

Samwontech Integrated Monitoring System

User Manual



Introduction

Thank you very much for purchasing the product of our company.

This manual describes the methods of real time monitoring and remote monitoring of the our company products using SIMS software

Notification Regarding the Manual

- This user manual is a protected document with the publisher rights law.
- You may not copy, communicate to the public, distribute, translate or change to an unreadable format without the written permission of the Samwontech. Inc.
- Please make sure the final user keeps this manual and keep it at a place you can reach at any time.
- Please read the manual thoroughly before using the software.
- This manual is for providing details and directions on using the product and does not guarantee any other problems occurring.
- The contents of the software manual may be edited both with and without advance notification.
- Although the software manual is written with full effort, if you find any typing errors or omissions please notify the place of purchase or the sales department of the company.

About the Exemptions with the Product

- The company holds no guarantee or responsibility for any circumstances other than what is mentioned in the quality assurance.
- The company holds no responsibilities for any direct and indirect losses of a user or a third party, caused by an unexpected error or a natural disaster.

Revisions

January 2014 1st Edition

Consent to Software Copyright

Important – Please check before installing and using the product

- Please read thoroughly before installing the software. The user policy for a final SIMS user ("user policy") is a legal contract signed between the Samwontech Inc., software seller, a company with the using right and a user regarding the "software."
- Installing the "software" indicates that the user has fully read and understood the "user policy" and have agreed with it.

License Policy and Management

- I agree to use the "software" and the document only by the compliance with all laws of the region of use, including the terms related to the copyrights and other intellectual properties (not limited).
- This "Software" is subjected to protection by the copyright law and the program protection law and it cannot be modified, subjected to reverse engineering, decompiling or disassembling unless within the restriction boundary stated in relevant law. In addition, the device and relevant prints cannot be copied or distributed without a permission of Samwontech. Inc. in advance. If a damage has occurred in violation of the copyright act, Samwontech Inc. may claim and demand for compensation for any damages caused by the violation of copyrights.
- This "Software" cannot be rented, transferred, distributed or resold to another without a written permission (Email, Fax, etc.) of the Samwontech Inc.
- This "Software" is for the certain group of products of Samwontech Inc. and is provided as a free give for those who purchased the product.
- The right, ownership, authority and intellectual property right on this "Software" is held by Samwontech Inc. This software is under protection of the international copyright agreement.
- All problems that occur during installation and operation of this "Software" are at the user's discretion and risk.
- This "software" does not guarantee any errors, bugs, security and performance, and does not assure that all errors on the software will be modified.
- In case a user of the software violates the use agreement, the contract of using right automatically ends. No notification is required in such end of contract. A user can terminate the contract of using the software at any time by uninstalling (remove program) the software.

Products on which the Software Manual Applies

- TEMI Series : Temperature-Humidity programmable controller
- TEMP Series : Programmable controller
- TEMP2000M Series : Multiple channel programmable controller
- TEMP2000S Series : Thermal shock tester controller
- SDR100 Series : Digital Recorder

Content

CHAPTER 1. INTRODUCTION.....	7
1. 1. Main Screen and Menu of the Program	8
1. 1. 1 Main Screen	8
1. 1. 2 Main Menu and Tool Bar	10
1. 1. 3 SIMS Monitoring View	12
1. 1. 4 SIMS Properties	15
1. 1. 5 SIMS Information	16
1. 1. 6 Status Bar	17
1. 1. 7 Data Monitoring Screen	18
1. 2. Hardware Preparation	19
1. 2. 1 Preparation for Operation	19
1. 2. 2 Communication Environment Setting	23
CHAPTER 2. COMMUNICATION SETTING AND CONNECTION.....	25
2. 1. Communication Setup	26
2. 1. 1 SIMS options	26
2. 1. 2 Serial options	27
2. 1. 3 SIMS Connection Setting	28
2. 1. 4 Connection	29
CHAPTER 3. MONITORING AND CONTROL.....	30
3. 1. Monitoring Screen	31
3. 1. 1 SIMS whole view	31
3. 1. 2 SIMS split view	32
3. 1. 3 SIMS trend view	38
3. 2. Control and Setting	39
3. 2. 1 Operation motion Control	39
3. 2. 2 Parameter Setting	39
3. 2. 3 Set Pattern	40
3. 2. 4 Pattern Setting Screen for TEMP2000S Series	44

CHAPTER 4. SAVE AND CONVERT DATA.....	46
4. 1. Data Record	47
4. 1. 1 Recording On/Off	47
4. 2. Open Data	48
4. 2. 1 Open	48
4. 3. Convert Data	51
4. 3. 1 Save Text file	51
4. 3. 2 Save Excel file	52
4. 3. 3 Screen Capture	53
4. 4. Print	54
4. 4. 1 Print	54
4. 4. 2 Print Preview	55
4. 4. 3 Print Setup	56
4. 5. Data Upload	57
4. 5. 1 Data Upload	57
CHAPTER 5. DATA SEARCH.....	58
5. 1. Trend Data Search	59
5. 1. 1 Trend Data Search	59
5. 2. Zoom In and Zoom Out	60
5. 2. 1 Zoom In	60
5. 2. 2 Zoom Out	60
5. 2. 3 Zoom fit	61
5. 2. 4 Set trend data area	61
5. 3. Graph Investigation	62
CHAPTER 6. TREND VIEW AND SCREEN SETTING.....	63
6. 1. Trend Direction Setting	64
6. 1. 1 Trend horizontal	64
6. 1. 2 Trend vertical	64
6. 2. Time Bar Setting	65

