Energy Saving Data Collecting Server
EcoWebServerIII
MODEL

MES3-255C-EN/MES3-255C-DM-EN

User's Manual (Operating)

- Before operating the instrument, you should first read thoroughly this operation manual for safe operation and optimized performance of the product.
  Deliver this user's manual to the end user.

Table of Contents

1. Preface

Thank you for purchasing Mitsubishi's Energy Saving Data Collecting Server (EcoWebServerIII).
This instruction manual is intended for users who know how to operate a PC and browsers, and describes how to use EcoWebServerIII to display measuring graphs, current values, and other data in browser.
Read this manual carefully and use the product properly.
After you read this manual, keep this manual in an accessible place for future reference whenever needed.
Make sure that the manual is delivered to the end user.

For information on how to set EcoWebServerIII, see **Instruction Manual - Setting**.
For information on how to handle the main unit of EcoWebServerIII, see **Instruction Manual - Hardware**.

Instruction Manual	Document No.
Instruction Manual – Hardware (with Demand function)	IB63895
Instruction Manual – Hardware	IB63652
Instruction Manual – Setting	IB63919

1.1 General Notes

1.1.1 Warranty

- For technical support or inquiries on the product, contact your nearest Mitsubishi office or dealer.
- This document and product have undergone strict quality control and inspection before delivery, but in the unlikely event that the document or product is defective in manufacture, our company shall provide replacement. Contact the distributor from which you purchased them. However, this warranty does not apply to the product or document that has been damaged by acts of God or misapplication.
- Our company shall not be liable for any damages arising out of your or third parties' system troubles, legal problems, misapplication, failures during use, or any other defects.
- The product is warranted for a period of less than one (1) year from the date of your purchase or from the date of delivery to your specified location or within eighteen (18) months from the date of shipment from our factory (from the month and year of manufacture), whichever is less.
  However, the charge-free warranty shall not apply to the following cases even during the charge-free warranty period:
  (1) When the cause is an improper usage
  (2) When the cause is an improper operation
  The charge-free warranty becomes invalid at the expiration of the charge-free warranty period.
- The warranty period shall not be renewed after repair.

1.1.2 Trademarks

- Microsoft, Windows, Microsoft Edge, and Internet Explorer are registered trademarks of Microsoft Corporation in the United States and other countries.
- Java is a registered trademark of Oracle Corporation and its subsidiaries and affiliates in the United States and other countries.
- iOS is a trademark or registered trademark of Cisco in the United States and other countries, and is used under license.
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- Safari is a registered trademark of Apple, Inc. in the United States and other countries.
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- MODBUS is a trademark of Schneider Electric USA Inc.
- Other company and product names herein are trademarks or registered trademarks of their respective owners.
- Trademark symbols such as "TM", "®" etc. may not be specified.

1.2 Safety Precautions

Please read EcoWebServerIII **Instruction Manual - Hardware**.

1.3 Precautions for Use

Before you display data on your PC, pay attention to the following points:

- If you have any questions about the installation, setting and other technical matters of PC network, web browsers, and Java plug-ins, contact your network administrator (or appropriate department). We do not offer technical support for the above.
- If you have changed any display-related settings, such as a measure point name, make sure to close the web browser being displayed and restart it. Otherwise the change may not be updated due to the cache function of the Web browser.
- When needed for keeping system security against illegal access from outside, users should take proper measure. We do not assume responsibility for any trouble arising from illegal access.
  We recommend users to note the followings.
  1) Use LAN for preventing illegal access from outside.
  2) Take measures like firewall and VPN when connecting internet.
  3) Before using, change the default account (login ID, password).
  Set the account so as not to leak the accont information according to the following precautions.
  Avoid using simple string like Name, birth date and numbers.
  Set the complex loging ID and password at least 8 characters by mixing uppercase or lowercase alphanumeric characters.

1.4 Main Features and Functions of Energy Saving Data Collecting Servers

1.4.1 Features

- With the browser on your PC connected via LAN, you can display data (such as Energy, current, and specific consumption) collected by Energy Saving Data Collecting Server (EcoWebServerIII).
- You can display the data on multiple (up to five) PCs simultaneously.
  *1 When a timing of display update is overlapped on more than one PC, you may fail to be updated. In such case, display it again.
  *2 The number of PCs at the same time varies depending on the browser version or type you use.
- You can download collection data stored in EcoWebServerIII to your PC.
- You can set planned values and specific consumption planned values through the browser on your PC.

1.4.2 Functions

Energy Saving Data Collecting Server (EcoWebServerIII) has the following functions:

1 Measured data collection function

- To collect measured data from CC-Link terminal devices
- To collect measured data from MODBUS terminal devices (CC-Link communication product)
- To collect device values from PLCs
- To collect demand data from transaction meters (Device with demand control function)

2 Save function

- To save logging data and operation data (virtual calculation points, specific consumption points, and equipment) in a memory card
- To save operating history in a memory card
- To save alarm history (occurrence of abnormal situations) in a memory card

3 Display function

- To display current measured data values
- To display ON/OFF operating condition of devices
- To graph previous and present data for comparison
- To graph specific consumption
- To graph multiple measuring points on one screen simultaneously
- To graph equipment data (such as overall equipment efficiency)

4 Contact output function

- To output contacts if an error occurs

5 Monitoring function

- To monitor the upper and lower limits of measured data, state change of monitoring points, and abnormality in communication/memory card
- To notify via email of abnormality in the upper and lower limits of measured data and communication abnormality
- To notify via email of state change of monitoring points
- To send an email on a regular basis (once a day, week, or month)

6 Input/ output function

- To output collected data to PLC/GOT devices
- To set the time setting and demand setting from PLC (change of demand target value, etc.)

7 Data transfer function

- To automatically transfer logging data, specific consumption measuring point data, and operating history to the FTP server

8 Automatic time adjustment function

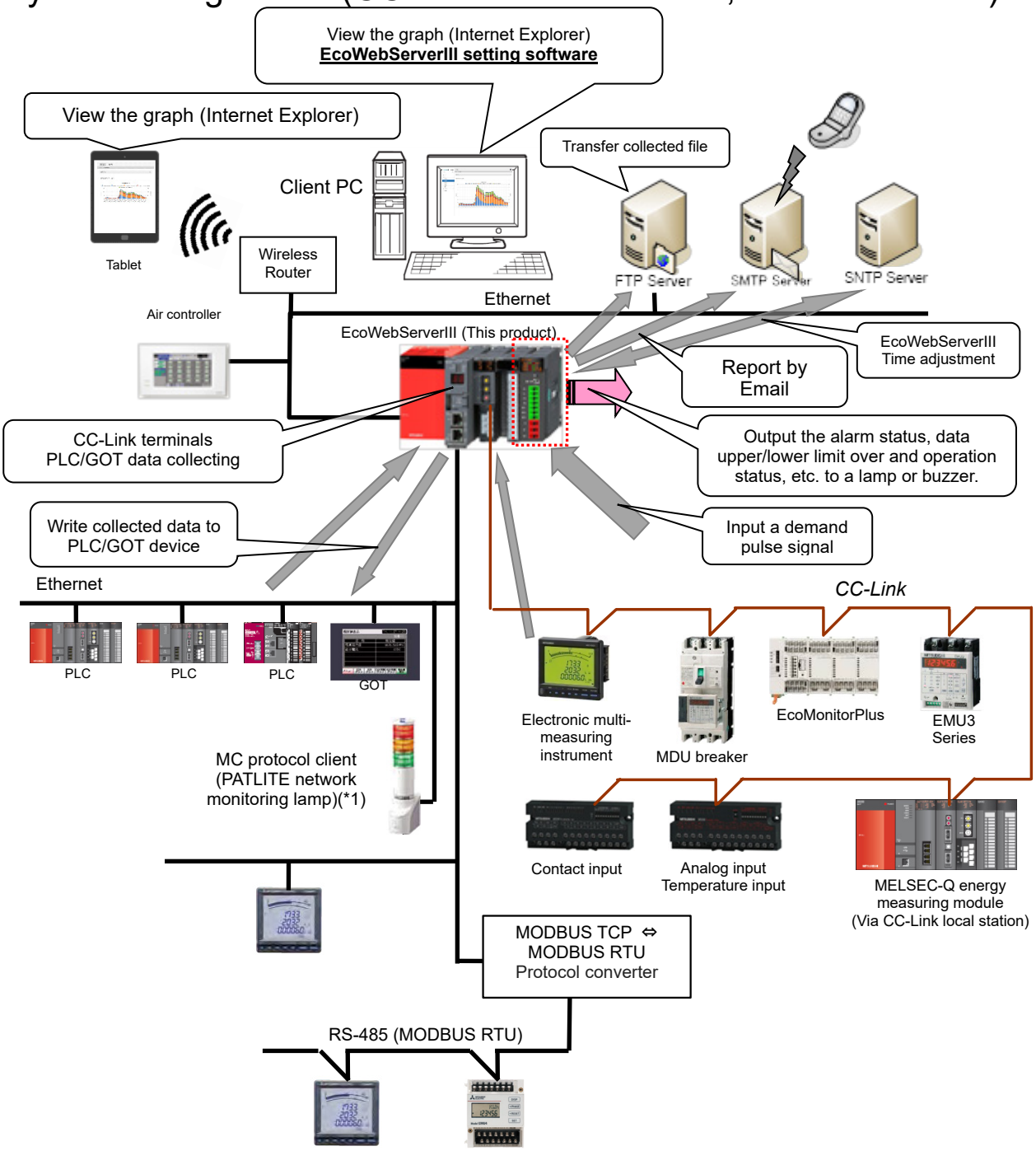
- To correct the time of EcoWebServerIII by acquiring time information from the SNTP server periodically

9 Maintenance function

- To set energy planned values and specific consumption planned values
- To display the project (setting data)

1.5 System Configuration

System configuration (CC-Link communication, demand control)



*1 Limited to be a MC protocol client.

