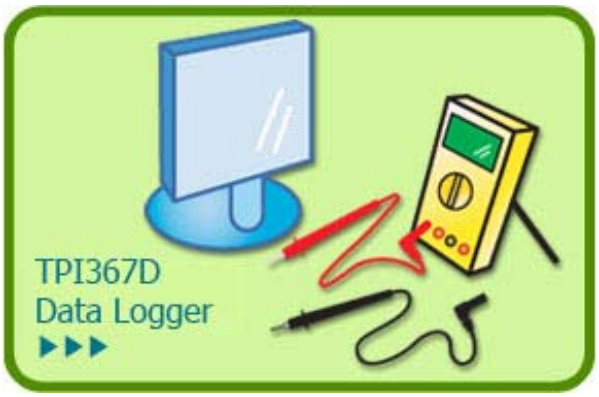
TPI367D Data Logger Manual



Contents

1. Introduction

TPI367D Data Logger program proceeds the received data from the 367D through RS232C on the PC and provides the following functions.

***Caution1) You should install the USB driver before use the program. The driver is included on the enclosed CD.**

***Caution2) The 367D should be connected with the PC with the USB cable and the 367D should be on for communication.**

Measurement status display

- Shows the data being measured with real time graphic.

Real time monitoring

- You can view the data being measured on the chart or table.
- If the thermometer is connected, you can start the real time monitoring.
- Regardless of connection to the meter, you can enter the history mode with selection of the stored data.

Logging mode

- The thermometer calculates the sample reading, max. reading, min. reading, and average reading with the measured data during the measurement period which you setup and saves them in this mode.
- You can view the status the logging data on the chart or the table.

History mode and data export

- You can search for the logging data whenever you want even the thermometer is no connected.
- You can search for the logging data intuitively because the title, data, measurement option, and user note are displayed.
- You can export the searched data in excel & test file format. And you can save the graph on the chart as it is in BMP or JPG format.
- You can enlarge/reduce the section on the chart with the mouse.

Communication status auto-compensation

- Users do not need to do the complicated serial port setup any more! The software searches for the port which can be used automatically and perform connection testing to device and make the connection automatically.
- If it decides that the connection is disconnected or power is off as per characteristics of device, it tries connection automatically per regular period.
- It considers the unstable RS232C communication environment and perform the maximum data validity test so you can trust the saved data.

2. Program Specification

Minimum Hardware Requirements

- CPU : Equivalent or better than Intel™ Pentium2™ Processor
- RAM : 32MB
- HDD : 20MB of free space in HDD, and additional space to save logging data.
- CD-ROM Drive
- Serial Port : COM port which supports RS232C

Recommended Hardware Requirements

We recommend the following hardware requirements, for a smooth operation.

- CPU : Equivalent or better than Intel™ Pentium-III™ Processor
- RAM : 128MB or more
- HDD : Enough space to save Logging data.

Operating System

- OS : Windows 2000™, Windows XP™

Installation CD

- Setup.exe : Installation program

3. Software Manual

Software Installation

Please insert the TPI367D Data Logger installation CD, and wait for an auto-installation. In case, the auto-installation does not run, please run Setup.exe file which is located in you installation CD.

USB Driver Installation

If you connect the product to the PC, new hardware search window will pop up.
You will find the USB Driver in Driver folder which is in you installation CD. Please locate and select the Driver folder from your Installation CD and click OK. The USB Driver will be installed.
(You will go through this same installation process 1 more time)

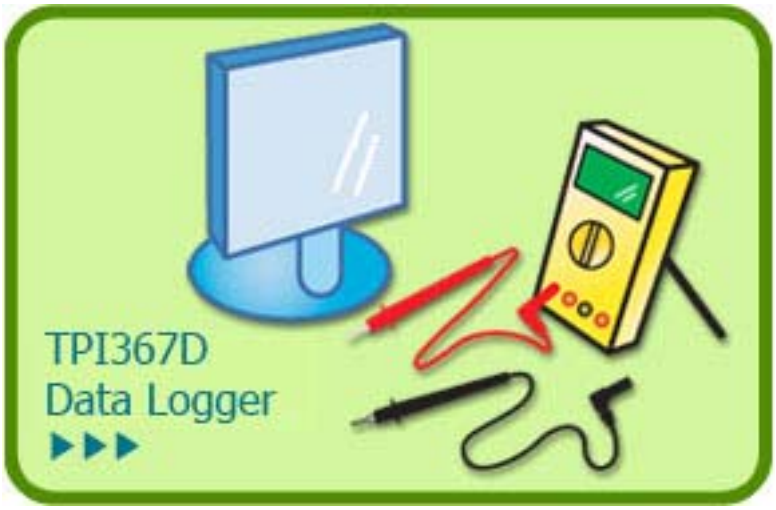
If USB Driver is not installed prior to the connection, connection failure will occur.

Connecting the Meter

Insert the serial port cable of the TPI367D to the serial port of the PC.

