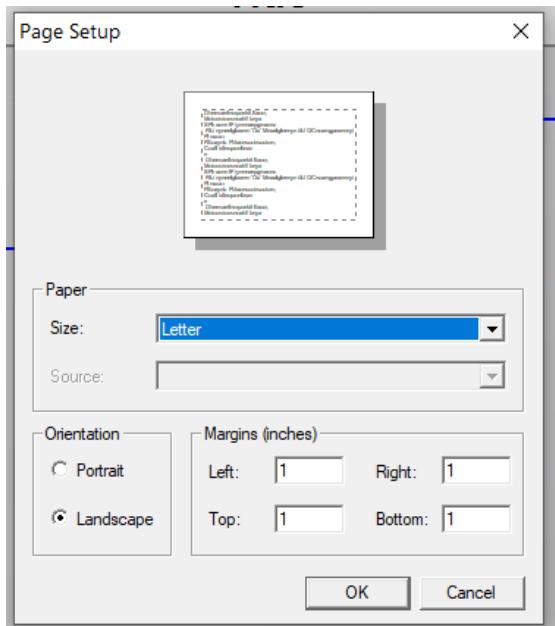


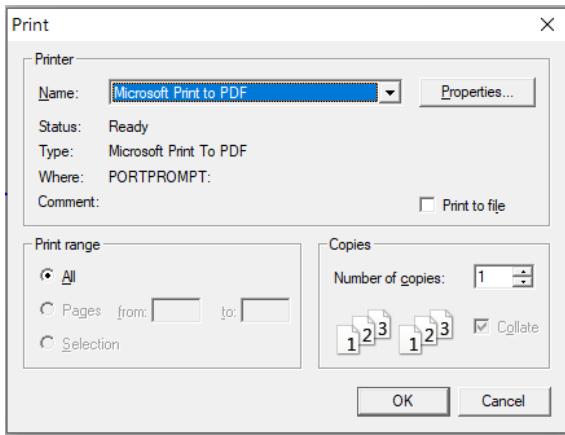
#### 4.4.4 Print Graph



From the Graph utilities menu click on Print icon or right click on graph menu, click on Print option.

It will open first page setup window, select appropriate page size , Orientation and Margins(inches).





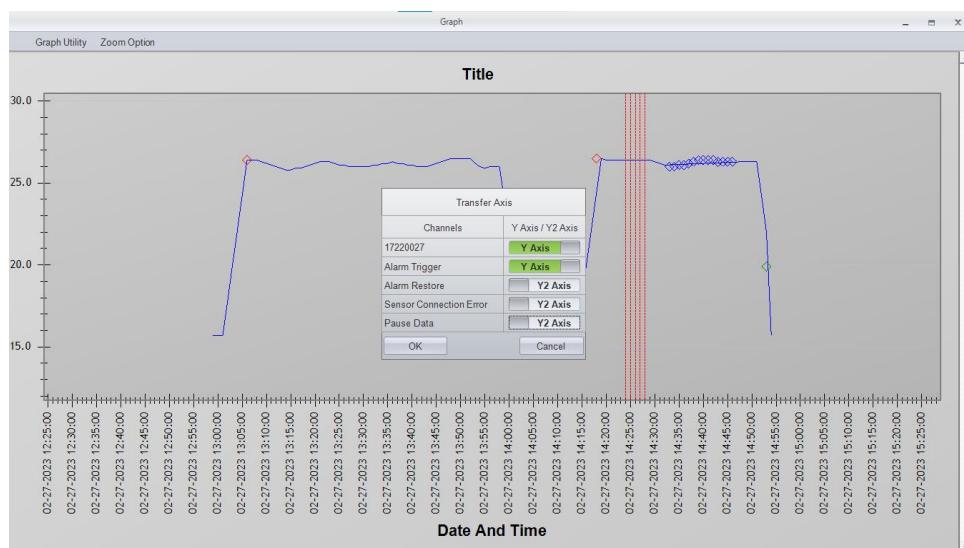
The default printer will be shown. User can select any of the installed printer or save as PDF from the drop down menu. Click on **OK** button and current graph image will be printed on the selected printer or saved as PDF. User can also change the properties of the printer by clicking on properties.

## 4.4.5 Transfer Axis

Lot of time it is useful to have the secondary Y axis for some of the data. Transfer Axis exactly allows you to do that. User can set as many channels as he desires for Y2 axis.



From the Graph utilities menu click on Transfer Axis icon , the following Transfer Axis window will open. From here user can select either Y Axis or Y2 Axis for a channel and press on OK button.





The channel is transferred to Y2 axis will be indicated in label as above.

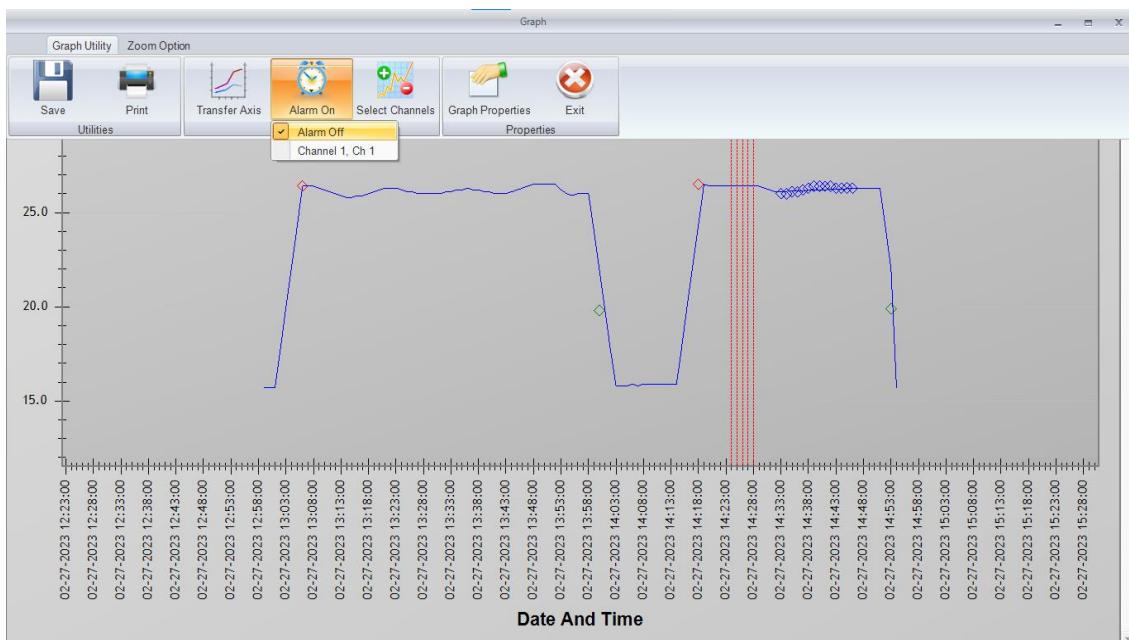
#### 4.4.6 Alarm On

To quickly know whether the channel's data remained within the set limits or not, LMView-XS sets a highlighted band on the graph for the selected channel.



From the Graph utilities menu click on Alarm On icon  , the following Alarm window will open ,where user should select the channel.

Normally, Alarm is Off in the graph view.





## 4.4.7 Select Channels

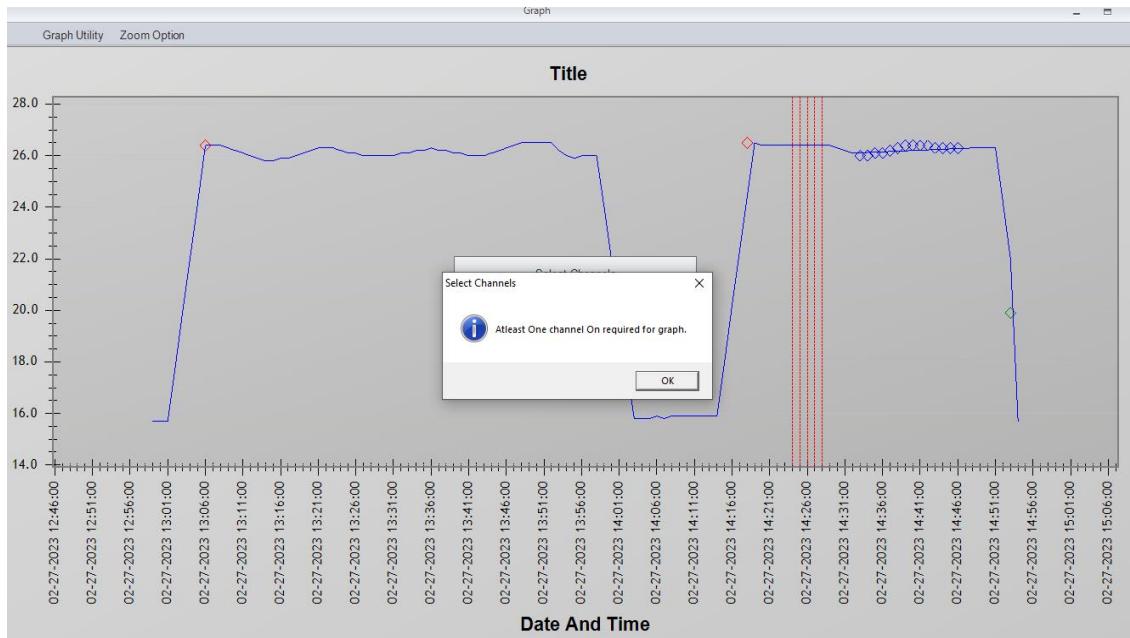
To remove the channel or add back the channel from the graph window, use Select Channels Menu.