The figure above is a system configuration (CC-Link communication, demand control) example
When using CC-Link communication device without demand control function, note the following points are different from the above figure.

- Demand control unit is not attached to the EcoWebServerIII.
- Shape of the power supply unit of EcoWebServerIII is different.
- There is no coordination function with air conditioning controller.
- There is no linkage function with the MC protocol client (Network monitoring indicator lamp made by PATLITE)

2. Before Use

This chapter describes how to set a browser on your PC.

2.1 Recommended System Environment

The table below shows the system environment requirements for this software to properly operate.

[PC]

Item	Description
OS (basic software)	Microsoft Windows 7 Professional (32-bit or 64-bit) (English version) SP1 Microsoft Windows 8.1 Pro (32-bit or 64-bit) (English version) Microsoft Windows 10 Pro (32bit, 64bit) (English version)
CPU	1 GHz or higher Pentium® processor, or compatible microprocessor (DOS/V compatible)
Memory *1	1 GB or more
Hard disk *1	To save data collected by EcoWebServer into your PC, enough disk space for the data is required
CD drive	One or more drives (required to install the setting software)
Display resolution	1,280 × 1,024 pixels or more
Display color	65,536 colors or more
Input device	A mouse and a keyboard
English input system	The system included in OS (English version only)
External interface	10BASE-T/100BASE-TX Memory card reader (when writing / reading / confirming a project via drive by setting software)
Web browser *2	Microsoft Internet Explorer 9 (32-bit), 10 (32-bit), or 11(32-bit) Microsoft Edge Google Chrome

*1 Note that the required memory and free space of hard disk vary depending on the system environment.
*2 Operation check for Microsoft Edge is done in version 97.
Operation check for Google Chrome is done in version 97.

[Tablet *3]

Item	Description	
OS	Android6.0	iOS10
Web browser *4	Google Chrome	Safari

*3 Tablet is only for browsing the web screen. Setting software cannot be used on the tablet.
*4 Operation check for Google Chrome is done in version 54.
Operation check for Safari is done in version 10.

2.2 Set Your PC's IP Address

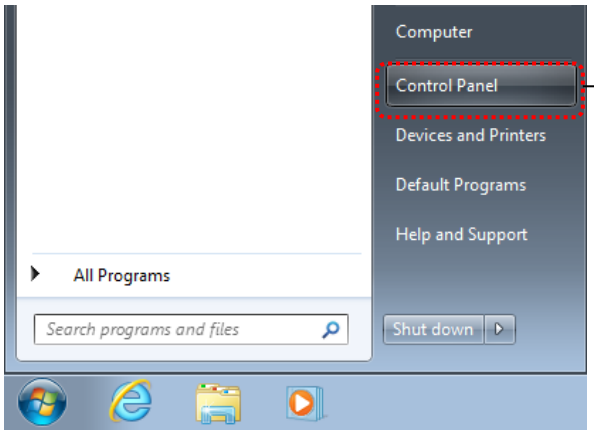
To connect your PC to EcoWebServerIII, set the PC as follows:

*1 The operation and screens may differ depending on the OS type or environment used in your PC. (The following screens are examples.)

*2 To connect your PC to LAN, set an IP address according to instructions from your network administrator.

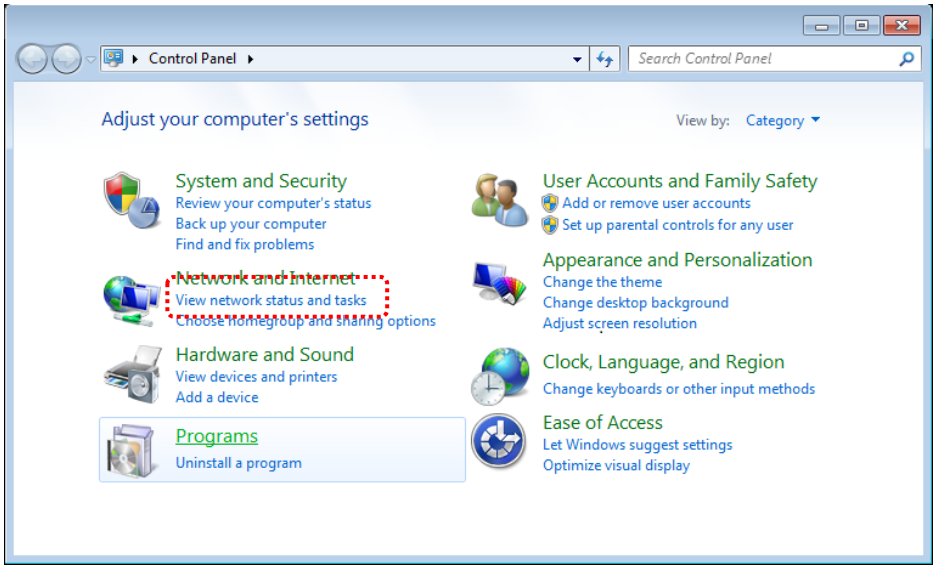
*3 Before setting your PC, take a note of the present settings (IP address and others) so that you will not forget them.

1 Start [Control Panel] of Windows



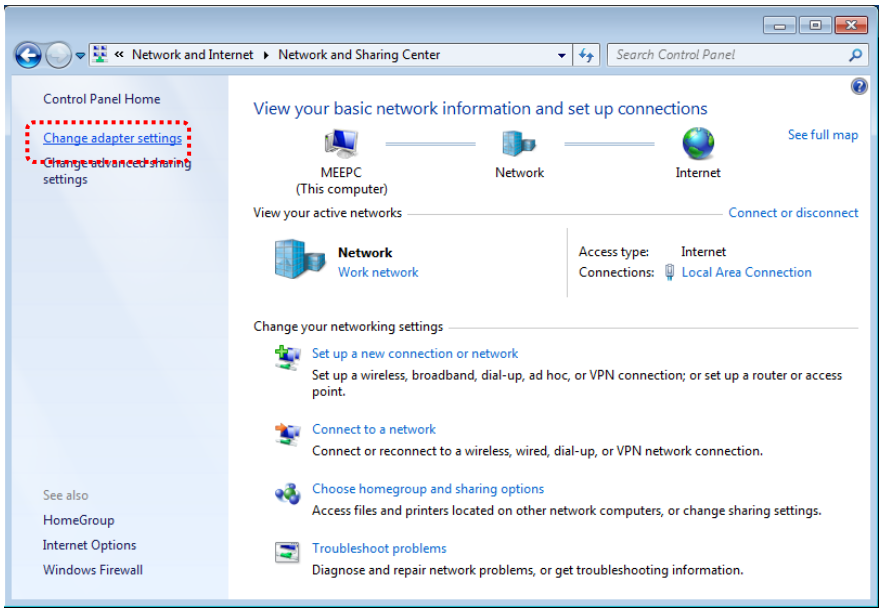
Click [Control Panel]

2 Click [View Network Status and Tasks]

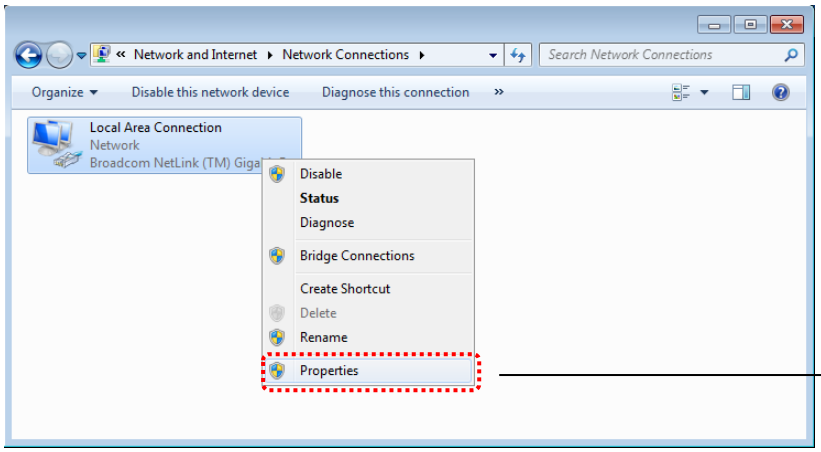


* The figure is [In Category View]

3 Click [Change Adapter Settings]

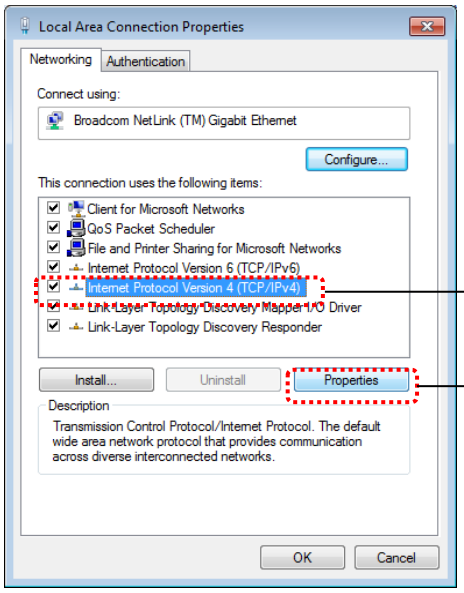


4 Open [Properties] of the connection



Right-click [Local Area Connection] and select [Properties].