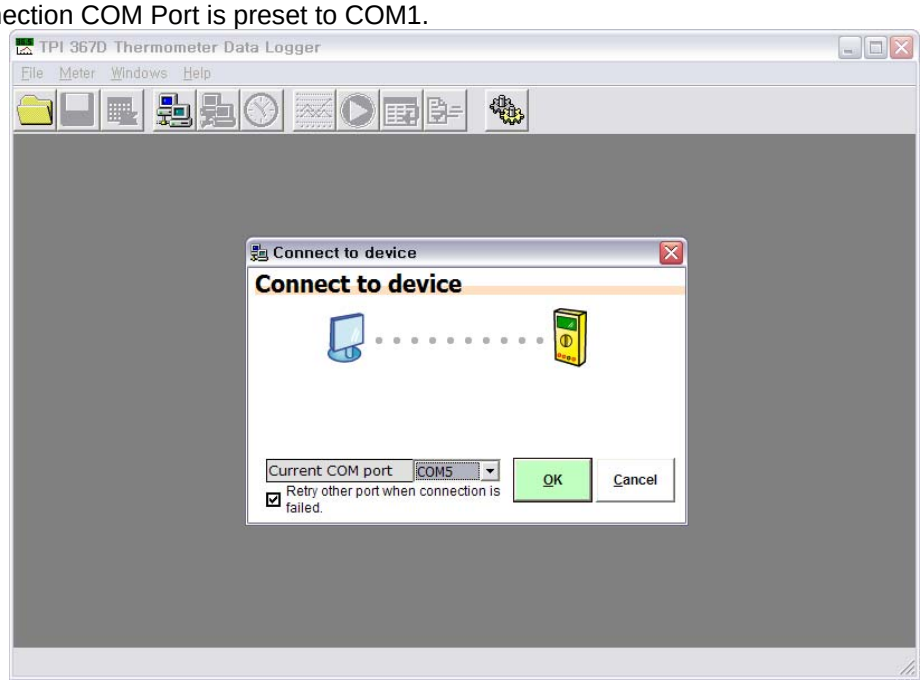
Running the Program

If the installation is finished, the TPI367 Data logger icon will appear on the desktop and the program group. You can run the program by simply double clicking on TPI367D Data Logger icon on you desktop screen or you can run it by clicking [Start menu] ->[Program] ->[TPI367D Data Logger] -> [TPI367D Data Logger].



After running the program, device connecting window will appear and search for TPI367D from the registered COM ports automatically. You can monitor the COM port connection status & progress, and the window will disappear when connected properly.

* Primary Connection COM Port is preset to COM1.



Menu & Toolbar

There are Menu & Toolbar in Data View's upper left-hand corner.

- [File]
  - Open : Opens the saved monitored data and display it on Data View screen.
  - Save : Save the data displayed on Data View screen as a DB file.
  - Export : Save the data on Data View screen, as Excel, text, and image file.
  - Configuration : Opens environment setup windows.
  - Quit : Close the program.
- [Meter]
  - Connect : Connect to the device.
  - Disconnect : Terminate connection.
  - Setup : Equipment's basic setup.
  - Start Monitoring : Starts the real-time monitoring.
  - Start Real-time Recording : Start real-time data recording
  - Import the Logged Data : Loads recorded Log Data.
  - Import the Stored Data : Loads Stored data.
- [View]
  - Hold Auto-Scroll : Prohibits auto-scrolling.
  - Actual size : Enlarges data screen to fit your screen.
  - Zoom-in : Zoom in on the data screen.
  - Zoom-ut : Zoom out on the data screen.
  - Show Guide : Indicates the guide line.
  - Show Table : Displays data list as a DB form on your right.
- [Windows]
  - Cascade : Cascades the opened windows to organize the working environment.
  - Tile Horizontal : Tiles the windows in horizontal direction.
  - Tile Vertical : Tiles the windows in vertical direction.
  - Arrange Icons : Organize the icons in grid formation.
- [Help]
  - About... : Displays software information.

[Toolbar(Quick Menu)]

 : Loads monitored data saved by a user

 **:** Save the data displayed on Data View screen as a DB file

 **:** Save the data on Data View screen, as Excel, text, and image file

 : Will attempt to connect with the equipment

 : Terminate connection

 : Equipment's basic setup

 : Start Real-Time monitoring

 : Save real-time data as a file

 : Imports logged data

 : Imports stored data from the equipment

 : Toggles chart's auto-scroll function

 : Make chart to fit screen

 : Zoom In

 : Zoom Out

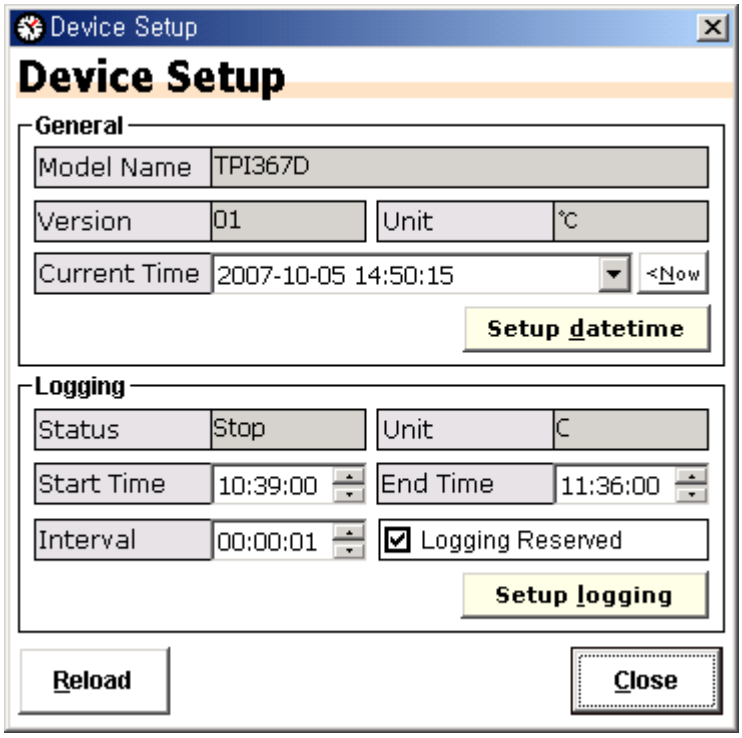
 : Toggles cross-line guide

 : Toggles data contents

 : Changes the program setup

Device Setup

If you click on [Meter]->[Device Setup] or Device Setup button from the quick menu, you will get the following screen.