From the Graph utilities menu click on Select Channels icon  , the following Select Channels window will open. From here user can select channels for On/Off purpose.



In case of single channel device, deafault channel 1 is ON. If user tries to turn it Off, Error message(Aleast One Channel On required for graph) is seen as below:

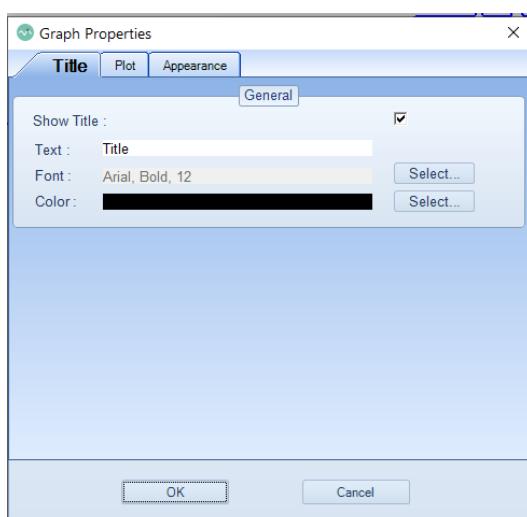


## 4.4.8 Graph Properties

You can set various graph properties like, Title of the graph, The Axis names, Axis scales and line colors. Following window shows details of chart elements which can be modified by Graph Properties dialog.

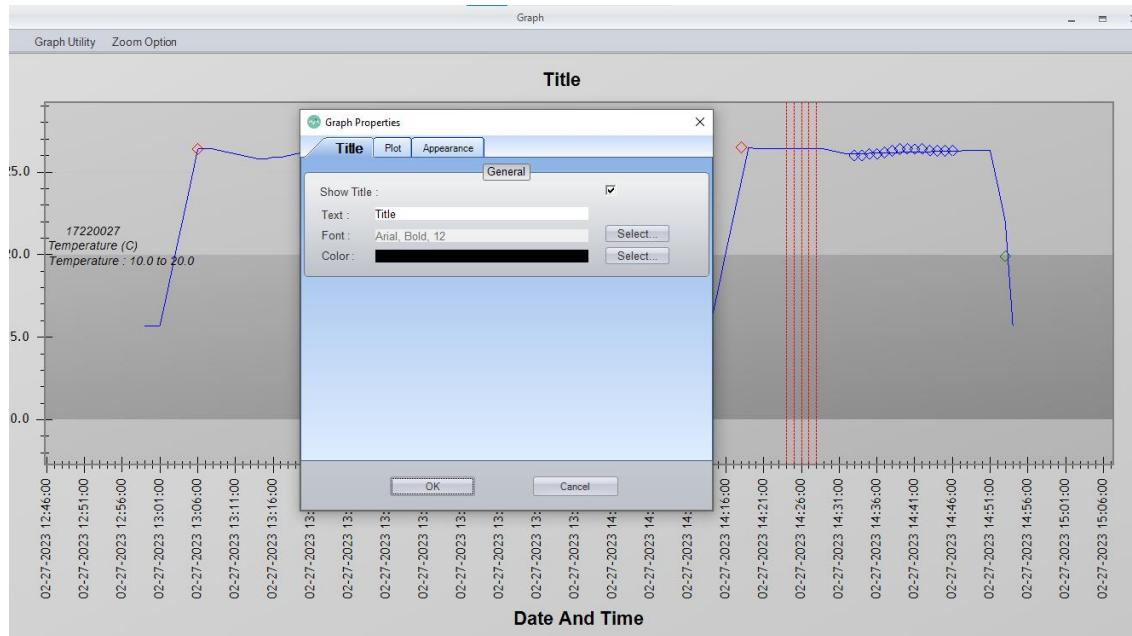


In Graph utility menu click on Graph Properties icon , and it will open Graph Properties window.



## Editing Chart Title :

A main chart title that can be changed by following chart properties dialog. You can also change its font and font color.

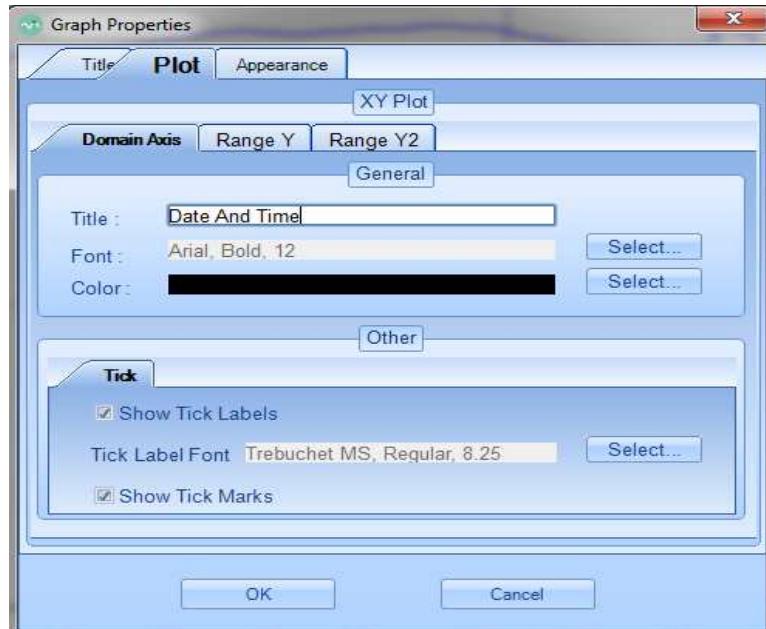


Select the Title Tab, and check show title. In the Text field, give the desired title. Click on "Select" button to change the font size and color.

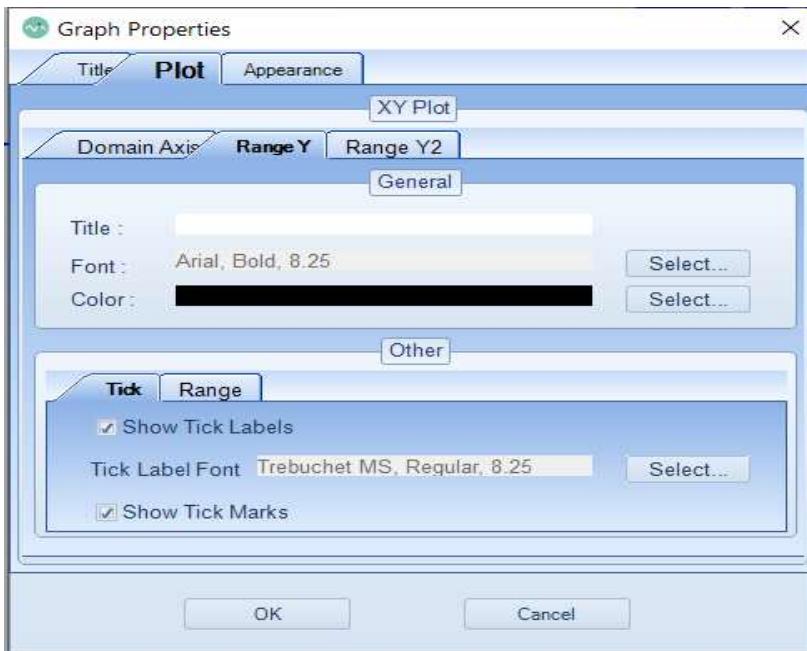
## Editing Axis :

Select the "Plot" tab, and on the XY plot select either Domain Axis (Date And Time) or Range Axis Y (Temperature) or Range Axis Y2 () to set various parameters. Following window shows which properties can be set for the Axis.

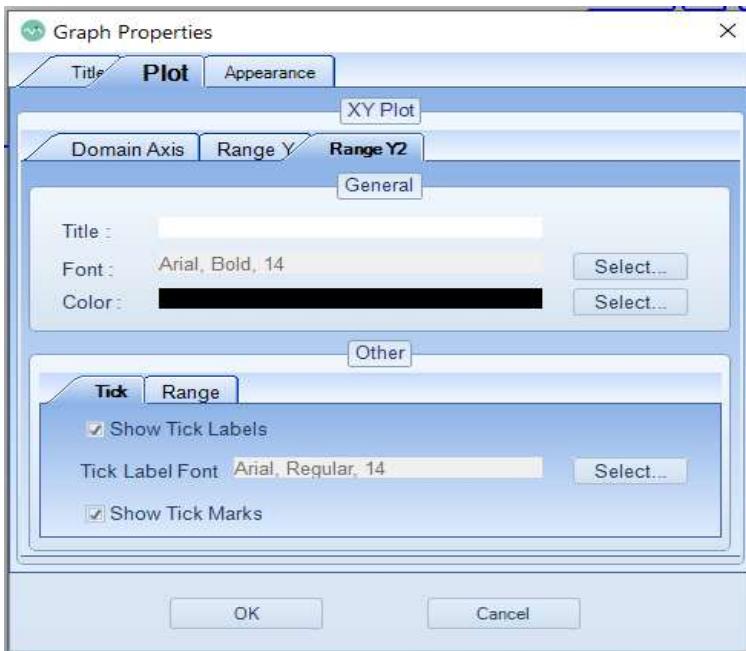
Select Plot → Domain Axis will change X axis title, its font style and font color. Tick properties like visible or not and the font style can be set here.