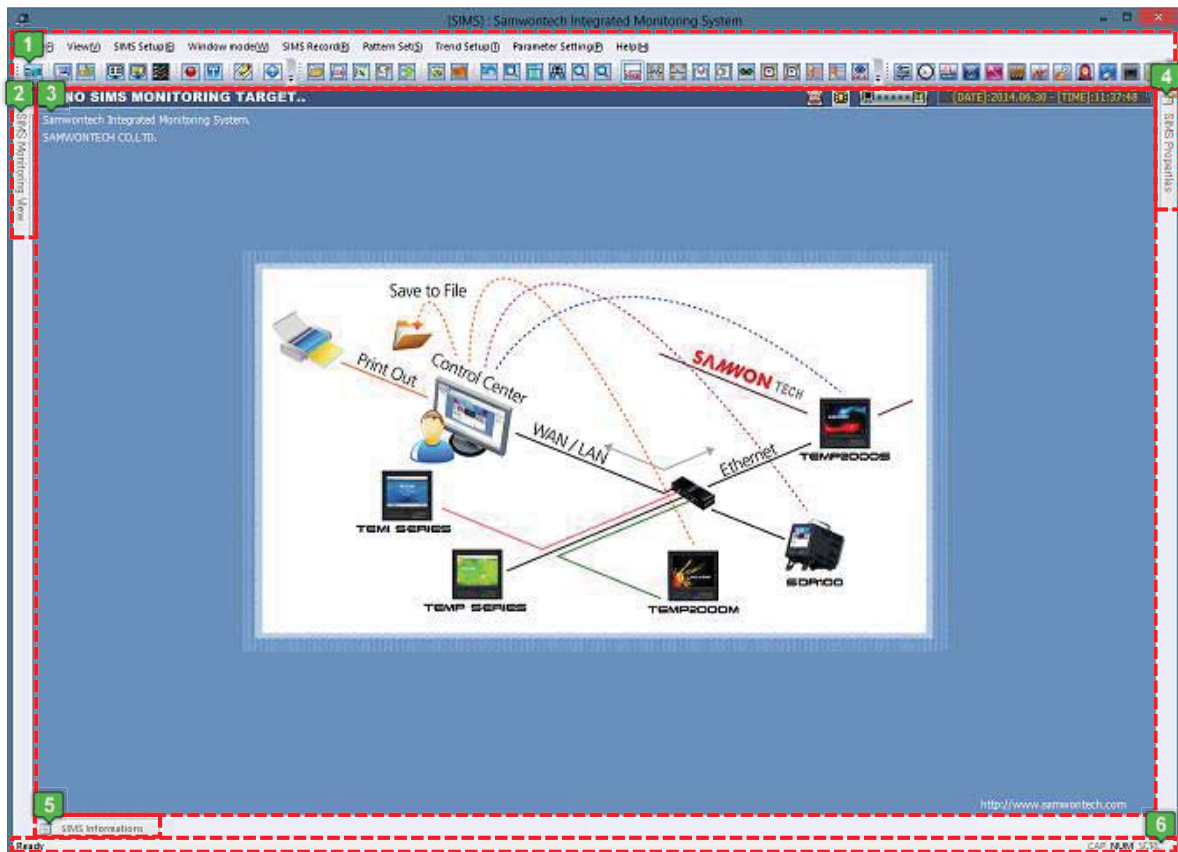
6. 2. 1 Time dense Inc	65
6. 2. 2 Time dense Dec	65
6. 3. Scale Bar Setting	65
6. 3. 1 Range dense Inc	66
6. 3. 2 Range dense Dec	66
6. 4. Trend data view mode	67
6. 4. 1 View all data area	67
6. 4. 2 View Data Section	67
6. 5. Display setup	68
6. 5. 1 SIMS Channel Color	69
6. 5. 2 Background : Trend View Color	70
6. 5. 3 Grid Color	70
6. 5. 4 Text Color	70
6. 5. 5 Trend View Mode	71
6. 5. 6 Background : SIMS Properties	71
6. 5. 7 Apply Background Image	71
6. 5. 8 Transparency	72
6. 5. 9 Grid setup	73
6. 5. 10 Digital View Background Color	74
 CHAPTER 7. SERVER & CLIENT.....	 75
 7. 1. Introduction	 76
 7. 2. Main Features	 76
 7. 3. Initial Screen and Functions of Server and Client	 77
7. 3. 1 Server & Client Initial Screen	77
7. 3. 2 Communication Setting – Authorized Account Setting	79
7. 3. 3 Link Monitoring	80
 7. 4. Start Server Mode	 84
 7. 5. Remote Monitoring Access in Client Mode	 84

Chapter 1. Introduction

1. 1. Main Screen and Menu of the Program

1. 1. 1 Main Screen


The main screen of this program consists of the data output screen, where the data from connected device is viewed, monitoring view, which shows list of devices, status window, which provides various information, property window, where you can change properties of each channel, and the user command menu.