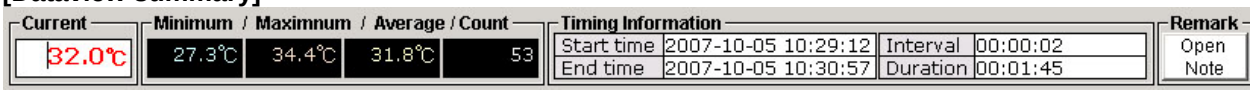


[General]
Model Name : Displays name of the model
Version : Displays the current version
Unit :
Current Time : Displays the current time
[setup datetime] : Setups date & time

[Logging]
Status : Displays current status
Unit :
Start Time / End Time : Setups the beginning & end time of the reservation time
Interval : Setups the data's time interval
Logging Reserved : Setups the reservation
[Setup logging] : Setups logging & reservation data
[Reload] : Reset
[Close] : Closes the setup window

Data View and Chart View

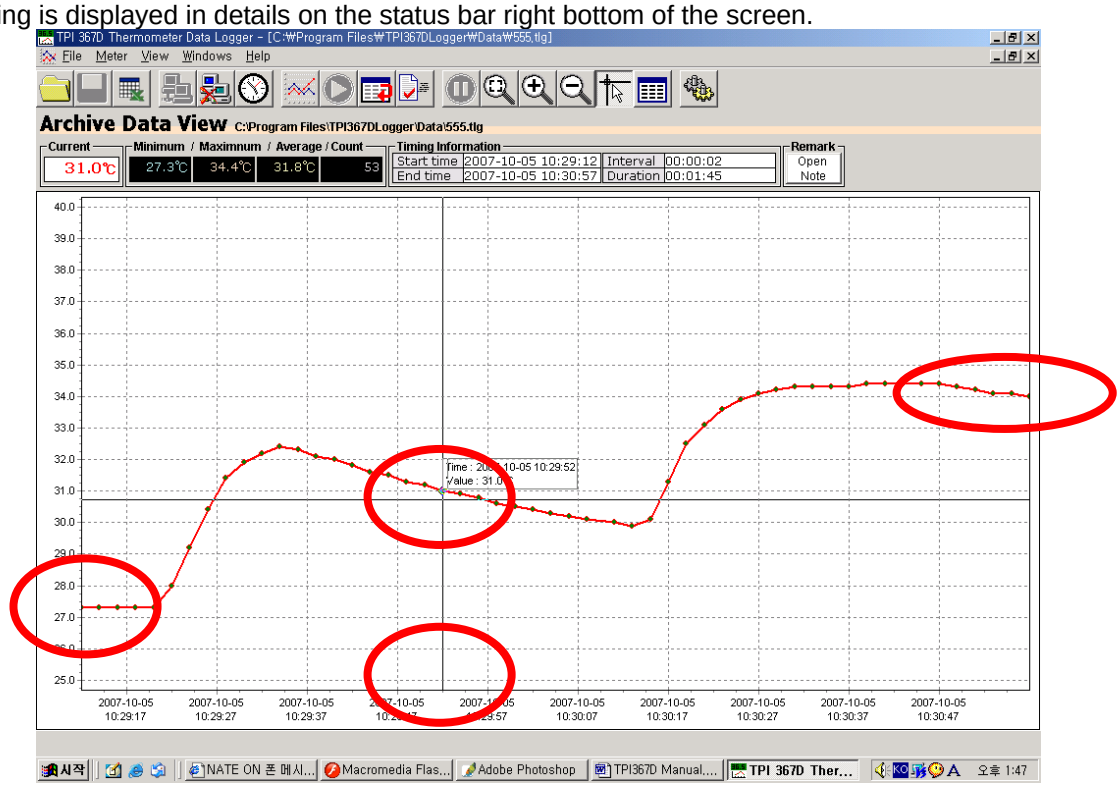
[Dataview summary]



[Current] shows temperature of the location where the mouse pointer indicates.
[Minimum / Maximum / Average / Count] shows the min. temperature and max. temperature and average temperature and count number.
[Timing Information] shows the time to start and finish recording, interval time between each counter and total recording time
[Remark] click the open Note and records the memo.

[Chartview details]

The cross guideline should appear according to the mouse cursor on the real time measurement mode or logging mode. This guide indicates measurement time and reading of each location and this reading is displayed in details on the status bar right bottom of the screen.