Select Plot → Range Y will change Y axis title, its font style and font color. Tick properties like visible or not and the font style can be set here.



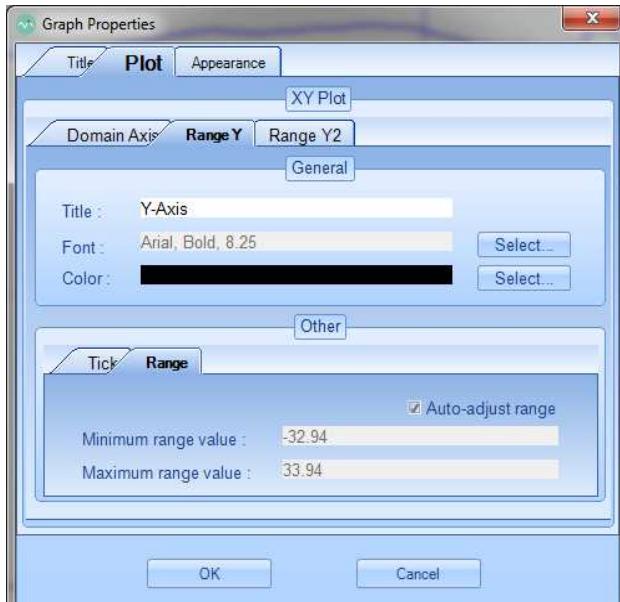
Select Plot → Range Y2 will change Y2 axis title, its font style and font color. Tick properties like visible or not and the font style can be set here.



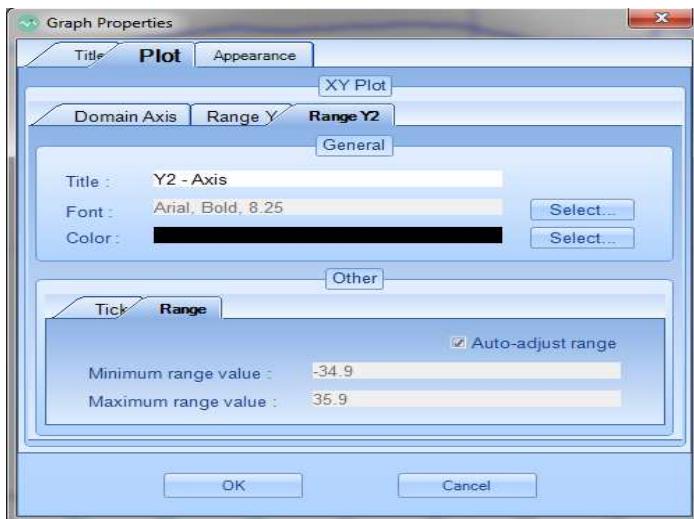
### Changing Scale of Range Axis :

Only Range Axis Y and Range Axis Y2 have the scale properties.

Click on Range Y Axis. In the Range, Deselect Auto adjust Range, Give the desired minimum and maximum range values in the edit box.



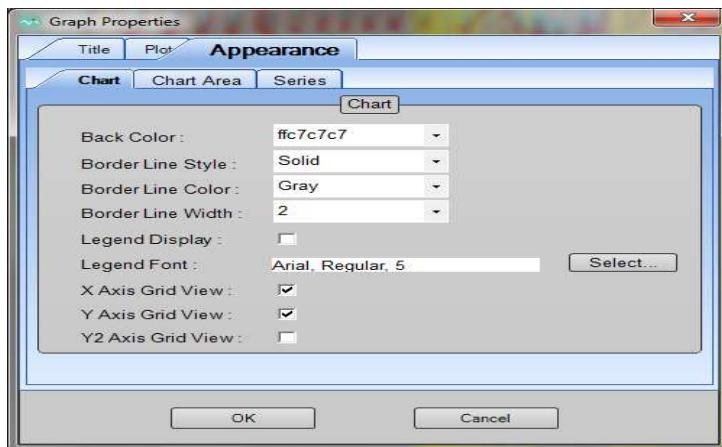
Click on Range Y2 Axis. In the Range, Deselect Auto adjust Range, Give the desired minimum and maximum range values in the edit box.



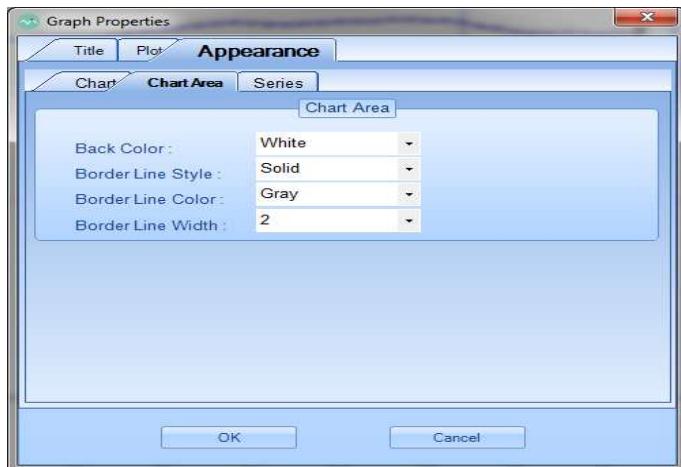
### Chart Appearance :

Select the "Plot" tab, and on the XY plot select Appearance to set Chart, Chart Area and Chart Series display properties. Following window shows various properties that can be set.

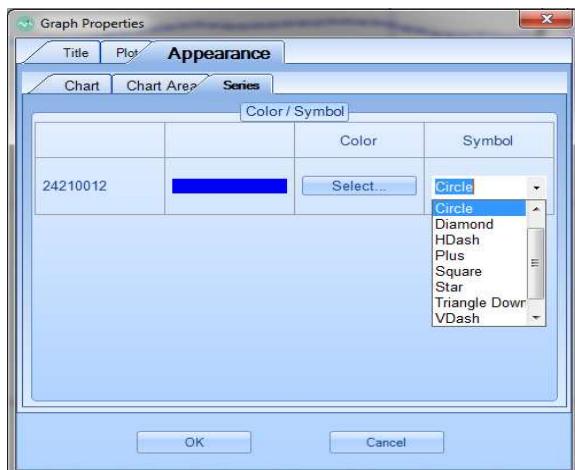
Select Appearance → Chart will change Chart back color, border line style, line color and line width. After setting all these properties click on ok button and chart appearance is updated. Experiment with various settings to get the desired result.



Select Appearance → Chart Area will change Chart Area back color, border line style, line color and line width. After setting all these properties click on OK button and chart appearance is updated. Experiment with various settings to get the desired result.



Select Appearance → Series will open color dialog to change its color properties. After setting all these properties click on OK button and chart appearance is updated. Experiment with various settings to get the desired result.



## 4.4.9 Exit



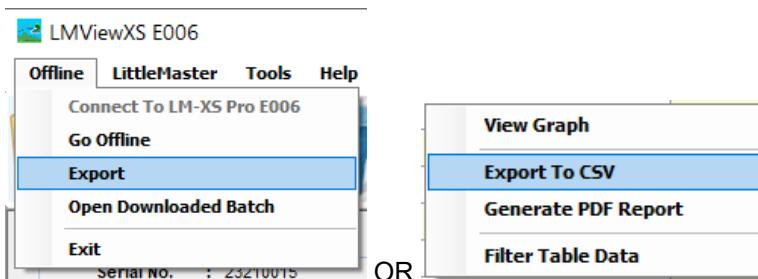
From the Graph utility menu click on Exit  icon or window Close icon and it will close the graph window and return to Tabular Display window.