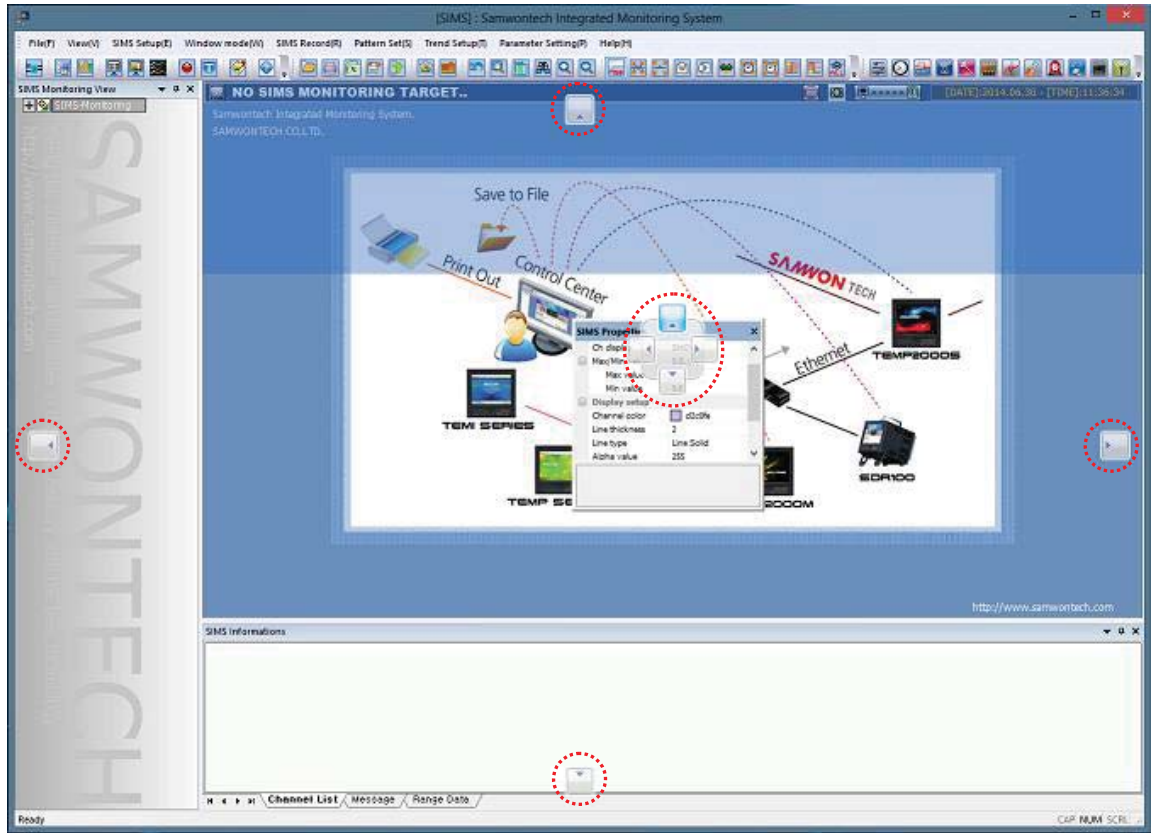


[Diagram 1 – 1] Initial Screen

1	Main menu and tool bar
2	SIMS Monitoring View
3	Data Output Screen
4	SIMS Property
5	SIMS Information
6	Status Bar

User Interface

You can freely move among each view and also fix at one of them. You can fix the screen by dragging a window towards the  icon.










[Diagram 1 – 2] Free Translation of View Window

1. 1. 2 Main Menu and Tool Bar

The program consists of the main menu at the top of the screen, the sub menus that belong to each relevant main menu and a tool bar that allows quick application of each function. The following describes each menu and tool bar.





File

Menu	Tool Bar	Function
Open		Open a saved file
Save text file		Save as text file
Save excel file		Save as excel file
Data upload		Upload data saved in internal memory
Screen capture		Save current page as image file
File information		View information on selected SIMS
Print		Print data output
Print preview	•	Preview page to be printed
Print setup	•	Set options for printer and printing
Exit	•	Exit program




View

Menu	Tool Bar	Function
Docking Window	•	Show / Hide each docking window
Program theme	•	Change program theme
Status bar	•	Show / Hide status bar



SIMS Setting

Menu	Tool Bar	Function
SIMS Connect		Connect Communication
SIMS Disconnect		Disconnect communicate
Connection setup		Communication connection setting
Display setup		Screen setting

Window mode

Menu	Tool Bar	Function
SIMS whole view		View all connected devices
SIMS split view		View details of selected device
SIMS trend view		Trend view selected device

SIMS Record

Menu	Tool Bar	Function
Recording On/OFF		Start / Stop recording data
Tracking mode On/Off		Turn tracking mode on / off

Pattern Setting

Menu	Tool Bar	Function
.		Set SIMS pattern

Trend Setting

Menu	Tool Bar	Function	
Trend message On/Off		Show / hide message	
Trend data search		Search data section	
View all channel On/Off		View max. / min. values for all / selected channels	
Set trend data area		Select a data section on graph	
Set time bar Abs/Inc		View absolute / comparative time	
Trend view mode	Trend horizontal		View graph horizontally
	Trend vertical view		View graph vertically
Time dense Inc/Dec	Time dense Inc		Expand time bar grid
	Time dense Dec		Reduce time bar grid
Range dense Inc/Dec	Range dense Inc		Expand min / max value of data
	Range dense Dec		Reduce min / max value of data
Trend data view mode	View all data area		View full graph
	View data section		View a part of graph
Zoom in / out	Zoom in		Zoom in graph
	Zoom out		Zoom out graph
	Zoom fit		Zoom in a selected interval
	Zoom fit undo		Cancel zoom in a selected interval