5 Open [Properties] of TCP/IPv4

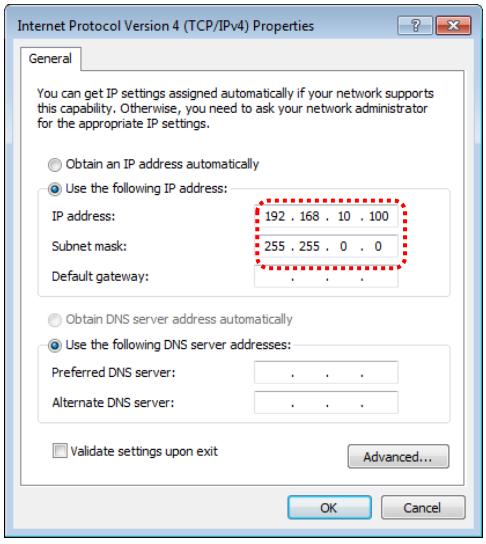


Select [Internet Protocol Version 4 (TCP/IPv4)] and click the [Properties] button.

If no [Internet Protocol Version 4 (TCP/IPv4)] appears
Click the [Install] button to install TCP/IP.
(Click the [Install] button -> select [Properties] -> click the [Add] button -> select [TCP/IP] -> click the [OK] button.)

6 Set an IP address

Set an IP address to connect to EcoWebServerIII.
For example, if the IP address of EcoWebServerIII is the factory settings ("192.168.10.1"), set "192.168.10.100."



The factory settings of EcoWebServerIII are the following:
IP address [192.168.10.1]
Subnet mask [255.255.255.0]

* The digits of the IP address with "255" for the subnet mask must be the same as those of EcoWebServerIII.
* The digits of the IP address with "0" for the subnet mask must be different from those of EcoWebServerIII.
  However, "0.0.0.0" and "*.*.*.255" cannot be set.

7 Click the [OK] button

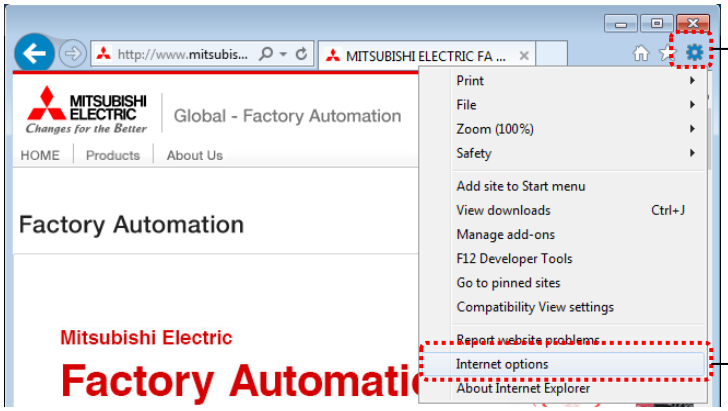
After setting the IP address, click the [OK] button.

2.3 Set the Web Browser

2.3.1 Set with no proxy server used

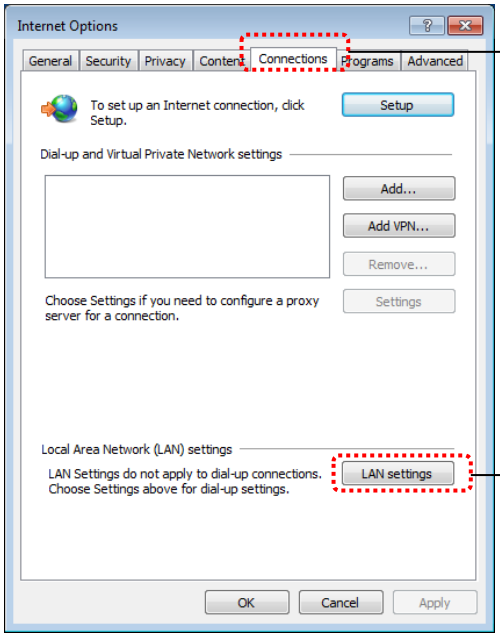
If the web browser is set to use a proxy server, the PC cannot connect to EcoWebServerIII.
Establish connection bypassing a proxy server to EcoWebServerIII by using the following procedure:

1 On Internet Explorer, select [Internet Options]



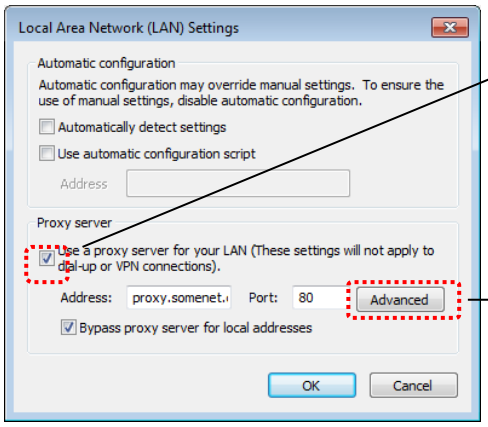
Click the [Tools] button (gear icon) and select [Internet Options].

2 Open the [Connections] tab and click the [LAN settings] button



Select the [Connections] tab and click the [LAN settings] button.

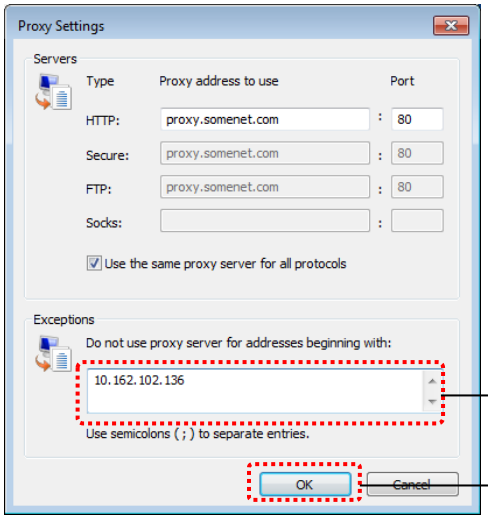
3 In [Proxy server], click the [Advanced] button



If [Use a proxy server for your LAN] is unchecked, this setting is unnecessary.

If [Use a proxy server for your LAN] is checked, click the [Advanced] button.

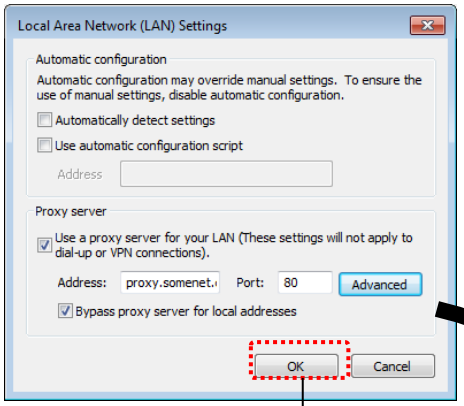
4 In [Exceptions], enter the IP address of EcoWebServerIII

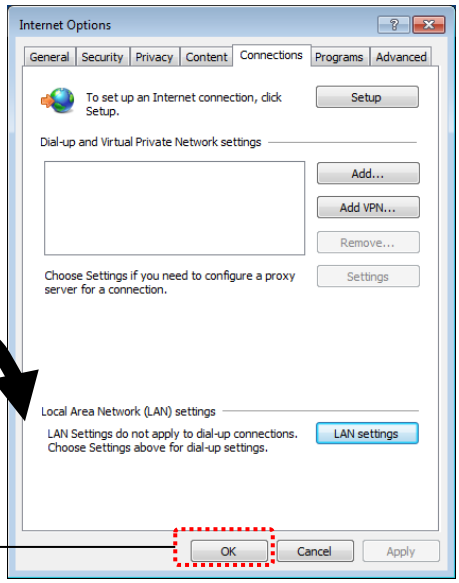


After entering [Exceptions], click the [OK] button

To enter more than one IP address
There are two options below:
(1) Use a semicolon (;) as a separator.
E.g.) "10.162.40.87;10.162.40.88"
(2) Include an asterisk (*)
E.g.) "10.162*"
(This applies to all IP addresses starting with "10.162.")

5 Finish the setting



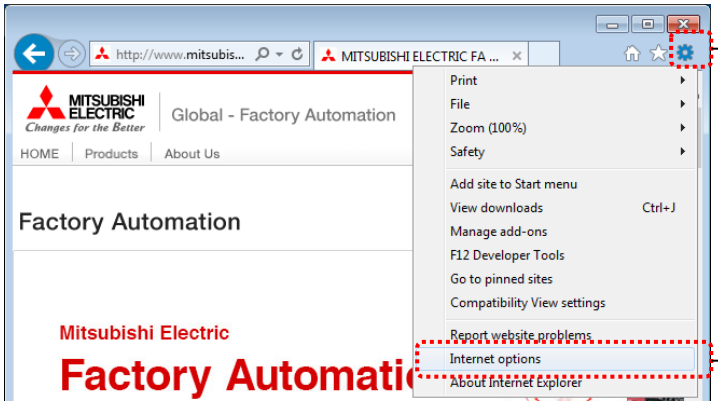


Click the [OK] button to finish the setting.

2.3.2 Add to [Local intranet] sites

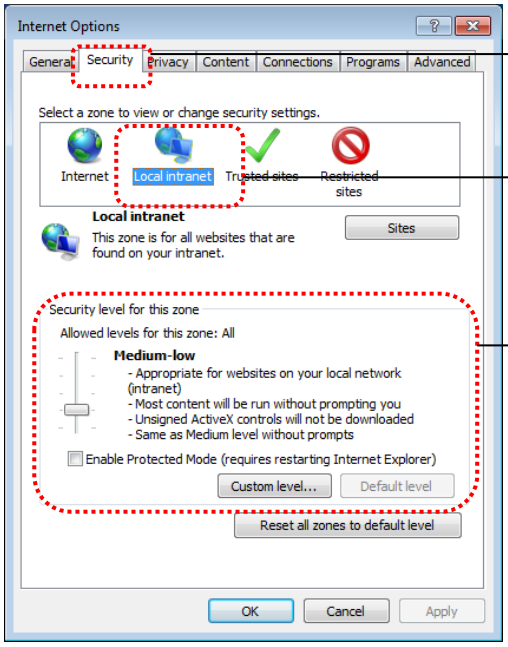
If EcoWebServerIII is recognized as an Internet site with high-level security, you cannot browse properly. For example, the Java plug-in cannot be executed or pop-ups are blocked.
Add EcoWebServerIII to [Local intranet] sites with low-level security by using the following procedure:

1 On Internet Explorer, select [Internet Options]



Click the [Tools] button (gear icon) and select [Internet Options].