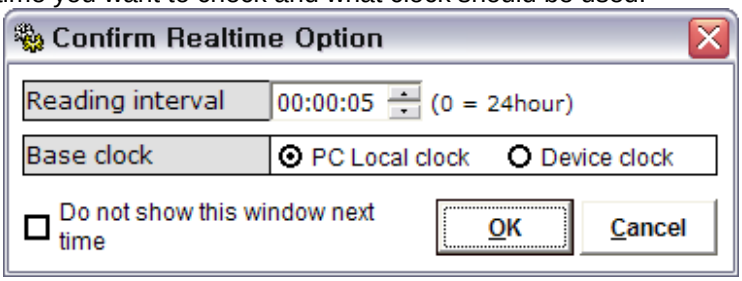


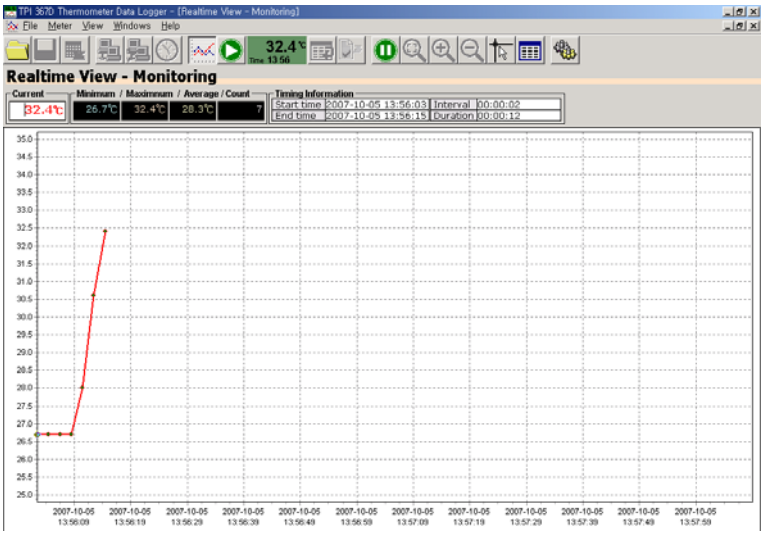
Here is the operation of the mouse.

- Click the left button : enlarge the scale by 50%
- Click the right button : reduce the scale by 50%
- Drag the left button from the left top to the right bottom : enlarge the selected area
- Drag the left button from the right bottom to the left top : initialize the scale
- Drag with the right button : scroll the chart

Real time monitoring

The following box should appear when the real time monitoring begins.
It asks per what time you want to check and what clock should be used.

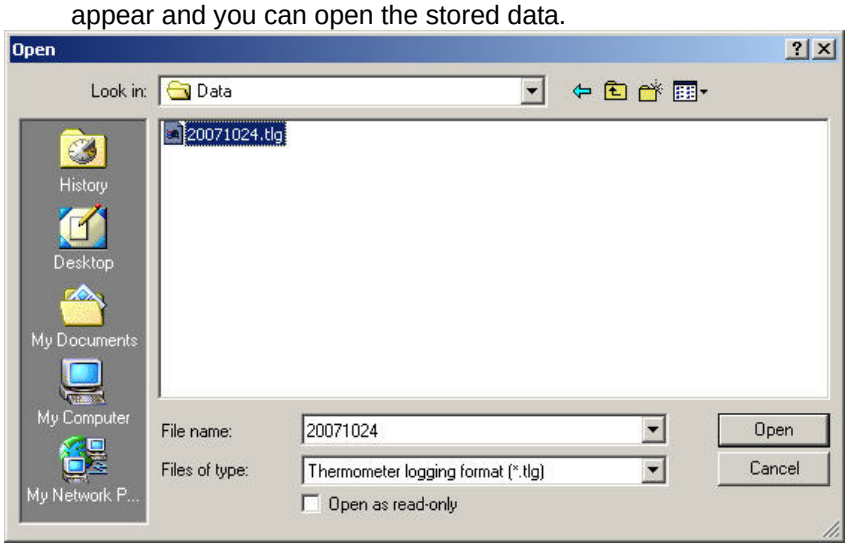




When you press the OK and recording begins and if you want to save the data as a file during recording, you can press  and set the file name and save the file.

Open logging data

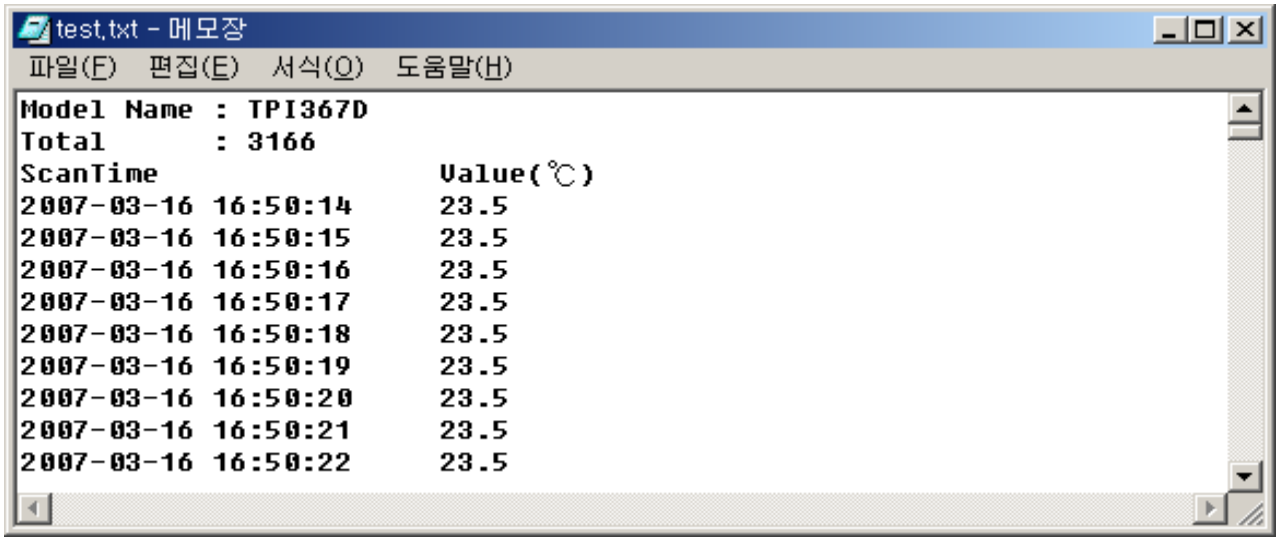
Click [File] -> open on the menu or click the open button on the tool bar, then the following box should appear and you can open the stored data.