Parameter Setting

Menu	Tool Bar	Function
Function Set		Setting for additional function and operation method
Reserve Set		Setting for current time, programmed operation time
Time Signal set		Setting for time signal
Wait Set		Setting for waiting motion
Input Set		Setting for input sensor type and sensor input
Output Set		Setting for output type and output
Inner Signal setting		Setting for inner signal
ON/OFF Signal setting		Setting for ON/OFF signal
Alarm Signal Setting		Setting for alarm signal
PID Group Set		Setting for PID
DO Config Set		Setting for I/O board relay output signal
DI Config Set		Setting for user BMP screen

Help

Menu	Tool Bar	Function
SIMS Information		SIMS Information

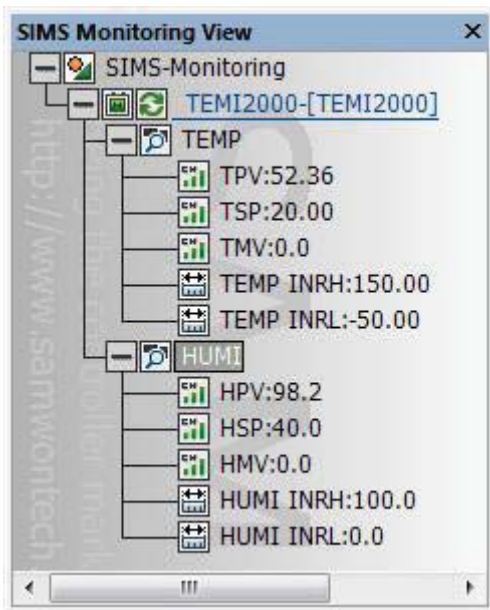
1. 1. 3 SIMS Monitoring View

You can view the list of connected devices. You can check if there are any problems with communicating with devices and also see the command values and channel information. When you click on a device that is connected to view, the data output screen will show the details.

Icon Descriptions for Monitoring View

Icon	Description
	Show when a TEMP Series is connected.
	Show when a TEMI Series is connected
	Show when a TEMP2000M Series is connected
	Show when a TEMP2000S Series is connected
	Show when a SDR 100 Series is connected
	Show on normal Communication status
	Show when the Communication is not normal or in case of file data.

TEMI Series



TEMP

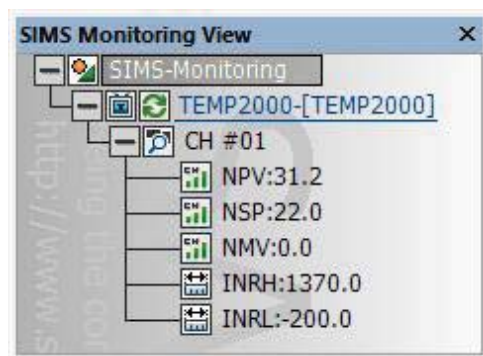
- TPV : Current temperature data
- TSP : Set temperature data
- TMV : Current output amount
- TEMP INRH : Upper limit of data value
- TEMP INRL : Lower limit of data value

HUMI

- HPV : Current humidity data
- HSP : Set humidity data
- HMV : Current output amount
- HUMI INRH : Upper limit of data value
- HUMI INRL : Lower limit of data value

[Diagram 1 - 2] TEMI Series

TEMP Series

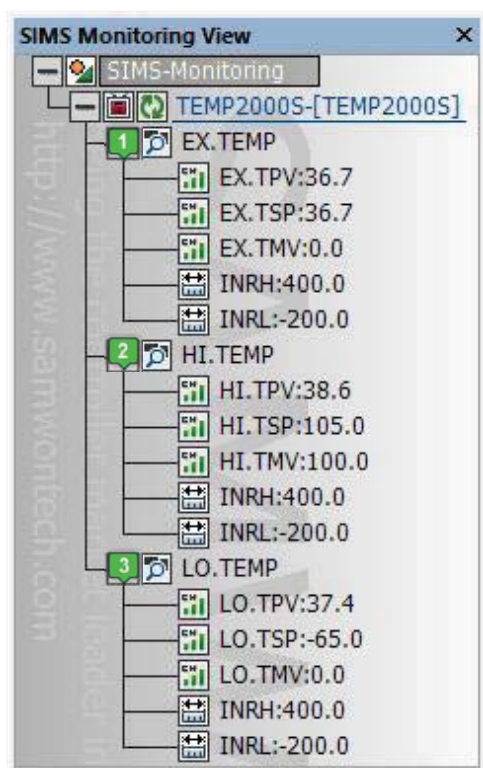


[Diagram 1 - 3] TEMP Series

- NPV : Current temperature data
- NSP : Set temperature data
- NMV : Current output amount
- INRH : Upper limit of data value
- INRL : Lower limit of data value