## 4.5 LMViewXS E006 Report

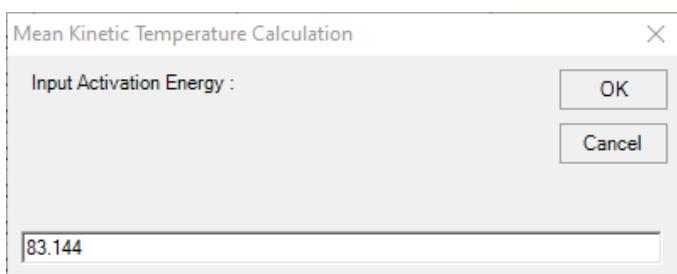
- [Export to CSV](#)
- [PDF Report](#)

### 4.5.1 Export to CSV

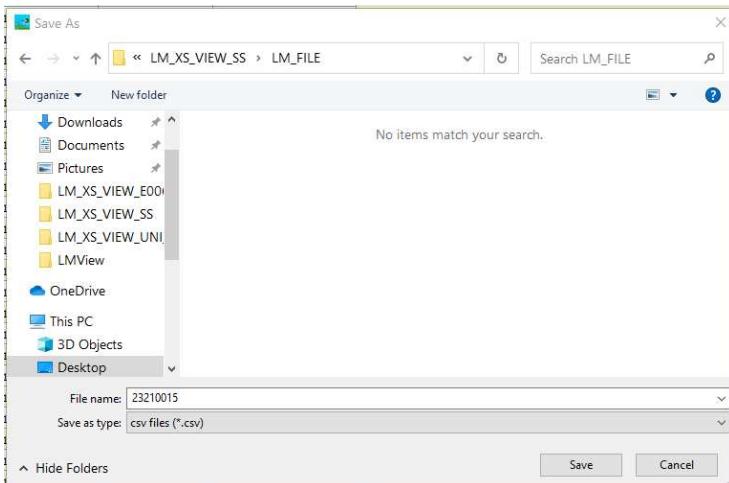
Data can be exported in CSV format by either clicking  on the main toolbar or by File  Export menu or by clicking Export to CSV popup menu on right click of tabular data windows.



It will open MKT calculation window.



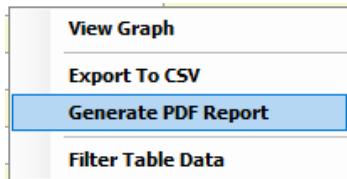
Give desired activation energy and click "OK". MKT value in tabular data will be updated. Save file dialog opens for saving .csv file on desired path.



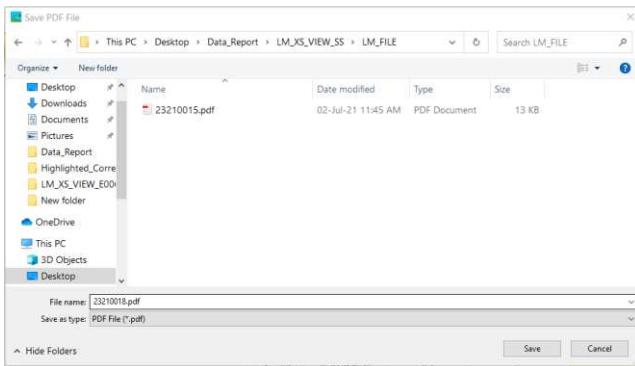
After clicking on Save, displayed tabular data of the file will be exported in .csv format to the given file name and path.

## 4.5.2 PDF Report

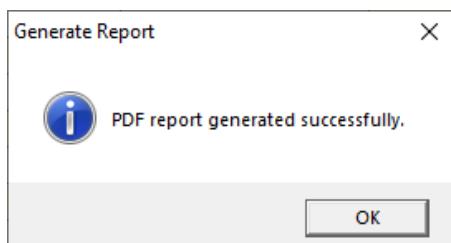
Data can be exported in PDF format by either clicking  on the main toolbar or by right click on tabular data open menu.



Following screen will come to save pdf file. Select the appropriate location and name of the file to save the data.



On Successful generation of pdf report, user will get the following message.



The displayed tabular data file will be exported in .pdf format at given path and name.

## Title of the report generated

Report has prefixed title "**Report from LM-XS Pro E006 Data Logger**"

## Device Information

It consist of Serial No., Model No. ,Version No. and Date Format.

Note that,date format has two options 1. dd-mm-yy hr:mn 2. mm-dd-yy hr:mn ( It is selected at the time of activation of LM-XS Pro E006 device)

## Batch Information

It shows information for Prefixed device activation, batch start and report generation date and time with time zone, alarm settings & store interval.

## Logged Data Summary

It contains total data points captured, starting and last record time.

## Statistical Summary

Statistical analysis gives Minimum, Maximum, Average, Mean +/- Std deviation and MKT of the total logged data.

Report from LM-XS Pro E006 Data Logger				
Device Information				
- Serial No. : 25210018				
- Model No. : 99963				
- Version No. : V 1.00				
- Date Format : dd-mm-yy hr:mn				
Batch Information				
- Date and time of report generation : 13-07-21 13:55 hrs				
- Device activation date and time : 04-02-21 12:09 hrs				
- Time zone : India Standard Time				
- Report start date and time : 04-02-21 12:10 hrs				
- Alarm high limit : 8.0 °C				
- Alarm low limit : -0.5 °C				
- Alarm high delay : 10 hr 00 mn				
- Alarm low delay : 1 hr 00 mn				
- Store interval : 0 hr 05 mn				
Logged Data Summary				
Data Points		Starting Time	Last Record Time	
334		04-02-21 12:10	06-02-21 16:19	
Statistical Summary				
Minimum	Maximum	Average	Mean ± Std Deviation	MKT
0.0 °C	29.1 °C	25.7 °C	25.7 °C ± 8.6 °C	27.6 °C

Entire population of data including alarm activated and reset included in calculation. Sensor open/error and pause condition are excluded.

## Data Summary

It shows max 120 days summary in table; Each row consists of a day summary. Table columns entries are explained as below:

- **Date:**Entry of date is in **ascending order**
- **Events:** Shows the tag(if any)of Date set and Time set for the day.

- **Average Temperature:** Calculated Average temperature data for the day
- **Lower Alarm Limit:** Min Temperature with its alarm low trigger time and cumulative time
- **Upper Alarm Limit:** Max Temperature with its alarm high trigger time and cumulative time
- **Sensor Connection Error:** Alarm trigger time and its cumulative time for the day
- **Alarm Status:** OK(Normal data condition) / ALARM(Alarm condition/sensor Error) during the day
- **Signature/Remarks/Action taken:** If the PDF report is printed, supervisor can write remarks/action taken with sign

Data Summary													
No.	Date	Events	Lower Alarm Limit			Upper Alarm Limit			Sensor Connection Error			Alarm Status	Signature / Remarks / Action taken
			Average Temperature	Minimum Temperature	Cumulative Time	Alarm Trigger Time	Maximum Temperature	Cumulative Time	Alarm Trigger Time	Cumulative Time	Alarm Trigger Time		
1	04-02-21	-	28.3 °C	27.2 °C	-	-	28.8 °C	11 hr 50 mn	12:10 hr	-	-	-	ALARM
2	05-02-21	T 13:43, 14:43	26.0 °C	0.0 °C	-	-	29.1 °C	12 hr 31 mn	00:00 hr	0 hr 05 mn	13:30 hr	-	ALARM
3	05-02-21	T 14:43, 14:43	-	-	-	-	-	-	-	-	-	-	-
4	06-02-21	D 06-02-21	0.2 °C	0.2 °C	-	-	0.2 °C	-	-	-	-	-	OK
5	06-02-21	D 06-02-21	-	-	-	-	-	-	-	-	-	-	-
6	06-02-21	D 06-02-21	-	-	-	-	-	-	-	-	-	-	-

D = date changed, dd-mm-yy; T = time changed, hr:mn (old value, new value);

## Cumulative time

Actual cumulative daily time duration for below/above the temperature limit. Date and time change have no effect on alarm records.

E.g. Alarm high trigger time for the given day is 17:30 hr and the user has changed the current time from 18:00 hr to 23:30 hr. In this case, the cumulative time for the alarm will be 00 hr 30 mn.

## Alarm Trigger time

Time at which alarm high/low triggers after corresponding alarm delay.

**Note:**

1. The report will show the data in last selected unit. The default set unit is degree Celsius (°C).
2. The report will show the date format as selected by the user at the time of activation of LM-XS Pro E006 data logger.
3. In data summary, in absence of Events or alarm low/high condition or sensor connection Error, **dash ' - '** will be shown in that column(s).
4. Alarm status column will have dash ' - ' entry, if Date set or Time set tag event occurs before/after temperature store interval.

## Graph for the logged data

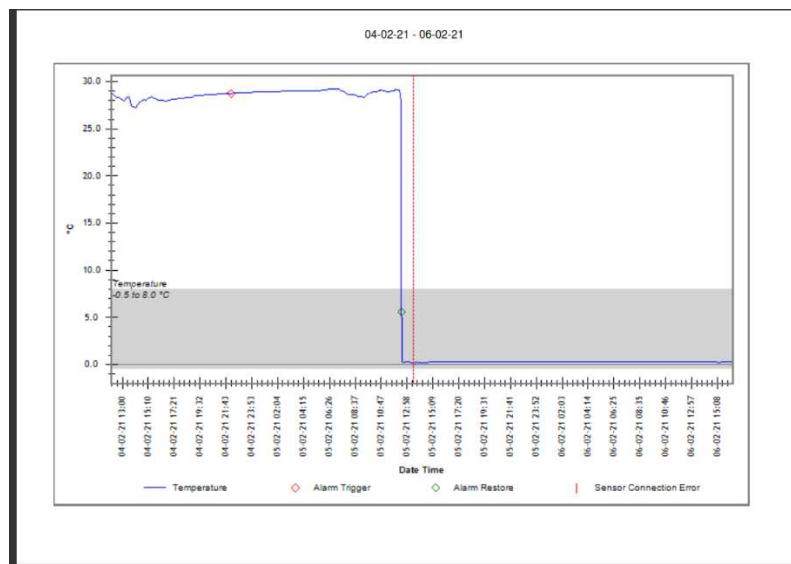
Graph for temperature data in (°C or °F) versus Date Time.