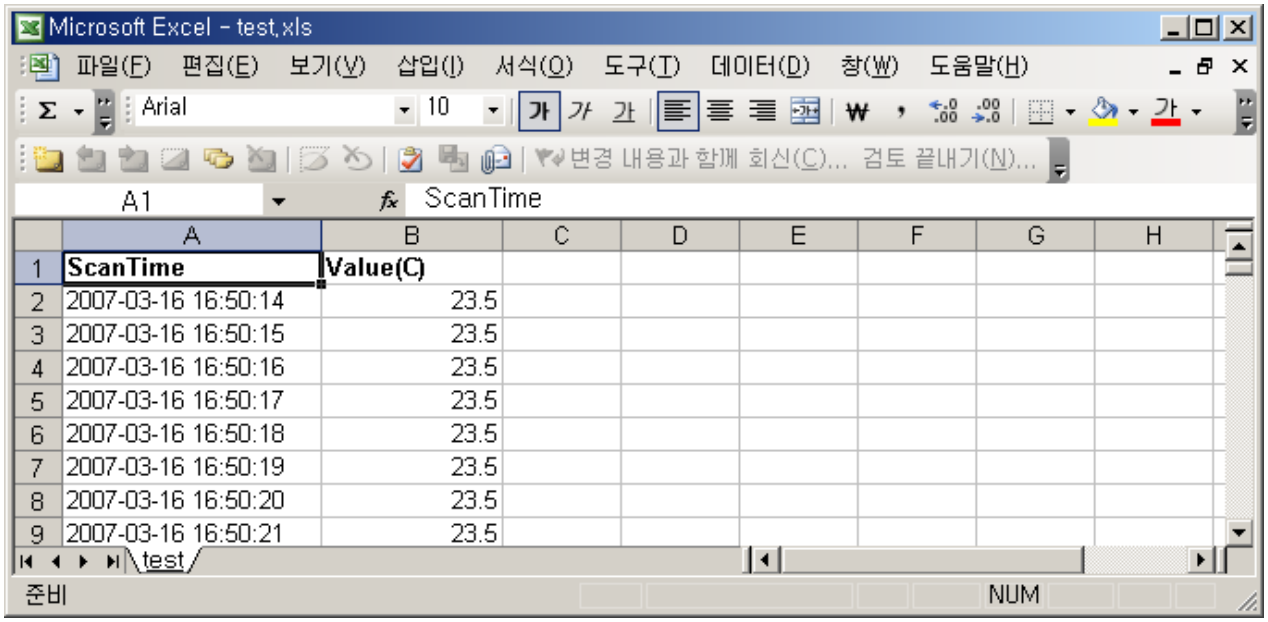
Save the data and chart image

Select [File]-> save on the menu or data save button on the tool bar, then you can keep saving the data on the real time data.

Save format is text format and excel format. The save data has a following format.



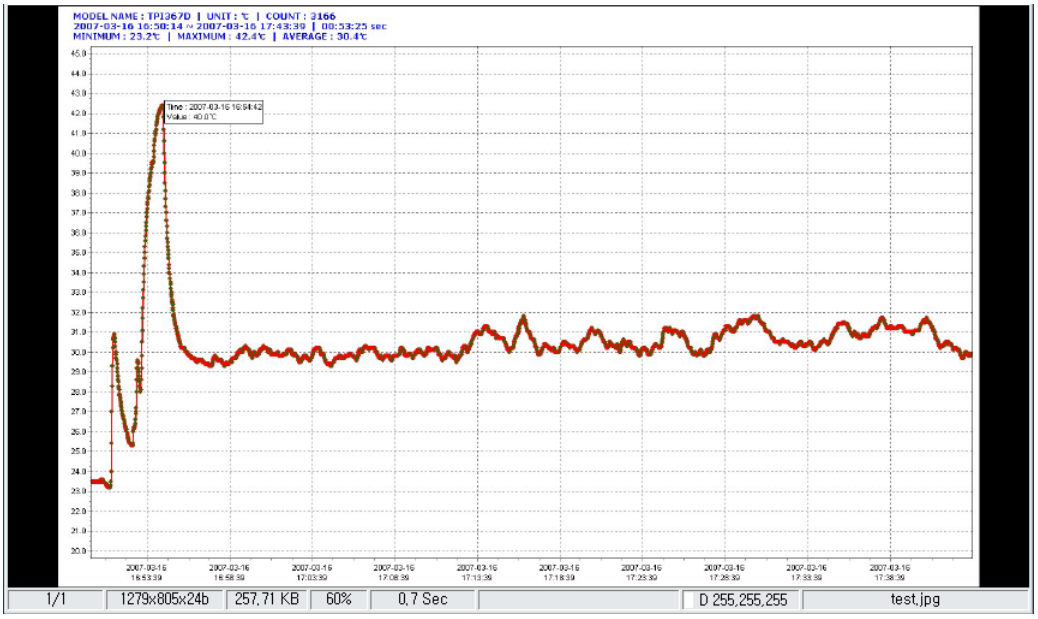
caution) In case of excel, you cannot save over 65000 data. In this case, the program ignores the excessive data automatically.