※ Two channels are given for TEMP2020 Series

TEMP2000S Series



[Diagram 1 - 4] TEMP2000S Series

1 EX.TEMP

- EX.TPV : Current experimental temperature data
- EX.TSP : Set experimental temperature data
- EX.TMV : Current experimental output amount
- INRH : Upper limit of data value
- INRL : Lower limit of data value

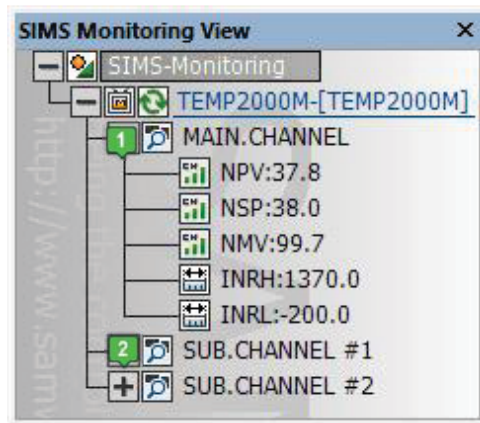
2 HI.TEMP

- HI.TPV : Current high-temp. temperature data
- HI.TSP : Set high-temp. temperature data
- HI.TMV : Current high-temp. output amount
- INRH : Upper limit of data value
- INRL : Lower limit of data value

3 LO.TEMP

- LO.TPV : Current low-temp. temperature data
- LO.TSP : Set low-temp. temperature data
- LO.TMV : Current low-temp. output amount
- INRH : Upper limit of data value
- INRL : Lower limit of data value

TEMP2000M Series



1 Main Channel

2 Sub Channel

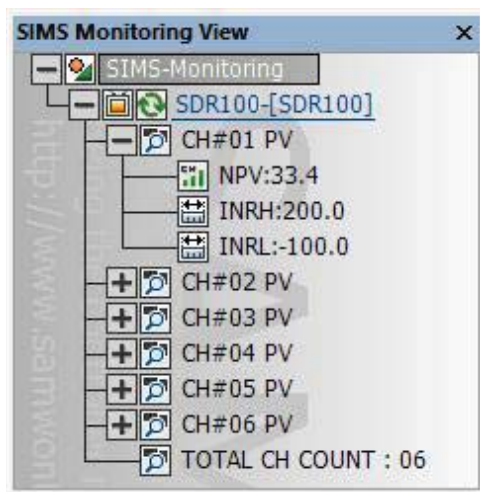
- NPV : Current temperature data
- NSP : Set temperature data
- NMV : Current output amount
- INRH : Upper limit of data value
- INRL : Lower limit of data value

※ Sub channel group and the main channel are the same

※ Number of channels may vary depending on the device

[Diagram 1 - 5] TEMP2000M Series

SDR100 Series



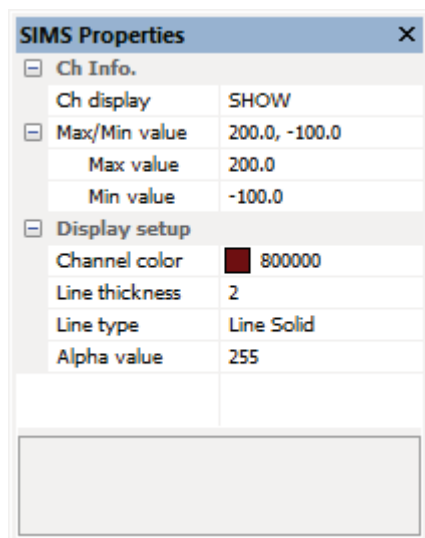
- NPV : Current temperature data
- INRH : Upper limit of data value
- INRL : Lower limit of data value
- TOTAL CH COUNT : Total number of channels

※ Number of channels may vary depending on the device

[Diagram 1 - 6] SDR100 Series

1. 1. 4 SIMS Properties

You may change the view setting for each channel, upper and lower limit values, channel colors in trend view, line thickness, line type and transparency of each connected devices.



Ch Info

Ch display : Show / Hide channel

Max/Min value

Max value : Set upper limit for data value

Min value : Set lower limit for data value

Display setup

Channel color : Change Channel color (graph)