Title indicates date span for logged data.

The gray band in graph shows area inside alarm low and high limit.

Indications for tags of alarm trigger, alarm restore, sensor connection error are specified in graph legends.

In the graph, X- Y axis scale are auto adjusted.



**Note:**

1. In the graph, legends will be seen as per the data collected. E.g. If there is no tag event for given data summary, then Only "Temperature" legend will be seen.
2. In case of single data point for the data collected, single point(circle ) will be seen in the graph.
3. The graph will be showing the date format as selected by the user at the time of activation of LM-XS Pro E006 data logger.

## 4.6 Log Data Bin File

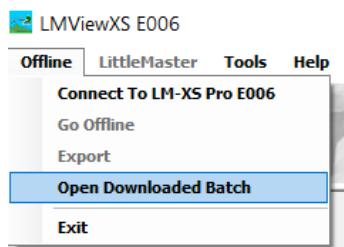
- [Open Downloaded Batches](#)
- [Filter Tabular Data](#)
- [View Graph](#)
- [Export to CSV](#)
- [Calculate MKT](#)
- [Unit Conversion](#)
- [PDF Report](#)

### 4.6.1 Open Downloaded Batches

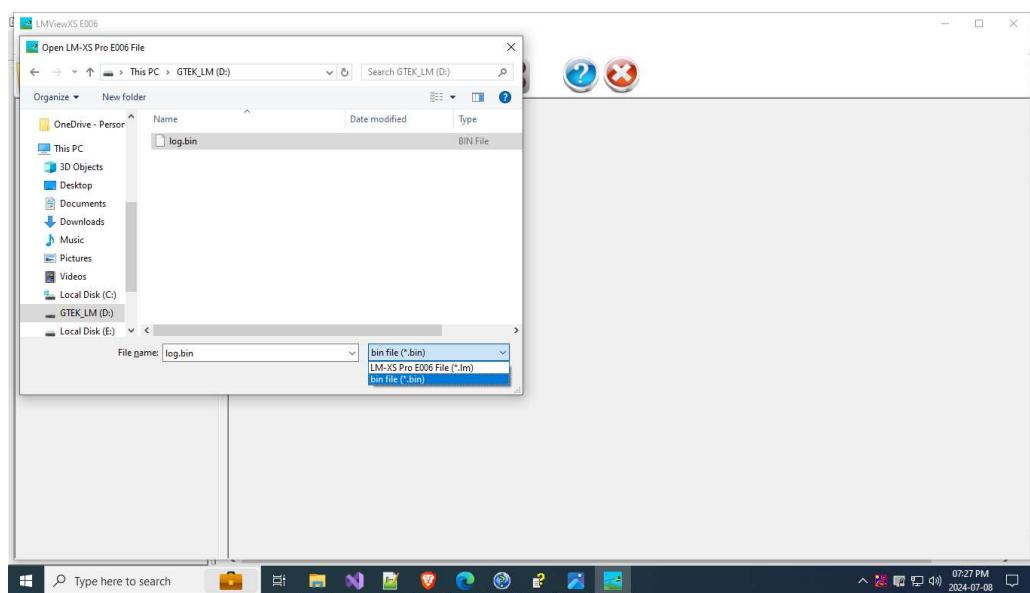
To show Downloaded Batch data into tabular form click the Open

Downloaded Batches icon. 

OR click the following menu from menu bar.



Select bin file which you want to open.



After selecting file click Open to see data into tabular form on main window.

### Tabular View :

After the file is opened, the tabular data will appear on the right panel with the Minimum ,Maximum, Average and MKT values.

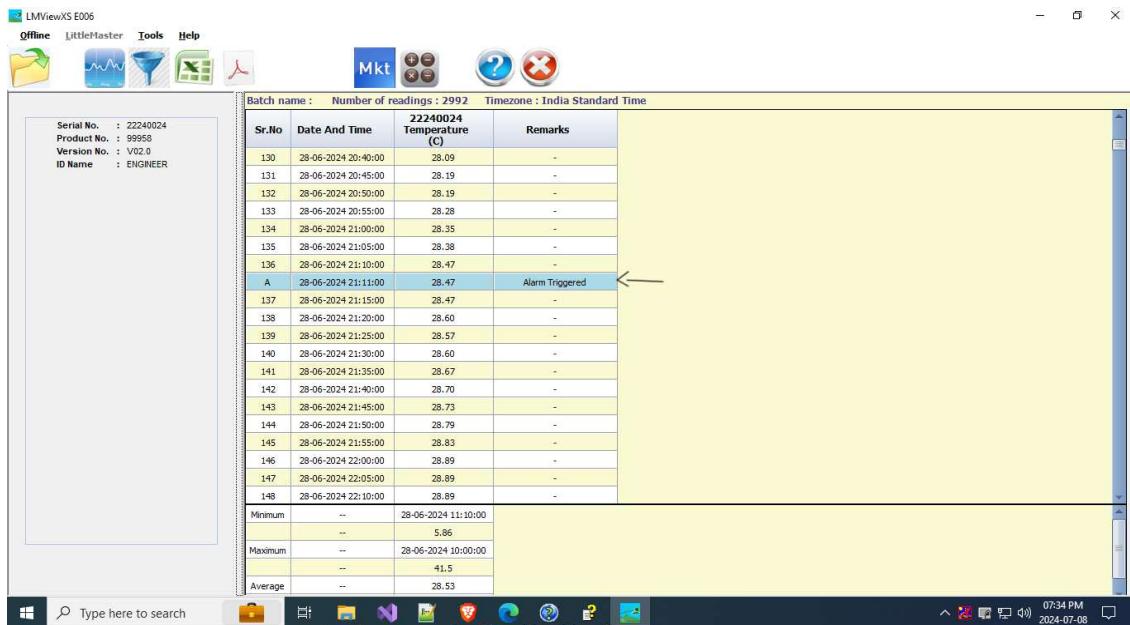


In the left panel it shows device information like Serial Number, Product Number, Version No and ID Name are reflected in CSV and PDF reports.

### Tabular View with Tagged Data :

Tagged data display into tabular form with tagged time, data and remarks. In tabular data events are shown in different color row with remarks information. In events, each character defines event type as below:

<b>Tag ID</b>	<b>Remarks for Tag Event</b>
D	Date set
T	Time set: old time Hr:Mn
A	Alarm Triggered
R	Alarm Reset
E	Sensor Open
P	Pause Data
S	Resume From Pause



LMViewXSE006

Offline LittleMaster Tools Help

Mkt

Batch name : 22240024 Number of readings : 2992 Timezone : India Standard Time

Sr.No	Date And Time	Temperature (C)	Remarks
130	28-06-2024 20:40:00	28.09	-
131	28-06-2024 20:45:00	28.19	-
132	28-06-2024 20:50:00	28.19	-
133	28-06-2024 20:55:00	28.28	-
134	28-06-2024 21:00:00	28.35	-
135	28-06-2024 21:05:00	28.38	-
136	28-06-2024 21:10:00	28.47	-
A	28-06-2024 21:11:00	28.47	Alarm Triggered
137	28-06-2024 21:15:00	28.47	-
138	28-06-2024 21:20:00	28.60	-
139	28-06-2024 21:25:00	28.57	-
140	28-06-2024 21:30:00	28.60	-
141	28-06-2024 21:35:00	28.67	-
142	28-06-2024 21:40:00	28.70	-
143	28-06-2024 21:45:00	28.73	-
144	28-06-2024 21:50:00	28.79	-
145	28-06-2024 21:55:00	28.83	-
146	28-06-2024 22:00:00	28.89	-
147	28-06-2024 22:05:00	28.89	-
148	28-06-2024 22:10:00	28.89	-
Minimum	--	28-06-2024 11:10:00	
	--	5.86	
Maximum	--	28-06-2024 10:00:00	
	--	41.5	
Average	--	28.53	

Windows Taskbar: Type here to search, File, Start, Task View, Edge, File Explorer, File History, Taskbar settings, 07:34 PM, 2024-07-08

## 4.6.2 Filter Tabular Data

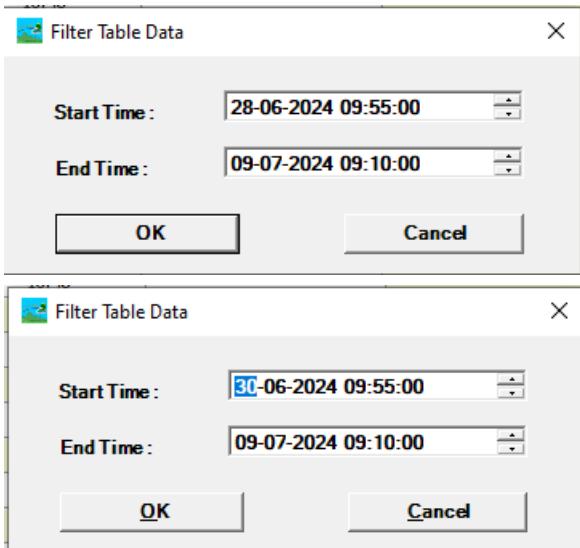
Let us say you want to view / plot only selected part of the data and get the PDF

report for the same. Right click on the tabular data or click on  filter icon to open filter window.