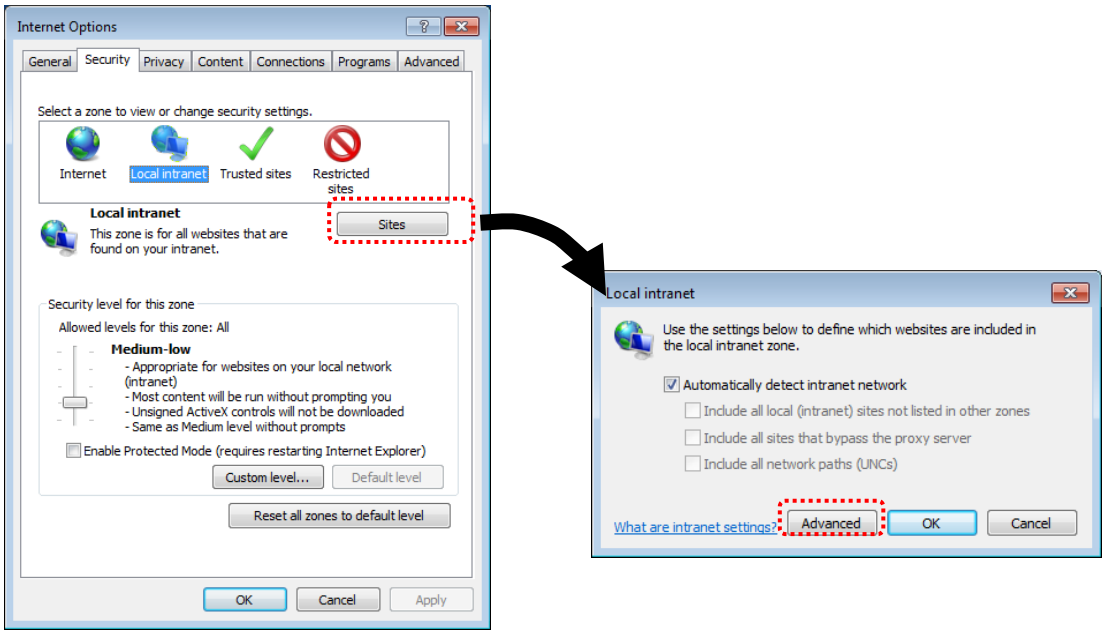
2 Open the [Security] tab and select [Local intranet]



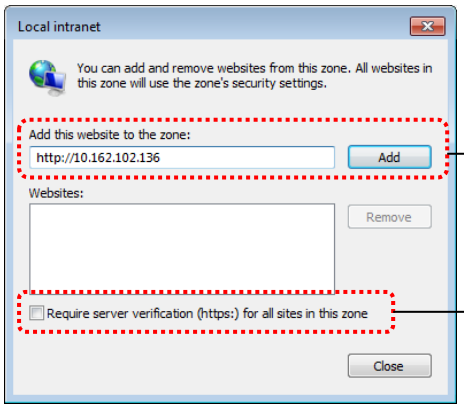
Select the [Security] tab and select [Local intranet].

If the security level is not [Medium-low], click the [Default level] to set it to the default level ([Medium-low]).

3 Click the [Sites] button and click the [Advanced] button



4 Add the URL of EcoWebServerIII

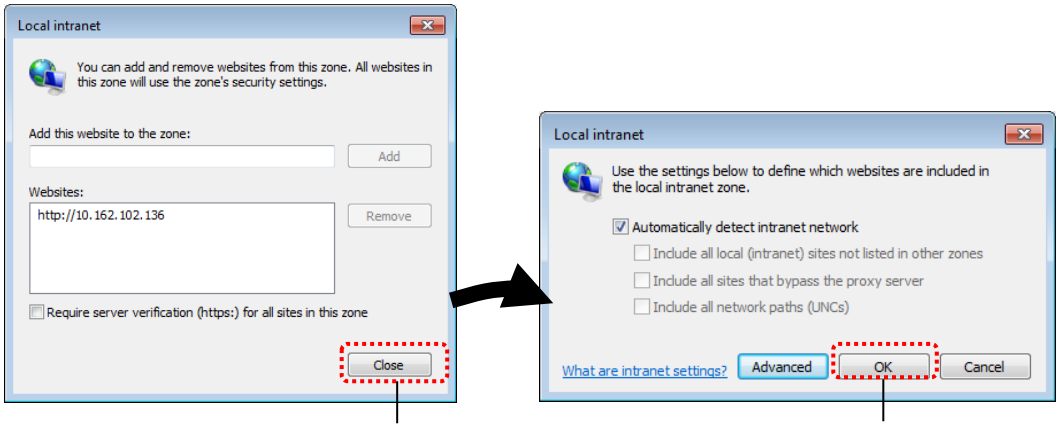


http://xx.xx.xx.xx
(For "xx.xx.xx.xx," enter the IP address of EcoWebServerIII. Uncheck [Require server verification (https:) for all sites in this zone] and click the [Add] button.)

✓

When more than one EcoWebServerIII exists
Include an asterisk (*).
E.g.) http://10.162.*.*
(This applies to all IP addresses starting with "10.162.")

5 Finish the setting



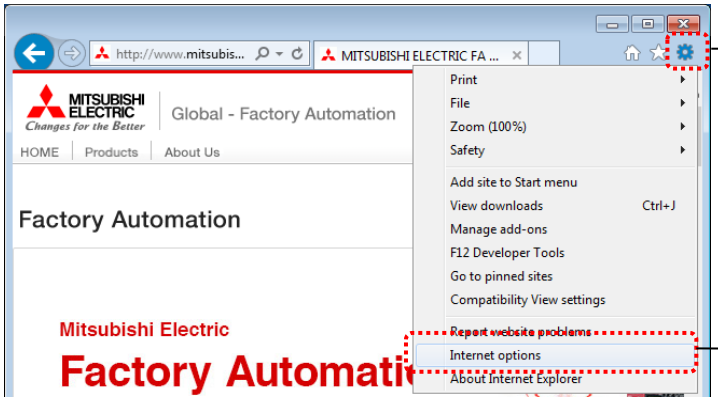
Click the [Close] button.

Click the [OK] button.

2.3.3 Change the temporary Internet file settings

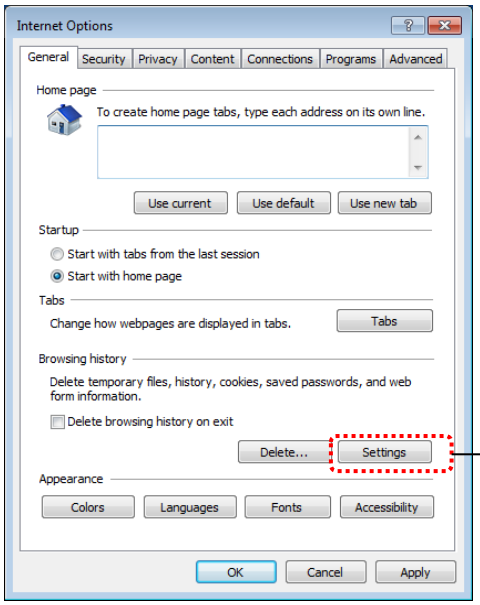
Depending on the temporary Internet file settings, the latest settings or data may not appear due to the cache function of the web browser.
Change the temporary Internet file settings by using the following procedure:

1 On Internet Explorer, select [Internet Options]



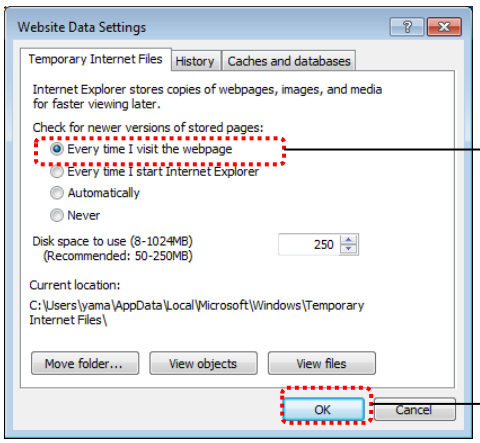
Click the [Tools] button (gear icon) and select [Internet Options].

2 In [Browsing history], click the [Settings] button



In [Browsing history], click the [Settings] button.

3 Select [Every time I visit the webpage] and click the [OK] button



Select [Every time I visit the webpage] and click the [OK] button.

3. Basic Operations

This chapter describes terminology, basic operations and how to check versions.

3.1 Glossary

The table below describes terms used in this document.