Line thickness : Change thickness of graph line

Line type : Change type of graph line

Alpha value : Change transparency of graph line

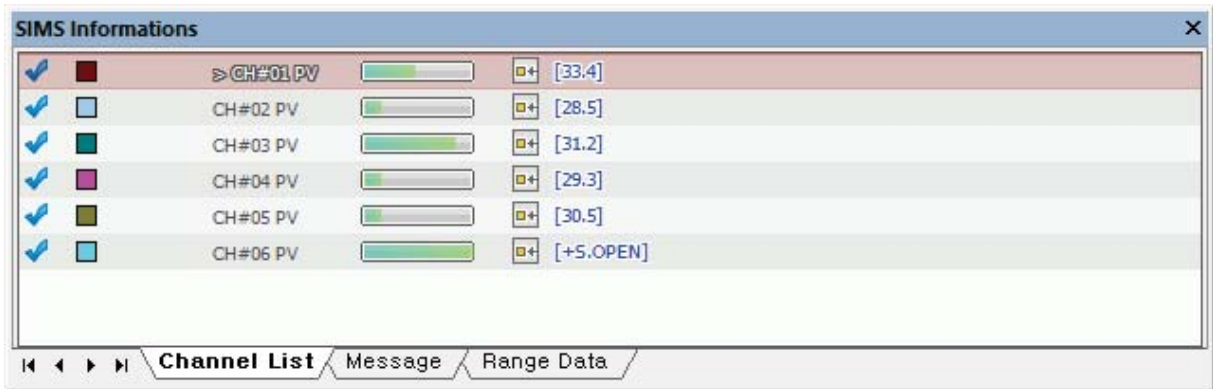
[Diagram 1 - 7] SIMS properties

1. 1. 5 SIMS Information

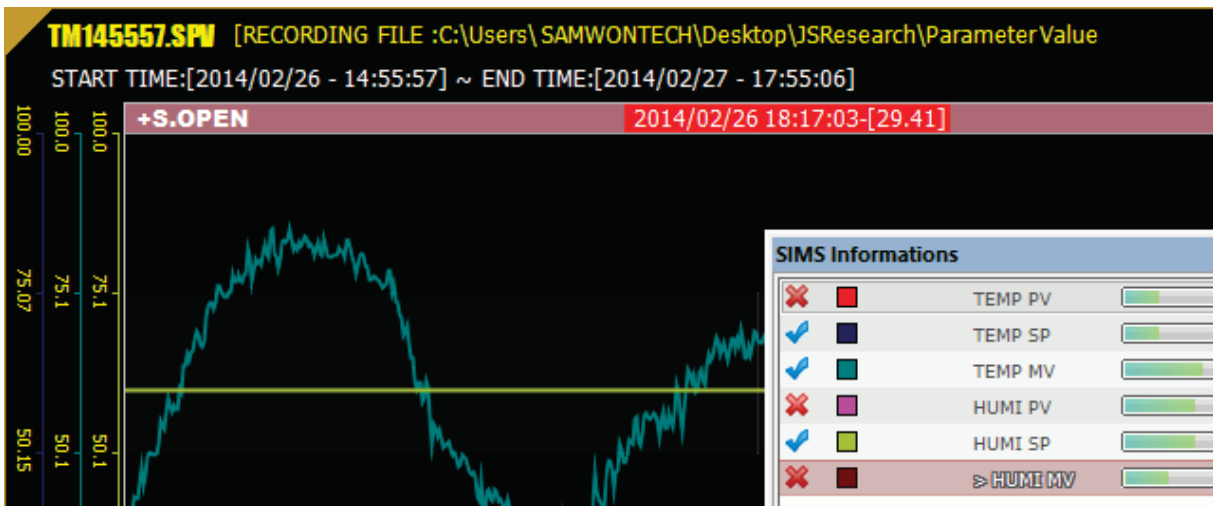
It gives information on each channel and show data or selected section and messages.

Channel List

You can select channels and use [✓] or [✗] to hide or show the graph of each selected channel.



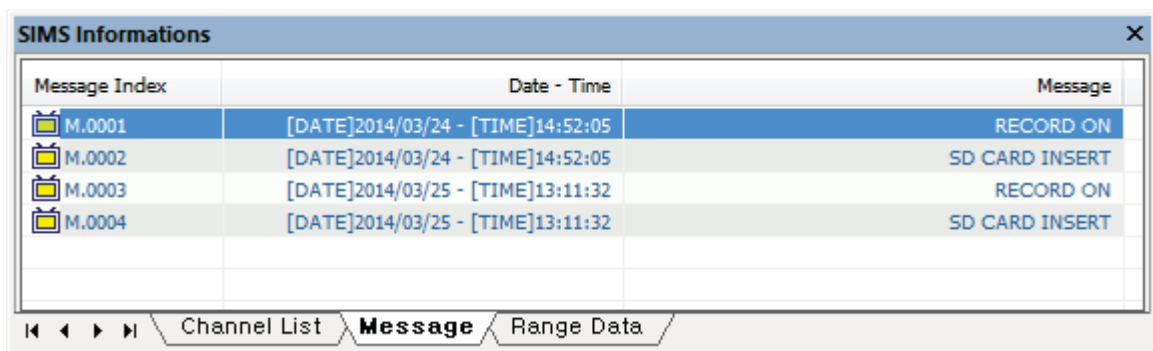
[Diagram 1 - 8] SIMS Channel List



[Diagram 1 - 9] Select channels to show

Message

Shows message alerts during monitoring and you can move to the point where the message occurred in trend view by clicking on the message.



[Diagram 1 - 10] Message

Range data

Use the function of [5. 2. 4 View selected interval] to view the data in selected interval.