Filter Table Data option is enabled when data is displayed in tabular form in main window. For filter data, required parameters are new Start Time and End Time. If user enters the start and/or end date-time which is beyond the range of original data, the error message will be generated.

Sr.No	Date And Time	Temperature (C)	Remarks
1	28-06-2024 09:55:00	25.87	-
2	28-06-2024 10:00:00	41.50	-
3	28-06-2024 10:05:00	38.15	-
4	28-06-2024 10:10:00	24.03	-
5	28-06-2024 10:15:00	16.48	-
6	28-06-2024 10:20:00	13.19	-
7	28-06-2024 10:25:00	10.81	-
8	28-06-2024 10:30:00	9.23	-
9	28-06-2024 10:35:00	8.16	-
10	28-06-2024 10:40:00	7.43	-
11	28-06-2024 10:45:00	6.94	-
12	28-06-2024 10:50:00	6.56	-
13	28-06-2024 10:55:00	6.32	-
14	28-06-2024 11:00:00	6.10	-
15	28-06-2024 11:05:00	5.96	-
16	28-06-2024 11:10:00	5.86	-
17	28-06-2024 11:15:00	15.33	-
18	28-06-2024 11:20:00	20.01	-
19	28-06-2024 11:25:00	22.72	-
20	28-06-2024 11:30:00	23.97	-
Minimum	--	28-06-2024 11:10:00	
	--	5.86	
Maximum	--	28-06-2024 10:00:00	
	--	41.5	
Average	--	28.6	

In the above batch there are 3160 readings with start time as 28-06-2024 09:55 and stop time as 09-07-2024 09:10.



Click "Filter Table Data" command and let us change Start Time as 30-06-2024 09:55(indicated in above figure) and press "**OK**". The tabular data will be seen as below:

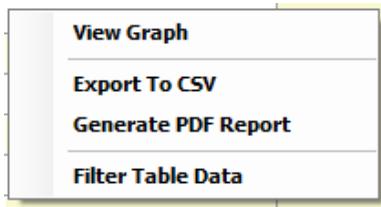
Sr.No	Date And Time	22240024 Temperature (C)	Remarks
1	30-06-2024 09:55:00	29.99	-
2	30-06-2024 10:00:00	29.96	-
3	30-06-2024 10:05:00	29.99	-
4	30-06-2024 10:10:00	29.99	-
5	30-06-2024 10:15:00	30.02	-
6	30-06-2024 10:20:00	30.02	-
7	30-06-2024 10:25:00	30.02	-
8	30-06-2024 10:30:00	30.02	-
9	30-06-2024 10:35:00	30.02	-
10	30-06-2024 10:40:00	30.09	-
11	30-06-2024 10:45:00	30.16	-
12	30-06-2024 10:50:00	30.22	-
13	30-06-2024 10:55:00	30.25	-
14	30-06-2024 11:00:00	30.32	-
15	30-06-2024 11:05:00	30.32	-
16	30-06-2024 11:10:00	30.42	-
17	30-06-2024 11:15:00	30.49	-
18	30-06-2024 11:20:00	30.45	-
19	30-06-2024 11:25:00	30.55	-
20	30-06-2024 11:30:00	30.52	-
21	30-06-2024 11:35:00	30.55	-
Minimum	--	02-07-2024 10:00:00	
	--	24.15	
Maximum	--	07-07-2024 17:20:00	
	--	32.83	
Average	--	28.9	

It is important to know that the data are not deleted from the file. Whenever you open the file again, the total data will be displayed.

## 4.6.3 View Graph

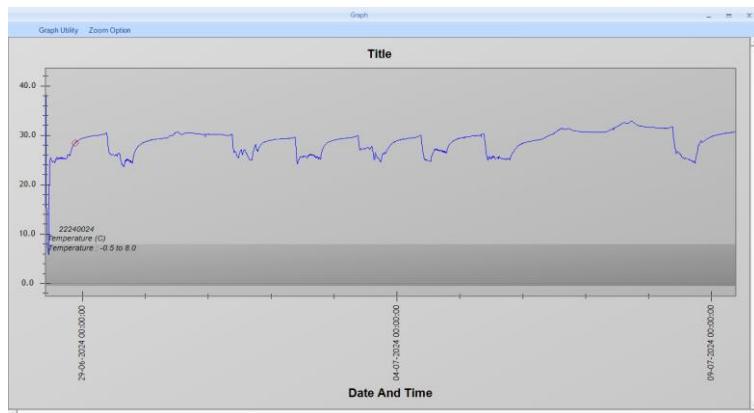


Click on the icon  and the graph for all the displayed columns in table will be displayed in a new window. Alternatively Graph can also be opened from the menu by right clicking on tabular data.



Display batch data and tagged data(if any) in graphical view as below.

Graph window appears as shown below:



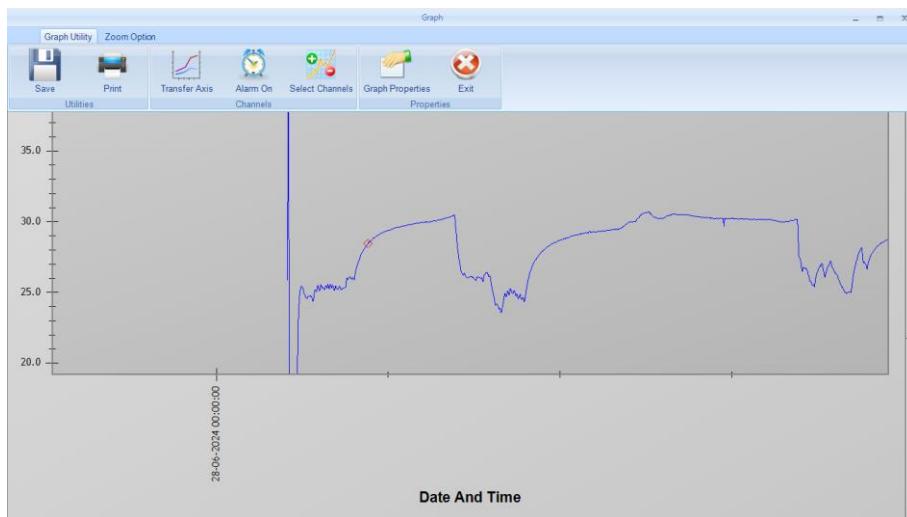
### Part

### Description

1. Menu bar The area containing pull-down menu options.
2. Toolbar A detachable bar that contains shortcuts to menu and other commands.
3. Chart The chart area to view data in graphical format.

### Graphical View :

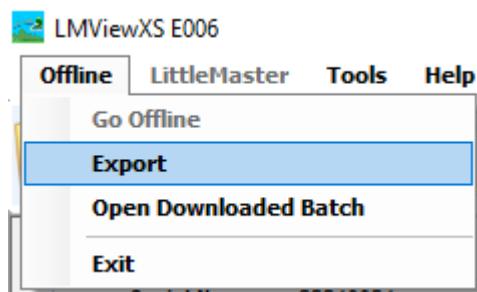
Graph Utility can give option to save, print graph. It give option to select channel to see graph and change graph properties.



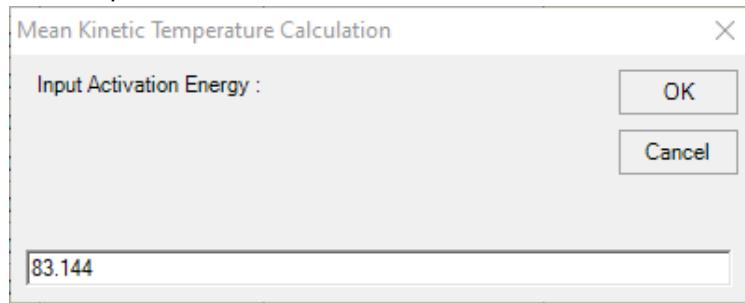
In above graph, Legend display consists - horizontal blue line to represent batch data and markers for different tag names as per the batch data

#### 4.6.4 Export to CSV

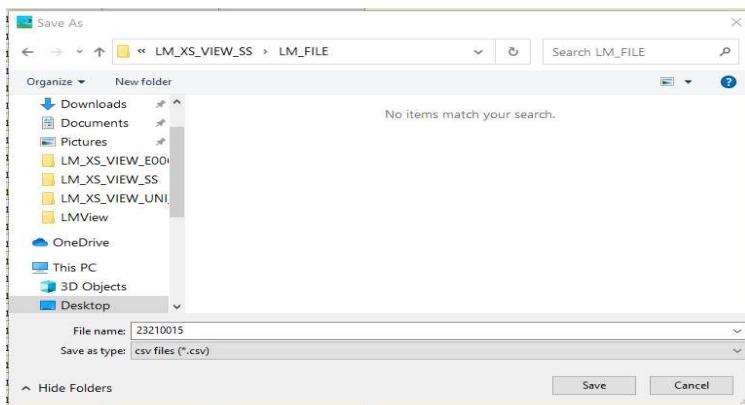
Data can be exported in CSV format by either clicking  on the main toolbar or by File  Export menu or by clicking Export to CSV popup menu on right click of tabular data windows.