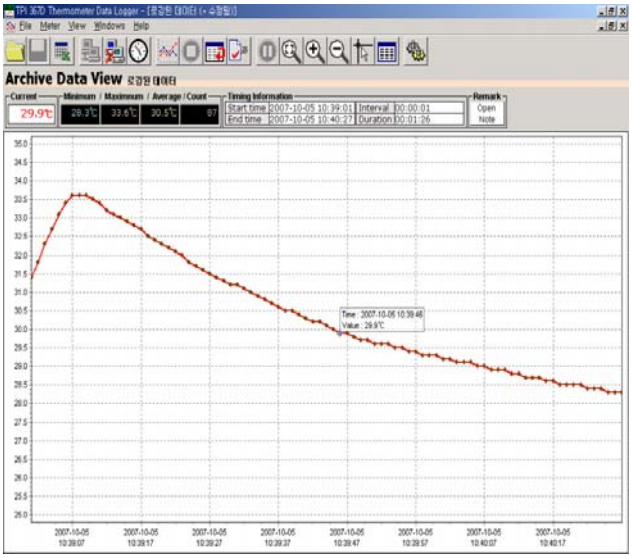


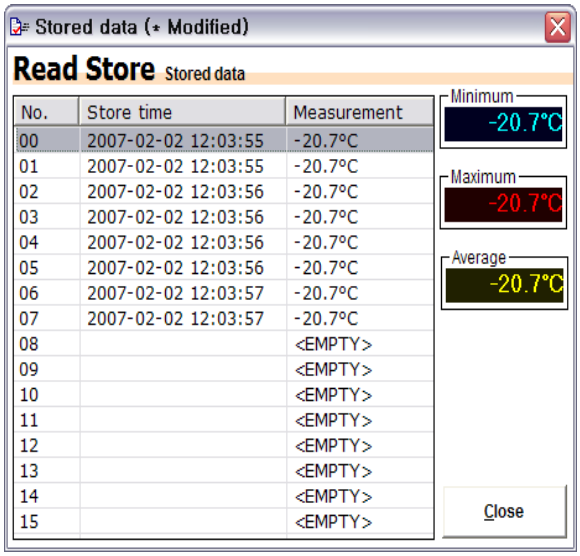
Select [File]->[Save image] on the menu or image save button on the tool bar, and the following dialog box should appear which asks for the save location and save format.

Enter the file name and select OK button.

You can open the file with the image view software.