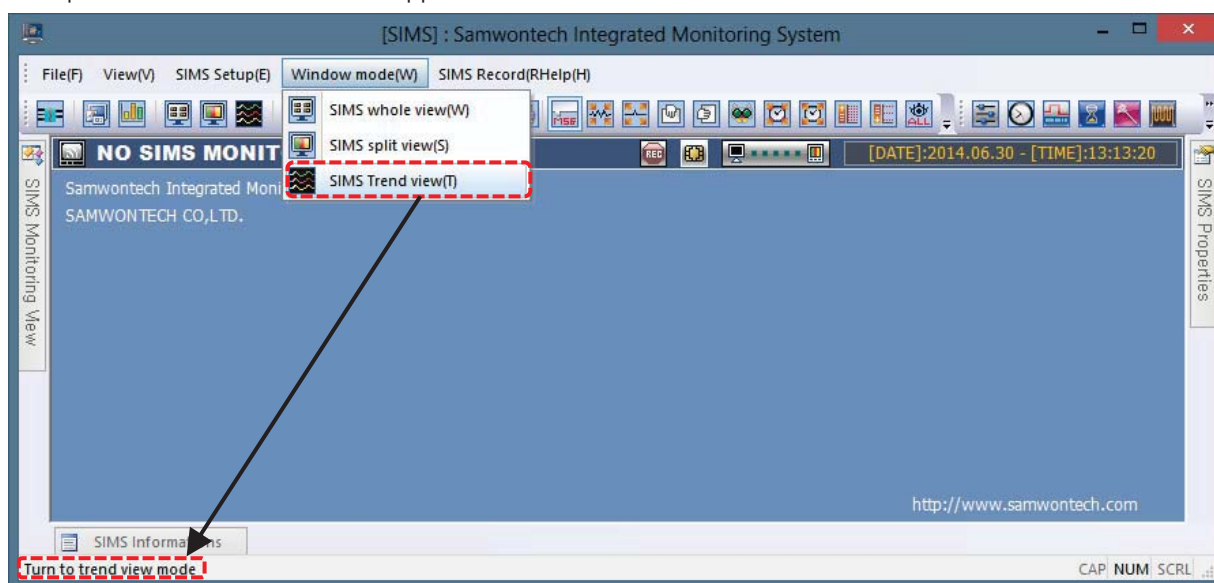


No.	Time	CH#01 PV	CH#02 PV	CH#03 PV	CH#04 PV	CH#05 PV	CH#06 PV
Index. 11	2014/03/18 - 15:22:44	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 12	2014/03/18 - 15:22:45	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 13	2014/03/18 - 15:22:46	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 14	2014/03/18 - 15:22:47	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 15	2014/03/18 - 15:22:48	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 16	2014/03/18 - 15:22:49	33.4	28.5	31.2	29.3	30.5	+S.OPEN
Index. 17	2014/03/18 - 15:22:50	33.4	28.5	31.2	29.3	30.5	+S.OPEN

[Diagram 1 - 11] Range data

1. 1. 6 Status Bar

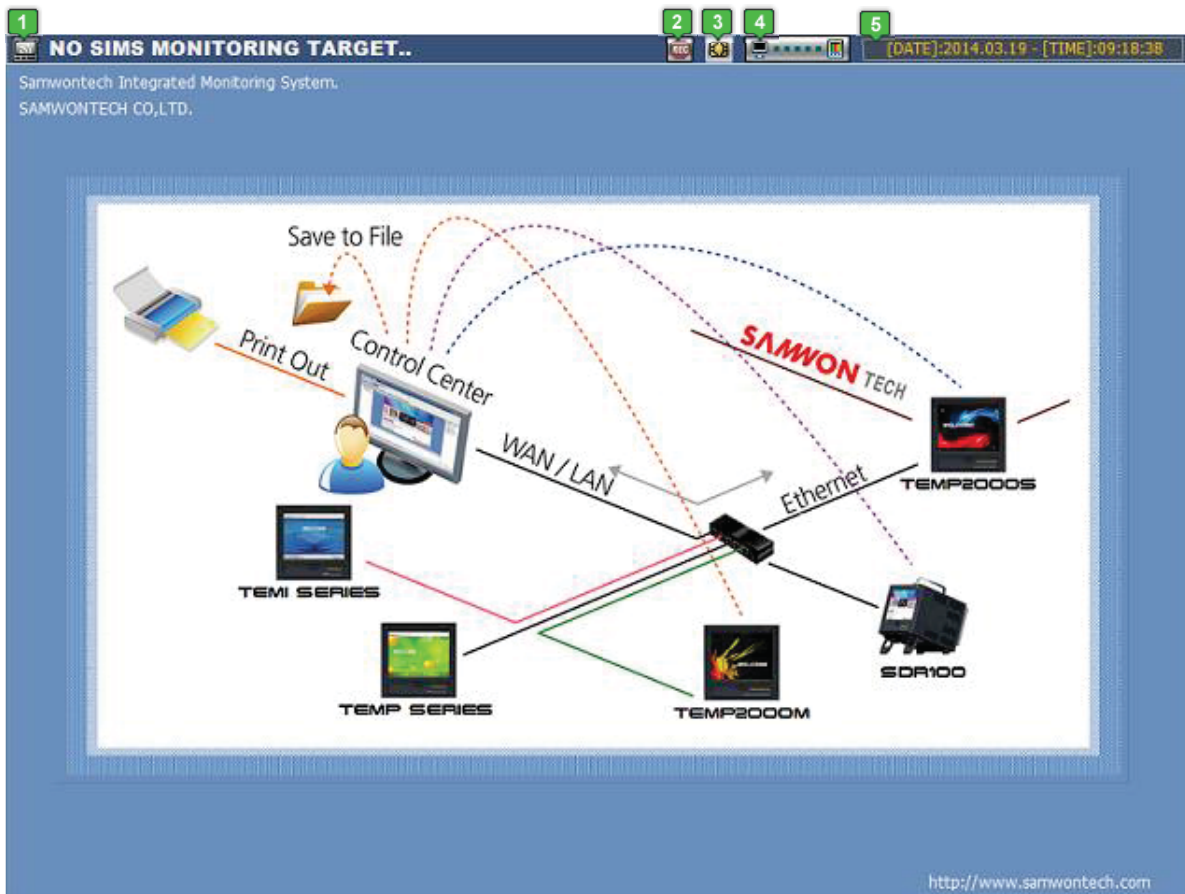
It provides brief descriptions on each menu and functions of tool bar. As in [Diagram 1 - 12], the descriptions on menu and tool bar appear on the status bar.