It will open MKT calculation window.



Give desired activation energy and click "OK". MKT value in tabular data will be updated. Save file dialog opens for saving .csv file on desired path.

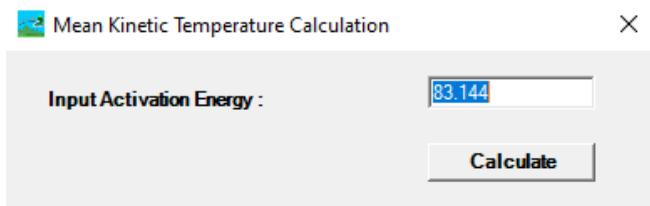


After clicking on Save, displayed tabular data of the file will be exported in .csv format to the given file name and path.

## 4.6.5 Calculate MKT

To calculate the MKT, click on  MKT icon, and enter the desired activation energy. The MKT is calculated and displayed in the box. It is also exported in .csv format and all other report.

Minimum	--	28-06-2024 11:10:00
	--	5.86
Maximum	--	28-06-2024 10:00:00
	--	41.5
Average	--	28.6
MKT	--	NaN



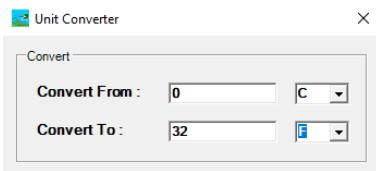
Minimum	--	28-06-2024 11:10:00
	After selecting "Calculate" button, table shows MKT for the given no. of data values in table.  --	5.86

Maximum	--	28-06-2024 10:00:00
	--	41.5
Average	--	28.6
MKT	--	28.89

## 4.6.6 Unit Conversion

Click on  to convert the temperature from one unit to another.

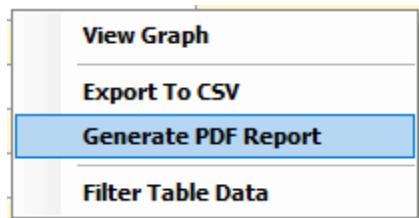
OR click the following menu from menu bar.



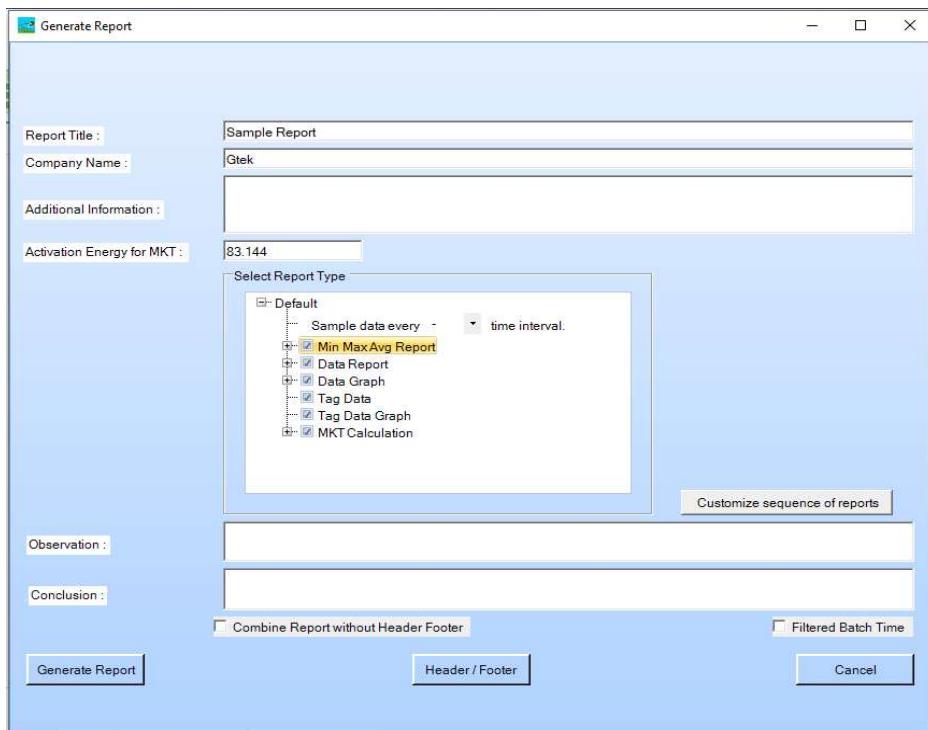
In above dialog input temperature value into convert from input box and its unit. Select the desired unit you want to convert to. The converted temperature will be displayed.

## 4.6.7 PDF Report

Data can be exported in PDF format by clicking on this  icon.



For generate PDF fill below fields. Select required Report types.



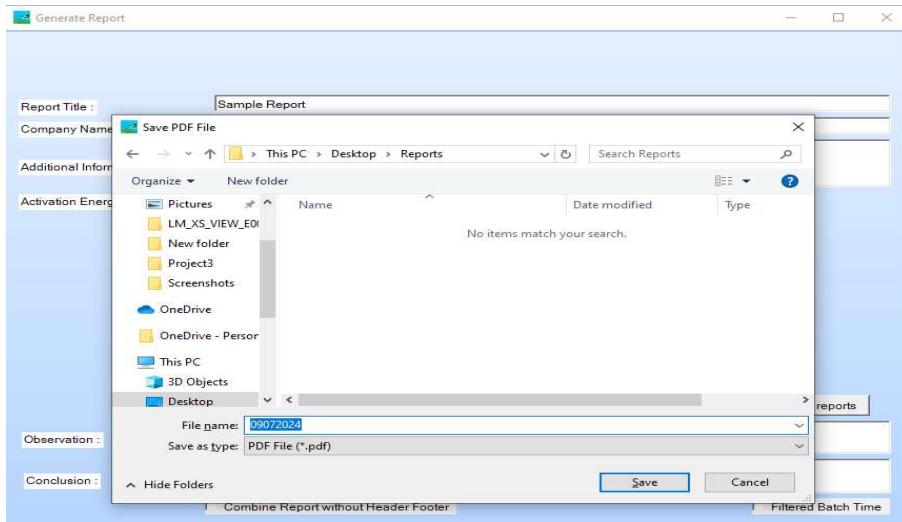
By default, all the options are selected, if user wants any specific type of report only, it can be selected individually.

User can also choose the different data time other than the store interval for the data report.

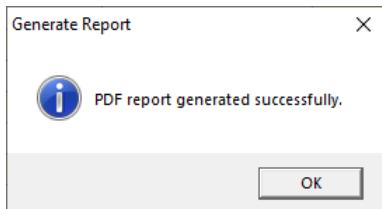
**You Can Set the following Fields in Data Report:-**

Report Title	Give an appropriate Report Title for the batch name. Maximum <b>50</b> character.
Company Name	Give the appropriate Company Name. Maximum <b>25</b> characters. This will be the title on the first page and footer in subsequent pages.
Additional Information	Give Summary report of data. Maximum <b>1100</b> character.
Activation Energy	Give activation energy value for calculate MKT.
Select Report Type	Select reports for create in current report.
Observation	Input any observation regarding to report.
Conclusion	Input any conclusion regarding report.
Combine Report without Header Footer	Check this option to remove Header Footer from report.
Filtered Batch Time	Check this option to change batch date time to filtered date time in report.
Generate Report	Click on Report to generate PDF report.
Header Footer	Click on Header Footer for insert custom header footer in report. PDF report.
Cancel	Click on Cancel to exit form Report window.

After Specifying the required fields Click on the Generate report button, Then the following window will appear to "Save pdf file". Provide the desired name and location to save the pdf file.

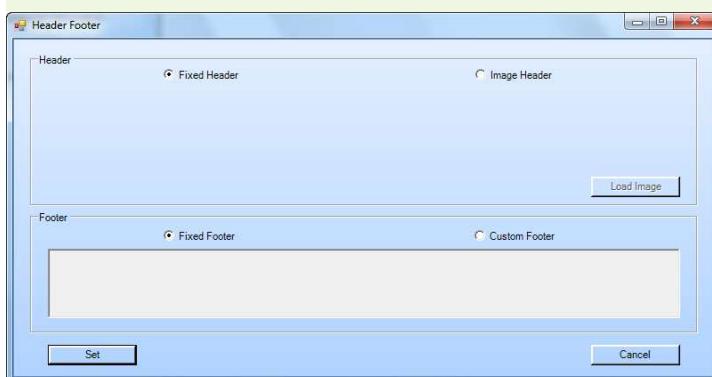


On Successful generation of pdf report, user will get the following message.



The displayed tabular data file will be exported in .pdf format at given path and name.