Item	Description
Project	A set value that is used for the operation of EcoWebServerIII.
Measuring point	An item collected from a terminal. Up to 255 points can be registered.
Operation monitoring point	A measuring point to record the operation state of equipment by monitoring digital input signals. Up to 32 of 255 measuring points can be registered.
Virtual calculation point	A measuring point for which the computation result among measuring points is used as virtual measured data. In addition to the 255 measuring points, up to 128 measuring points can be registered.
Specific consumption point	A measuring point for which the result of dividing energy amount by production amount is used as measured data. In addition to the 255 measuring points, up to 64 measuring points can be registered.
Equipment measuring point	A measuring point to record the state of equipment such as equipment efficiency. Up to 42 measuring points can be registered.
Group	A group of measuring points. Up to 32 groups can be registered.
Equipment group	A group of equipment measuring points. Up to 42 groups can be registered.
Daily data	Data of a measuring point collected at 60, 30, or 15min. intervals for 1 day.
Weekly data	Data of a measuring point collected at 60-min. or 30-min. intervals for 7 days.
Monthly data	Data of a measuring point collected at 1-day intervals for 1 month.
Annual data	Data of a measuring point collected at 1-month intervals for 1 year.
Zoom (5 min.) data	Data of a measuring point collected at 5-min. intervals for 1 hour.
Zoom (1 min.) data	Data of a measuring point collected at 1-min. intervals for 1 hour.
Virtual calc. data (Daily)	Data of a virtual measuring point collected at 60, 30, or 15min. intervals for 1 day.
Virtual calc. data (Monthly)	Data of a virtual measuring point collected at 1-day intervals for 1 month.
Virtual calc. data (Annual)	Data of a virtual measuring point collected at 1-month intervals for 1 year.
Sp. Cons. data (Daily)	Data of a specific consumption point collected at 60, 30, or 15min. intervals for 1 day.
Sp. Cons. data (Monthly)	Data of a specific consumption point collected at 1-day intervals for 1 month.
Sp. Cons. data (Annual)	Data of a specific consumption point collected at 1-month intervals for 1 year.
Equipment data(Daily)	Data of an equipment measuring point collected at 60, 30, or 15min. intervals for 1 day.
Operation history data	Data recorded when the state of an operation monitoring point is changed.
Demand data (Daily)	Data for each demand time in 1 day.
Demand data (Monthly)	The data which recorded max. demand value of a day for 1 month.
Demand data (Annual)	The data which recorded max. demand value of a month for 1 year.
Demand alarm/control history data	The data which recorded occurrence / restoration of demand alarm and demand control.
System log	Data of events (such as errors) that occurred in EcoWebServerIII.
Maintenance password	A password required to reset EcoWebServerIII or to set dates and annual planned values/specific consumption planned values.
Data acquisition login ID and password	An account required to collect EcoWebServerIII data from FTP clients. Read-only permission is given.
System administration login ID and password	An account required to administer the EcoWebServerIII system. Read and write permissions for all files are given.
FTP server	A server that provides files on the Internet (LAN). FTP stands for File Transfer Protocol.

Item	Description
SMTP server	A mail server that performs transmission processing when sending email to distribute it to other mail servers on the Internet (LAN). SMTP stands for Simple Mail Transfer Protocol.
SNTP server	A server that provides time information to clients on the network. SNTP stands for Simple Network Time Protocol.
Domain name	The identifier of a computer group or computer that is connected to the Internet (LAN).

3.2 Flow of Operations

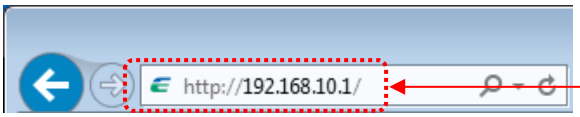
This section describes the flow of operations to display data collected by EcoWebServerIII on Internet Explorer.
This instruction manual uses the screens of Internet Explorer as examples.
For details on how to operate each screen, see Chapter 4.

1 Start the web browser

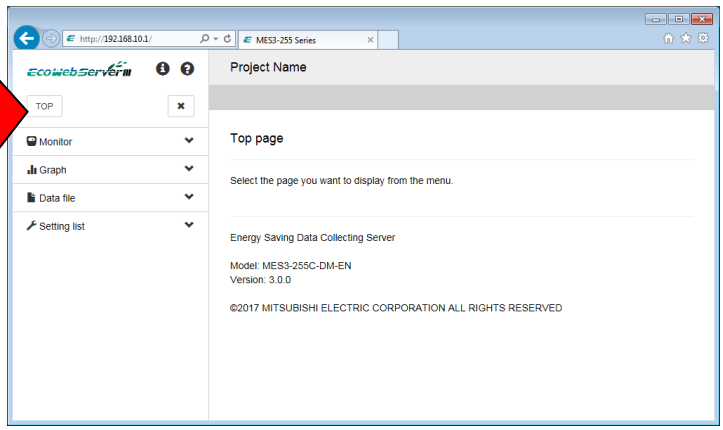
From the Windows taskbar or [Start] menu, start Internet Explorer.

2 Connect to EcoWebServerIII

In the Internet Explorer address bar, enter the IP address of EcoWebServerIII.
For example, if the IP address is "10.162.102.136," enter "http:// 10.162.102.136/" and press the Enter key. (Entering "10.162.102.136" also automatically changes into "http:// 10.162.102.136/.")

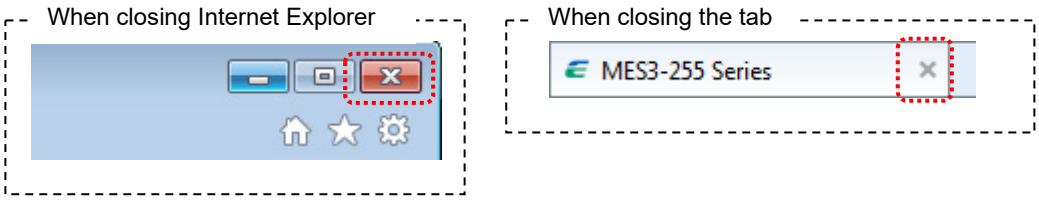


The top screen of EcoWebServer III appears



3 Terminate the communication with EcoWebServerIII

Closing Internet Explorer or accessing another website terminates the communication.
To close Internet Explorer, click the x button on the upper right or the x button on the right of the tab.



3.3 How to check the version

This chapter describes how to check the version of EcoWebServerIII.

1 Connect to EcoWebServerIII

For operation procedures, see [3.2 Flow of Operations]

2 Click on ⓘ icon on the Side Menu

For operation procedures, see [4.2 Side Menu].

3 Check the version

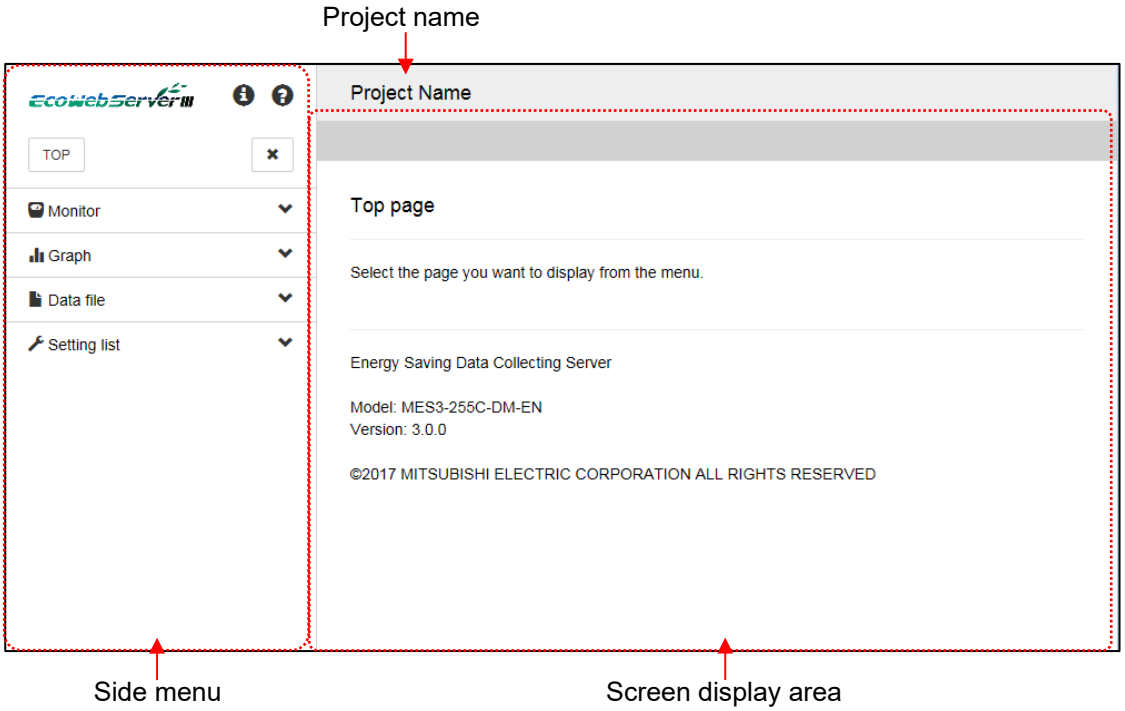
Check the version by the model name and the version information.

4. Screen Descriptions

4.1 Screen structure

This section describes web screen structure of EcoWebServerIII.

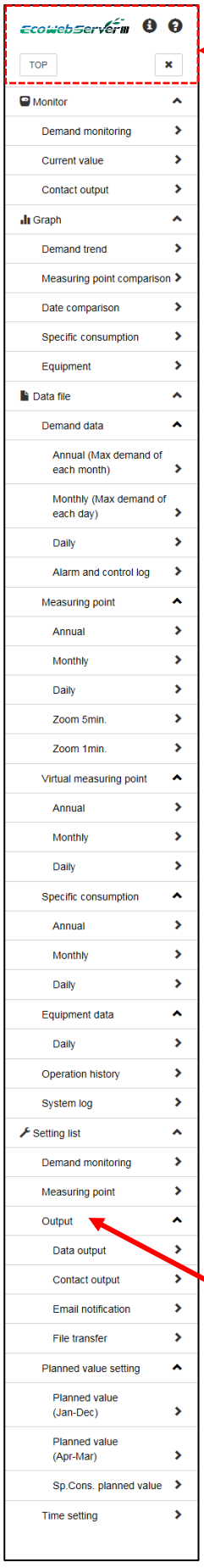
Web screen display example on PC



Web screen display example on Tablet

Item	Description
Menu button	The side menu is displayed.
Project name	The project name set by the setting software appears.
Screen display area	The screen of the menu you selected from the side menu appears. The initial screen is top page.
Side menu	Click a menu item to display the side menu in the screen display area.
Demand alarm occurring: Level 1 Alarm	The system monitors a demand alarm at 10-second intervals. This icon appears during the state in which a demand alarm occurs. The icon disappears after restored. (The figure on the left is an example when a level 1 alarm occurs.) For device with demand control function only.