[Diagram 1 - 12] Status Bar

1. 1. 7 Data Monitoring Screen

It is a screen for showing data of connected device or saved data.



[Diagram 1 – 13] Data monitoring screen

1	Shows name of the currently connected device or opened file
2	Shows the recording status of currently connected device
3	Shows whether memory card is inserted on currently connected device
4	Shows the connection state of currently connected device
5	Shows current date and time

1. 2. Hardware Preparation

1. 2. 1 Preparation for Operation

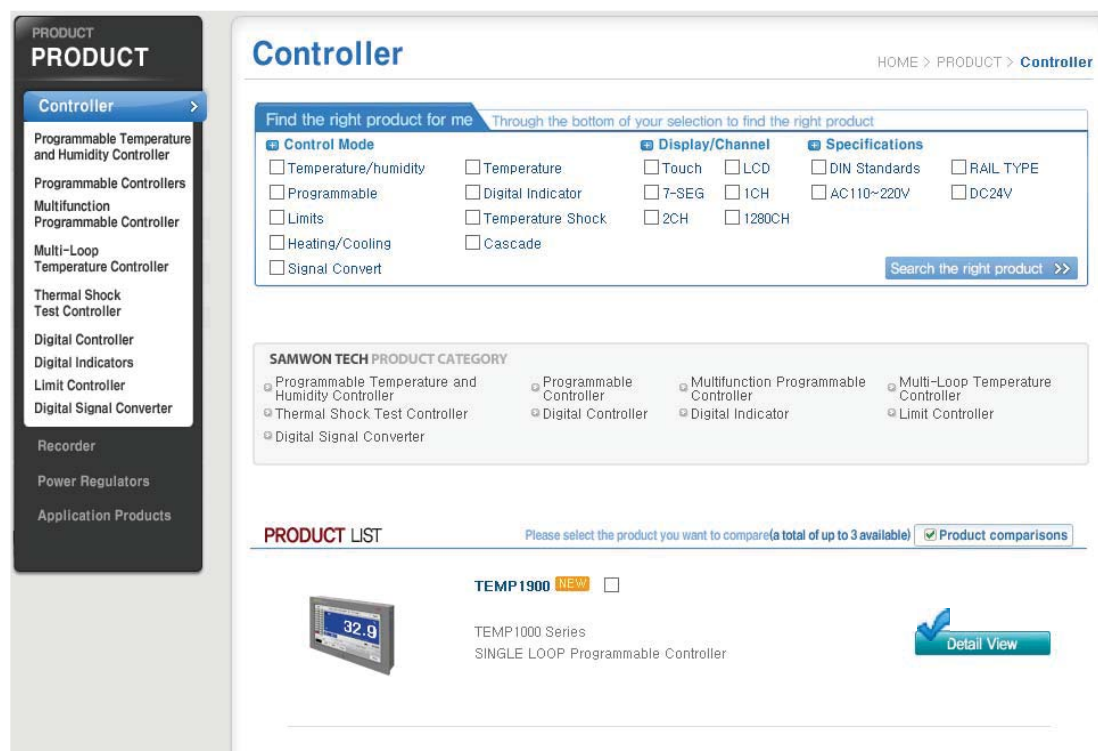
This program is software for PC for a real time monitoring on a product of Samwon Tech Inc. The monitoring of a device is operated through a Communication with the device, so for a proper monitoring, setting for cable and other environment for Communication are required in advance.

Installing Program

Download the latest version of the program from the website (www.samwontech.com) and start installation

Select a file and install the program.

☞ Homepage -> Product -> Controller



PRODUCT
PRODUCT

- Controller >
- Programmable Temperature and Humidity Controller
- Programmable Controllers
- Multifunction Programmable Controller
- Multi-Loop Temperature Controller
- Thermal Shock Test Controller
- Digital Controller
- Digital Indicators
- Limit Controller
- Digital Signal Converter
- Recorder
- Power Regulators
- Application Products

Controller HOME > PRODUCT > Controller

Find the right product for me Through the bottom of your selection to find the right product

Control Mode

- Temperature/humidity
- Programmable
- Limits
- Heating/Cooling
- Signal Convert

Display/Channel

- Temperature
- Digital Indicator
- Temperature Shock
- Cascade

Specifications


- Touch
- LCD
- DIN Standards
- AC110~220V
- RAIL TYPE
- DC24V

SAMWON TECH PRODUCT CATEGORY

- Programmable Temperature and Humidity Controller
- Thermal Shock Test Controller
- Digital Signal Converter
- Programmable Controller
- Digital Controller
- Multifunction Programmable Controller
- Digital Indicator
- Multi-Loop Temperature Controller
- Limit Controller

PRODUCT LIST Please select the product you want to compare(a total of up to 3 available) Product comparisons

TEMP1900 NEW

 TEMP1000 Series
SINGLE LOOP Programmable Controller