### Header Footer :

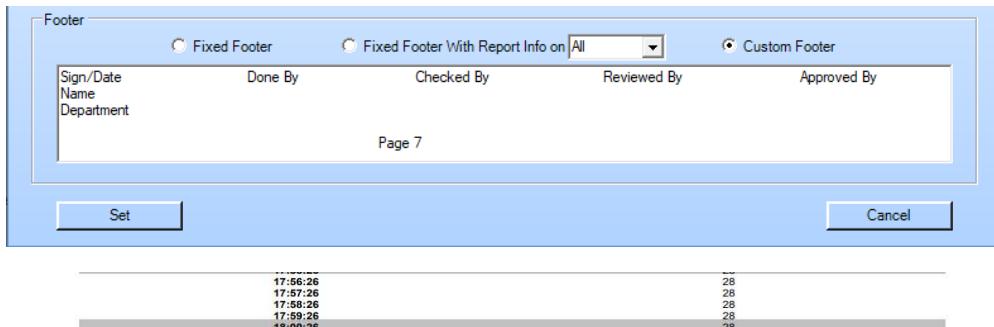


- In Header Footer dialog it provides selection for header and footer to set it as customize or fixed. There are two different sections for set Header and footer.
- In Header section there are two option available one is Fixed Header and other is Image Header.
- On selection of Fixed Header, it will create report using our fixed format of Header.
- On selection of Image Header, it will enable Load Image button which provide image selection dialog. On selection of any image it will show into image preview area like as below image and it will create report using this image as Header.



Time	46220009	Ch 1	ENGINEER	Temperature (C)
01-12-2022				
17:06:26				27
17:07:26				28
17:08:26				28
17:09:26				27
17:10:26				27
17:11:26				27
17:12:26				27
17:13:26				27
17:14:26				27

- In Footer section there are two option available one is Fixed Footer and other is Custom Footer.
- On selection of Fixed Header, it will create report using our fixed format of Footer.
- On selection of Custom Footer, it will enable text area to write any constant which use as footer. Any inserted content into text area view as footer in report page.



Sign/Date	Done By	Checked By	Reviewed By	Approved By
Name Department				

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## Batch/Test details:

It consists of Following details:

1. Batch name: - Name of the Batch.
2. Time Zone: - As per local time setting on your PC.
3. Start Date and Time: - The date and time of the batch start.
4. Stop Date and Time: - The date and time of the batch stop.
5. Interval: - Store interval of the batch data.

**Data Logger Details: -**

It consists of the serial Number and id Name.

**Sample Report**  
**Gtek**

**Batch/Test Details :**

- **BATCH NAME :**
- **TIMEZONE :** India Standard Time
- **START DATE AND TIME :** 28-06-2024 09:55:00
- **STOP DATE AND TIME :** 09-07-2024 09:10:00
- **INTERVAL (HH:MM:SS) :** 00:05:00

**Data Logger Details :**

Sr.No.	Serial Number	ID Name
1	22240024	ENGINEER

**Types of report user have Selected to generate: -****1. Min Max Avg Report-**

- It Contains the Min and Max value along with the corresponding date and time and also the average value of the batch data.

Min Max Avg Report					
Channel	Min	Time of Min	Max	Time of Max	Avg
Ch 1	5.66	28-06-2024 11:10:00	41.50	28-06-2024 10:00:00	28.61

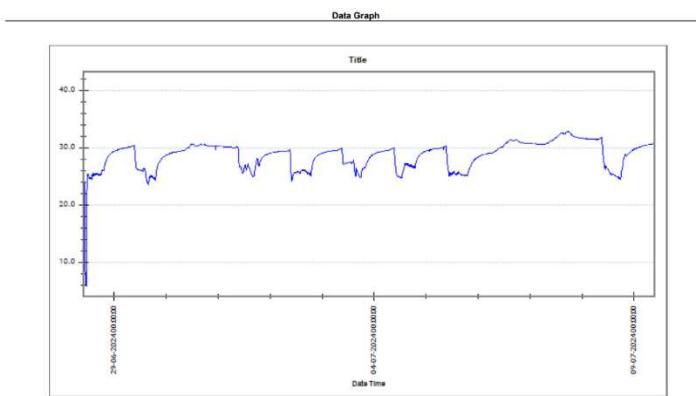
**2. Data Report -**

- Data Report contains the Batch data in the tabular form accordingly with the date and Time as shown below.

Data Report		
Time	22240024	Ch 1
	ENGINEER	Temperature (C)
28-06-2024		
09:55:00		25.87
10:00:00		41.50
10:05:00		38.15
10:10:00		24.00
10:15:00		16.48
10:20:00		13.19
10:25:00		10.81
10:30:00		9.23
10:35:00		8.16
10:40:00		7.43
10:45:00		6.94
10:50:00		6.56
10:55:00		6.32
11:00:00		6.10
11:05:00		5.96
11:10:00		5.86
11:15:00		15.33
11:20:00		20.07
11:25:00		22.97
11:30:00		23.87
11:35:00		24.58
11:40:00		24.95
11:45:00		25.26
11:50:00		25.47

**3. Data Graph -**

- Displays the Batch data in the Graphical view as shown in the below image.



#### 4. Tag Report -

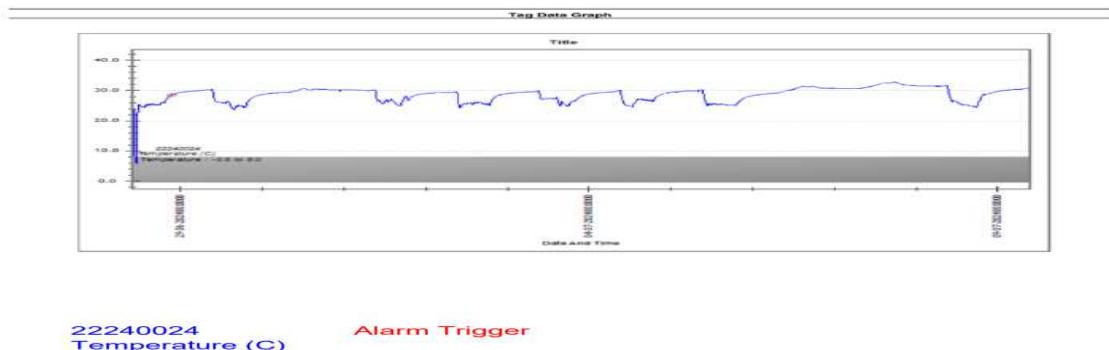
- It contains the detail information of the tags of the batch data along with the corresponding time and also the remarks to identify the type of the tag that is Alarm trigger, Sensor Open etc.

Tag Report

Sr.No	Date And Time	22240024 Temperature (C)	Remarks
A	28-06-2024 21:11:00	28.47	Alarm Triggered

#### 5. Tag Data Graph: -

- It Contains the Graphical view of the batch data along with the tags highlighted with different shapes and colors and also contains the description to know which tag indicates what information.



#### 6. MKT Calculations: -

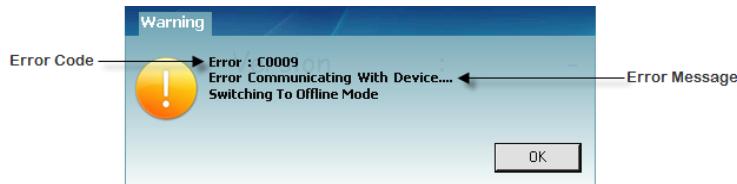
- It Contains MKT data for the report.

MKT Calculations

Parameter	Value	Unit
Activation Energy	83.144	K Cal/mol
22240024		Temperature (C)
MKT	28.89	Deg C
MKT	84.00	Deg F
MKT	302.03	Deg K

Data Report will contain the above-mentioned reports for the Batch data, that is the details information of the Batch data.

## 4.7 Error Messages



Error Communicating with Device is a generic error. This error can occur at various stage of communicating to device. The following table indicates the place of error occurring.

Error Code	Error Message	Error Description
C0001	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "setting Calibration value"
C0003	Error Communicating with Device... Switching to offline mode	This error is generated when device had communication problem during "Restore factory settings"
C0004	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "Setup Batch Configuration" LM- XS Pro E006 device.
C0005	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "download Stored Batch" from LM-XS Pro E006 device.
C0007	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "Setup Batch Configuration" on LM-XS Pro E006 device
C0008	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "Stop Batch" command on LM-XS Pro E006 device.
C0009	Error Communicating with Device.... Switching to offline mode	This error is generated when device had communication problem during "Waking up the device" and application goes into offline mode.

## Remedies:

- (1) Whenever there is an error communication message, please check that the communication cable is properly connected to both the PC and LM-XS Pro E006 device side. Micro USB cable might be faulty, replace the cable and try again to connect. Ensure that device is in wake-up condition.
- (2) The device automatically goes in to battery saving mode if no activity takes place for more than 5 minutes after waking it up. In this case also the "Error communicating message will come. To resolve this, "go to offline mode " and again go to "Online mode" this will wake up the device again and communication shall resume.
- (3) If the problem still persists, please send the error message no. with the log file (..\ProgramFiles\LMViewXSE006\LMView.bin) file to [service@gtek-india.com](mailto:service@gtek-india.com). We shall try to respond you within 24 hours.