4.2 Side Menu



Menus to display current values in real time
* [Demand value Monitor] is
for device with demand control function only.

Menus to display various graphs
* [Demand trend Graph] is
for device with demand control function only.

Item	Description
	Version information of EcoWebServer III is displayed by click.
	Click to link to FA site. * In order to view FA site, you need to connect to the Internet.
TOP	Display the top page.
	Hide the side menu.

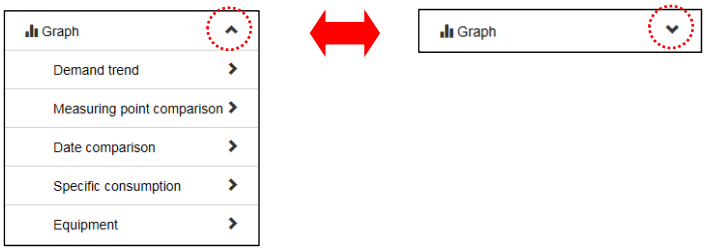
Menus to download data files
* [Demand data] is
for device with demand control function only.

Menus to check the settings
* [Setting of Demand control] is
for device with demand control function only

If you cannot select an menu item
If an item with no setting, the item appears (with no [>]) in black characters and no screen appears if clicked.
E.g.) The left figure shows that there is no file transfer setting.
[>] is disappeared for [File transfer].

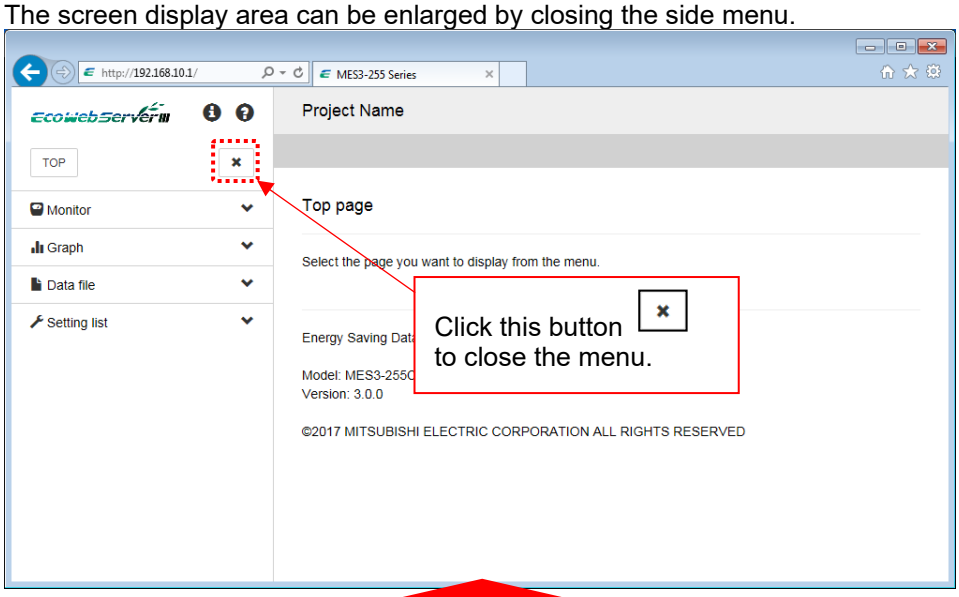
Expanding/collapsing menus

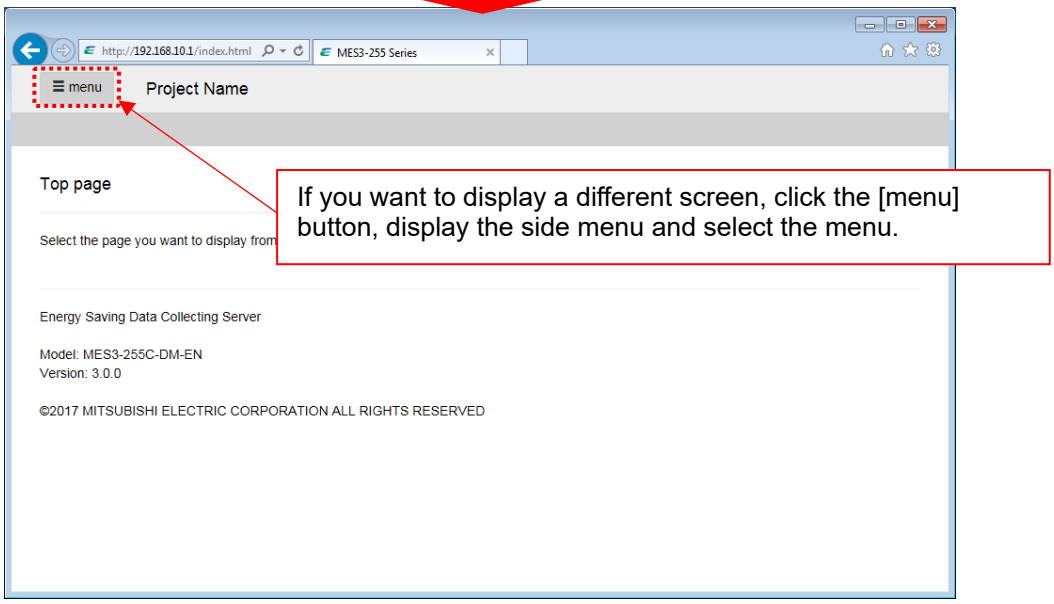
If you click ^, it will be changed to □ and the menu will be collapsed.
If you click ^, it will be changed to □ and the menu will be expanded.



Closing the side menu

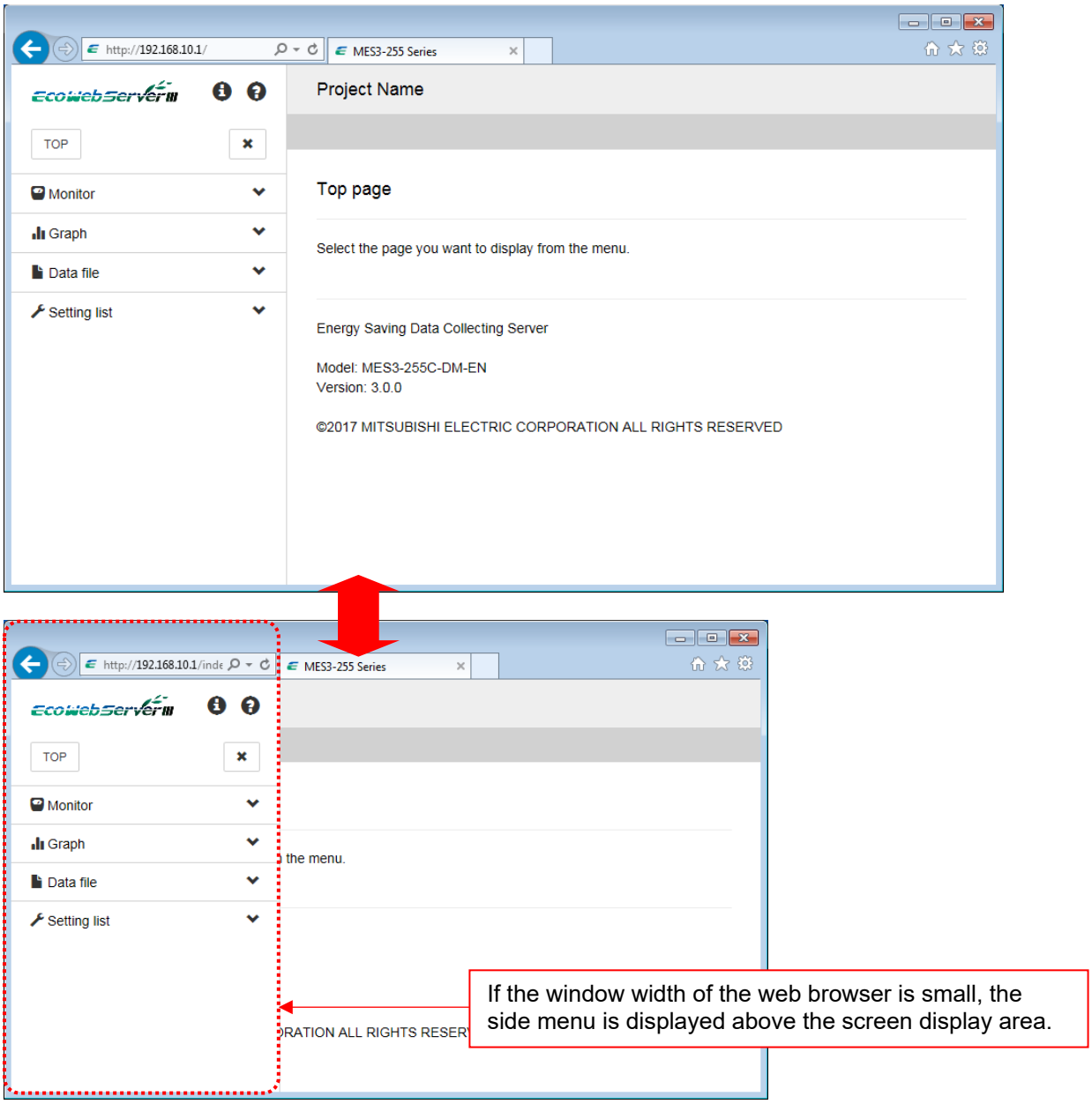
The screen display area can be enlarged by closing the side menu.