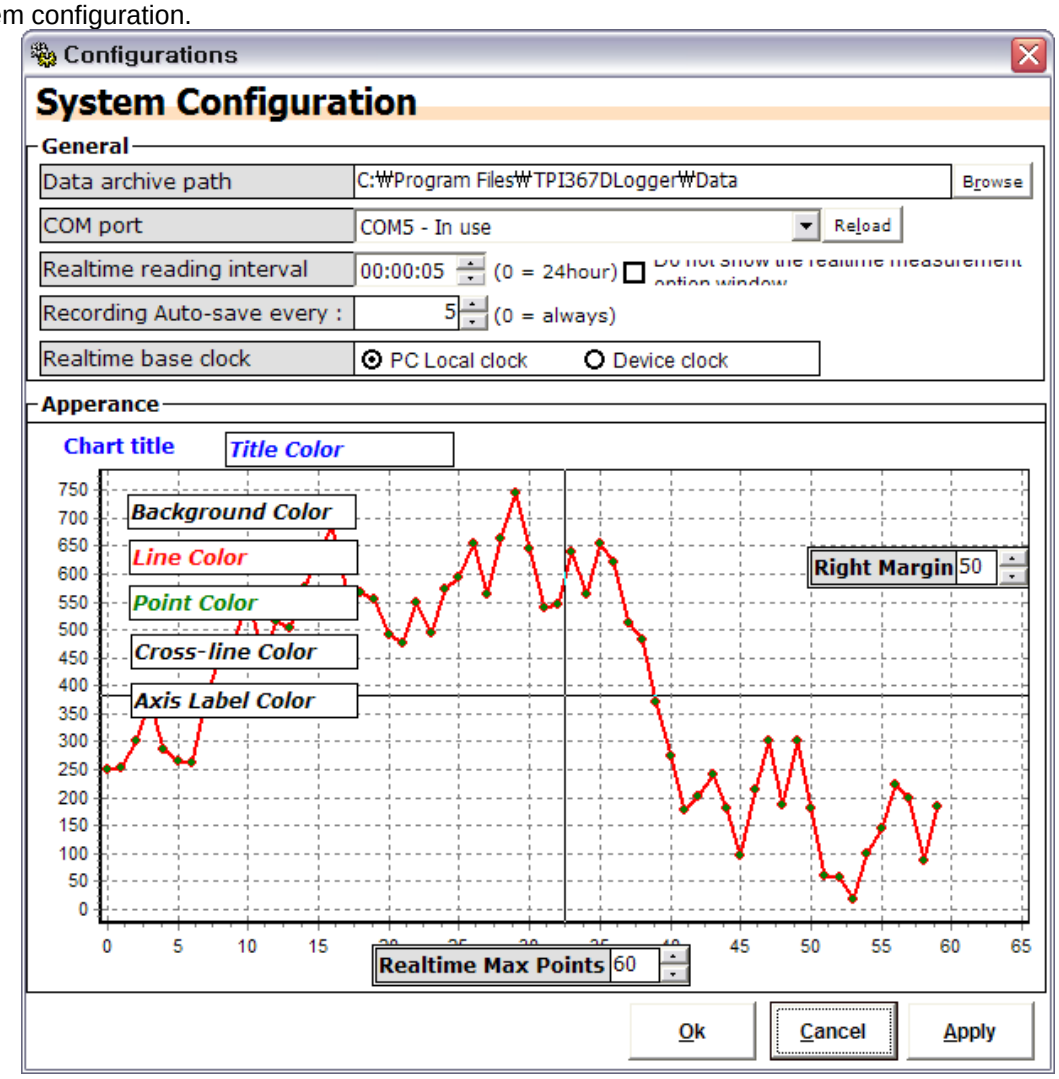






System Configuration

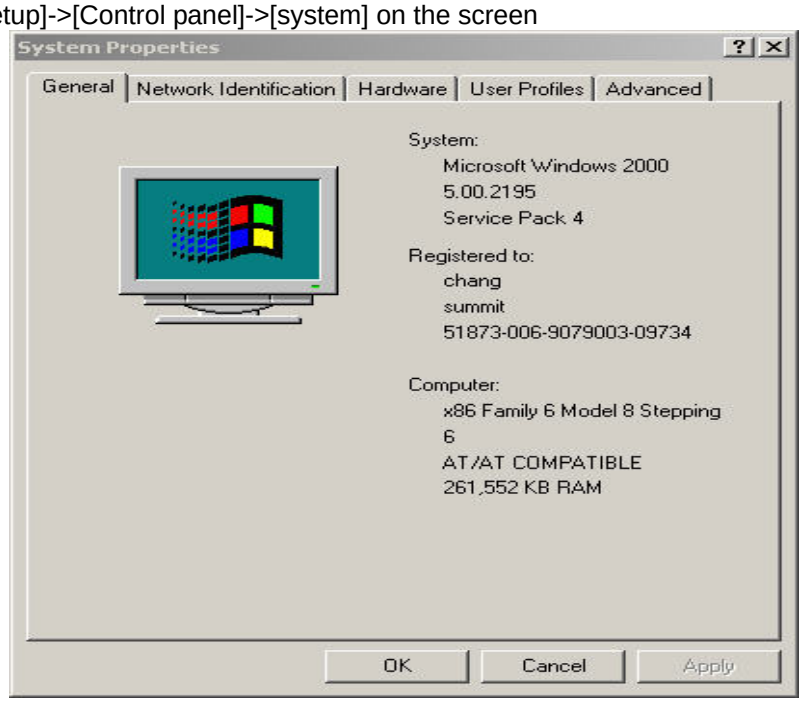
If you select [File]->configurations on the menus, the following window will appear and you can change the system configuration.



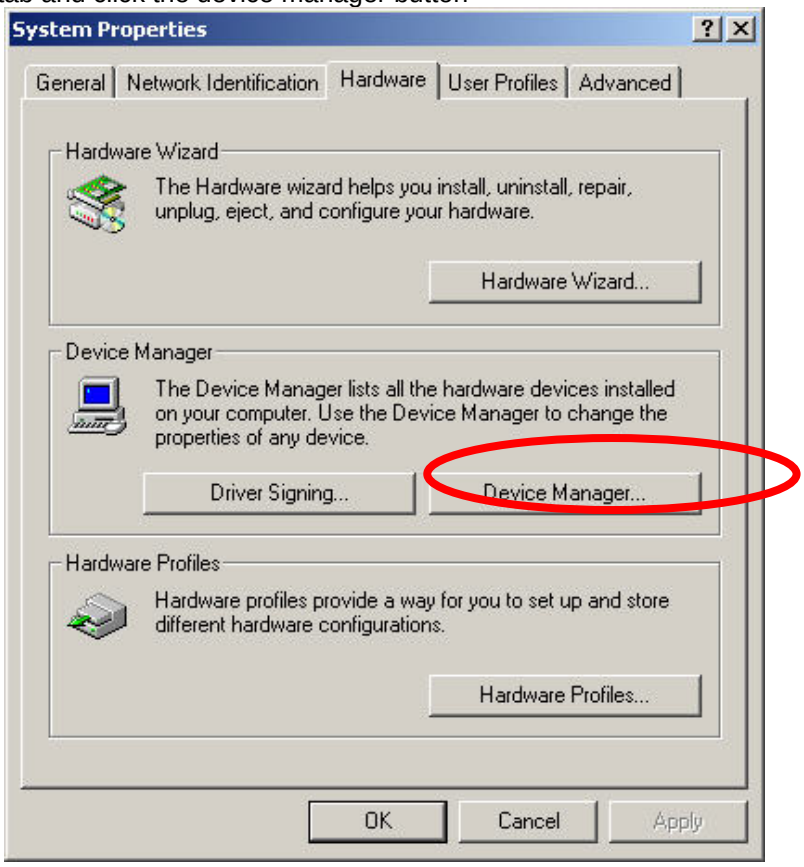
- Data archive path : click the [Browse] button and set the path to save the data.
- Com port : sets the serial port. If “Auto” is selected, the program searches for all possible available ports in the system and make a connection automatically. If not, it uses the setup port..
- Realtime reading interval : sets the recording time interval.
- Recording Auto-save every : sets the time for auto save function.
- Realtime base clock : sets the base clock to be recorded.
- Appearance : sets the color of the data view and maximum point of right margin on the real time record.

4. When the communication is not established

Select [Start]->[Setup]->[Control panel]->[system] on the screen

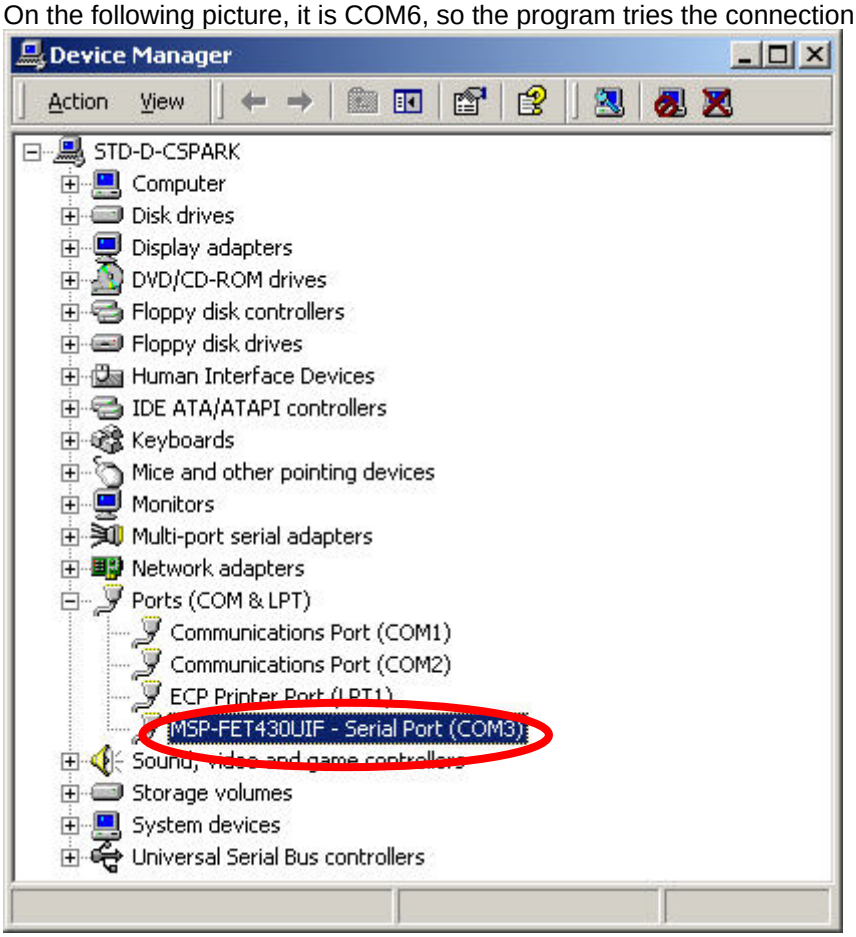


Click the hardware tab and click the device manager button



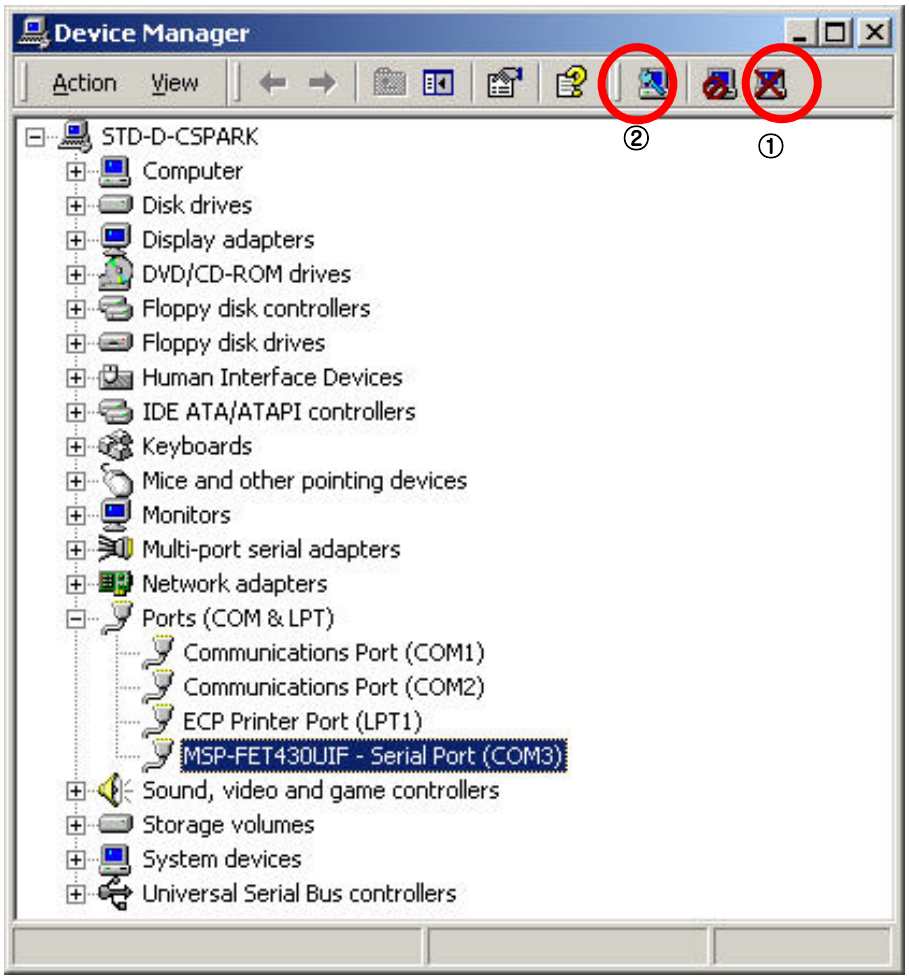
You can connect to the meter okay when there is a COMPort ‘ MSP-FET430UIF – Serial Port on the

port)COM & LPT).
On the following picture, it is COM6, so the program tries the connection with COM6.



1. If you cannot find the COM port ‘ MSP-FET430UIF – Serial Port’ , you should install the driver again.

2. If the connection is not made to COMPort‘ MSP-FET430UIF – Serial Port ’, select the correct COM Port.



Select ① [remove] and remove the registered one.

After it is finished, select ②