The side menu is displayed superimposed on the screen display area

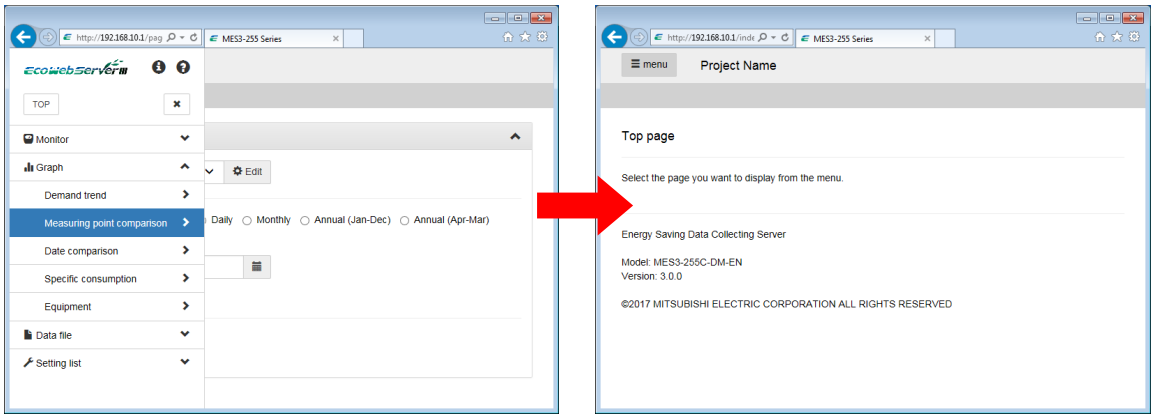
If the width of the web browser window is small, the side menu will be displayed in the screen display area.



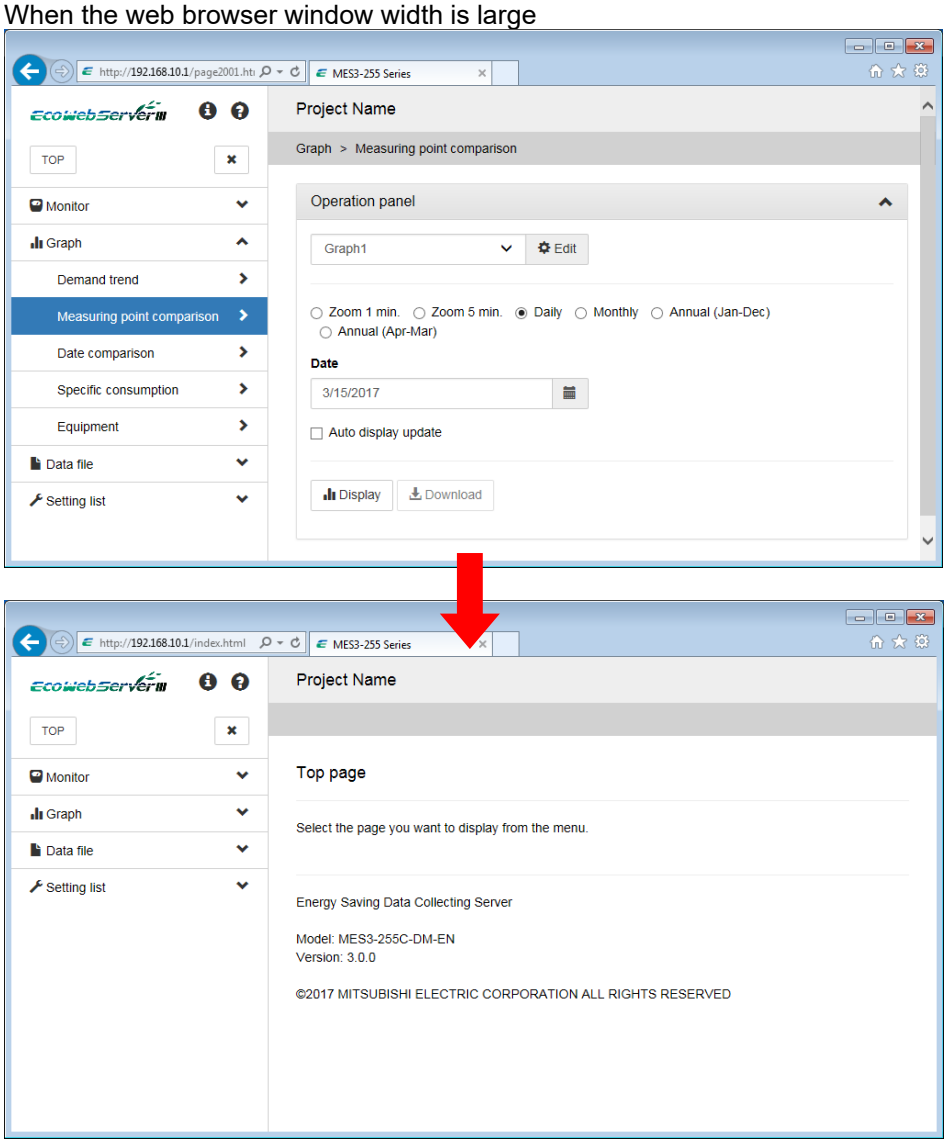
Automatic display of side menu

If the window width of the web browser is large, the side menu will remain displayed even after the screen is switched.

When the web browser window width is small



When the web browser window width is large



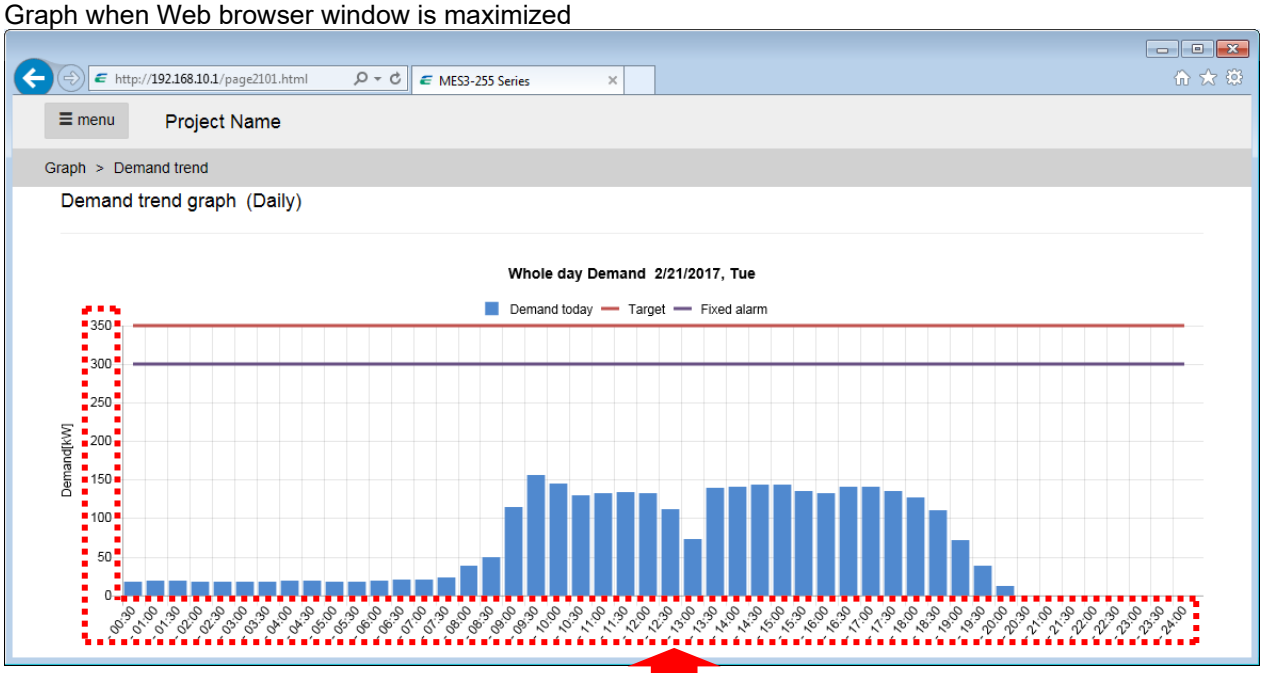
4.3 Graph

This section describes the functions of the graph.

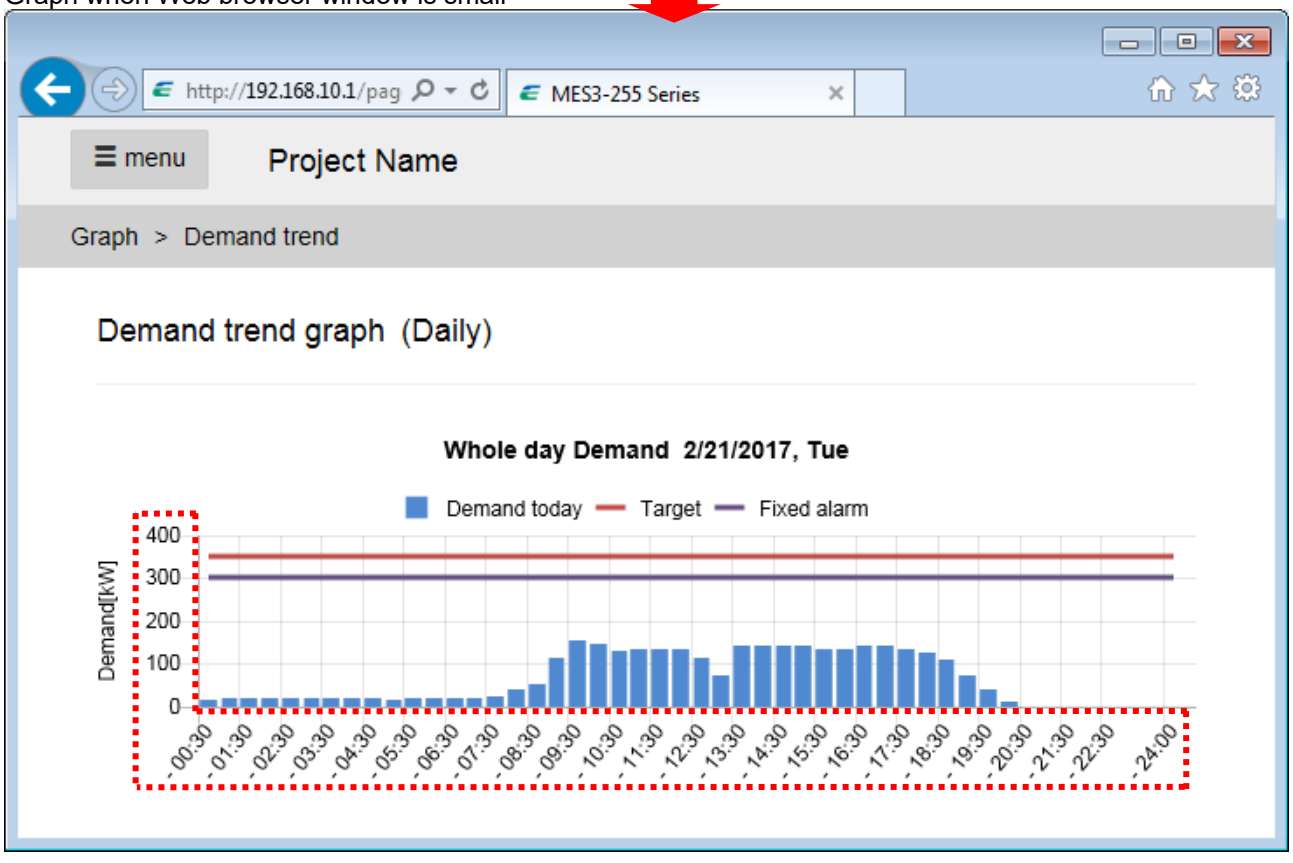
4.3.1 Automatic Layout

The graph automatically changes the layout according to the width of the graph area.

Graph when Web browser window is maximized

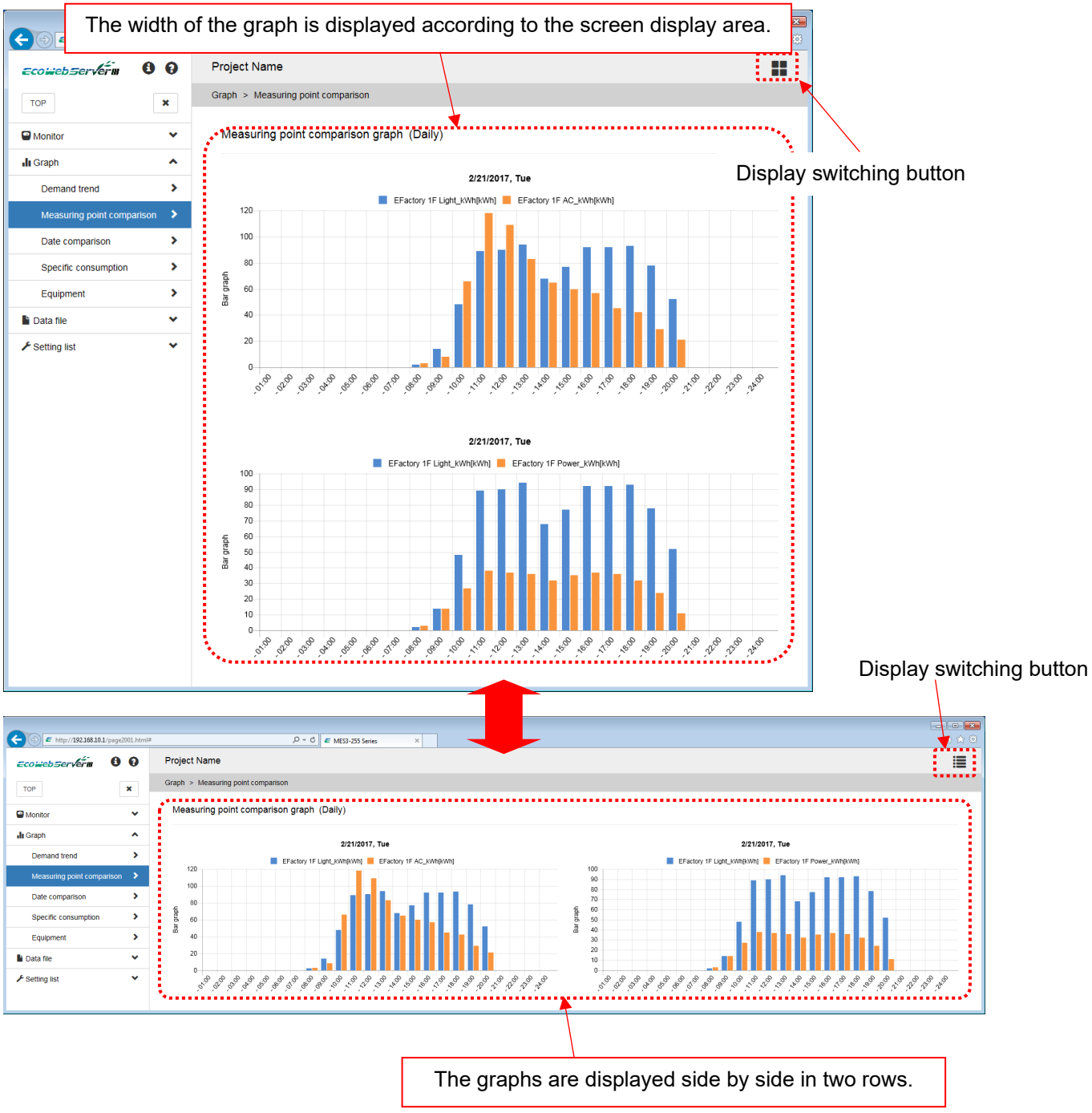


Graph when Web browser window is small



4.3.2 Switching display

Display can be switched by pressing the display switching button in [4.4 Monitor: Demand Value], [4.8 Graph: Measuring Point Comparison] and [4.9 Graph: Date Comparison].

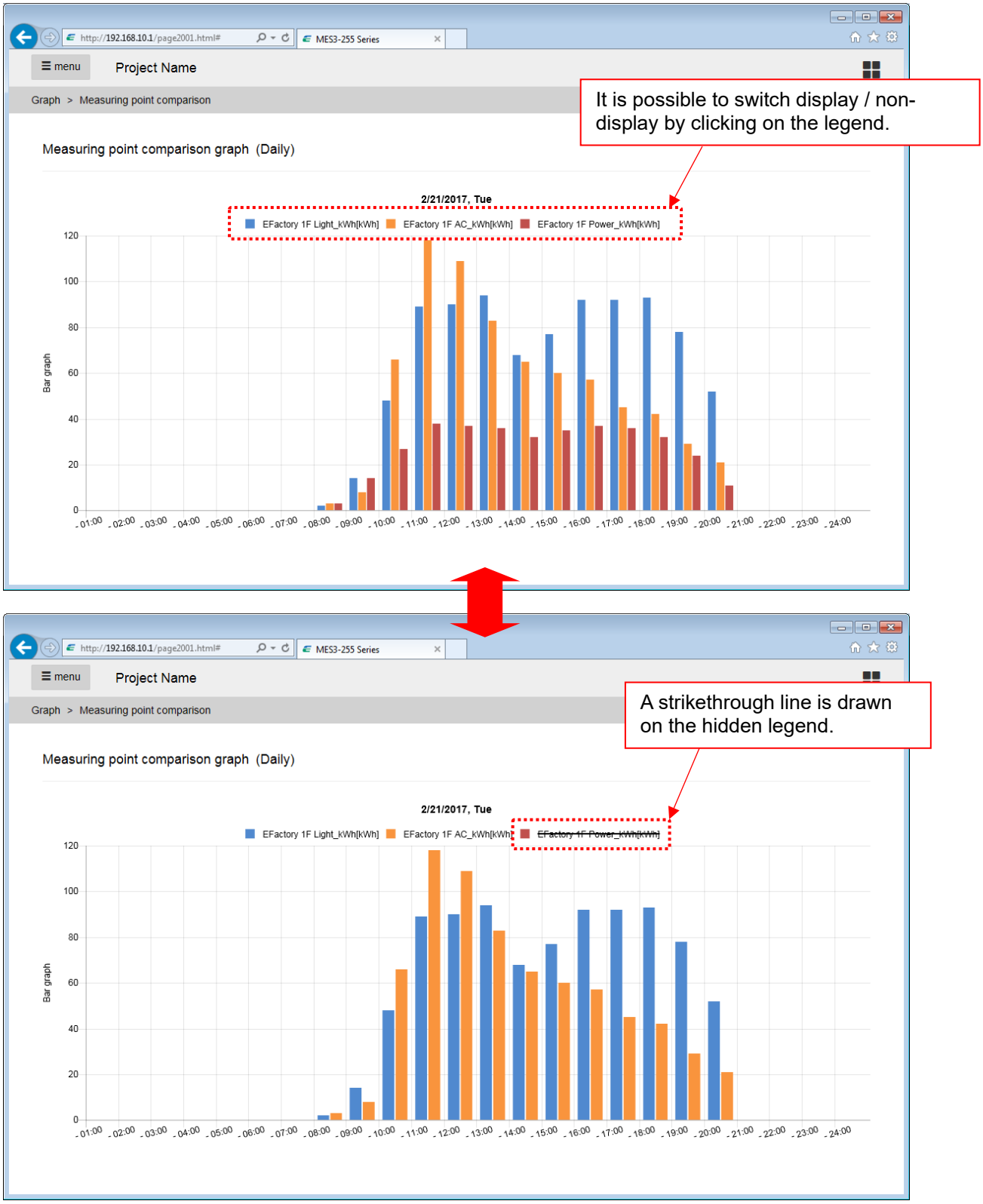


When the display switching button is not displayed

If the width of the Web browser window is small, the display switching button will not be displayed.

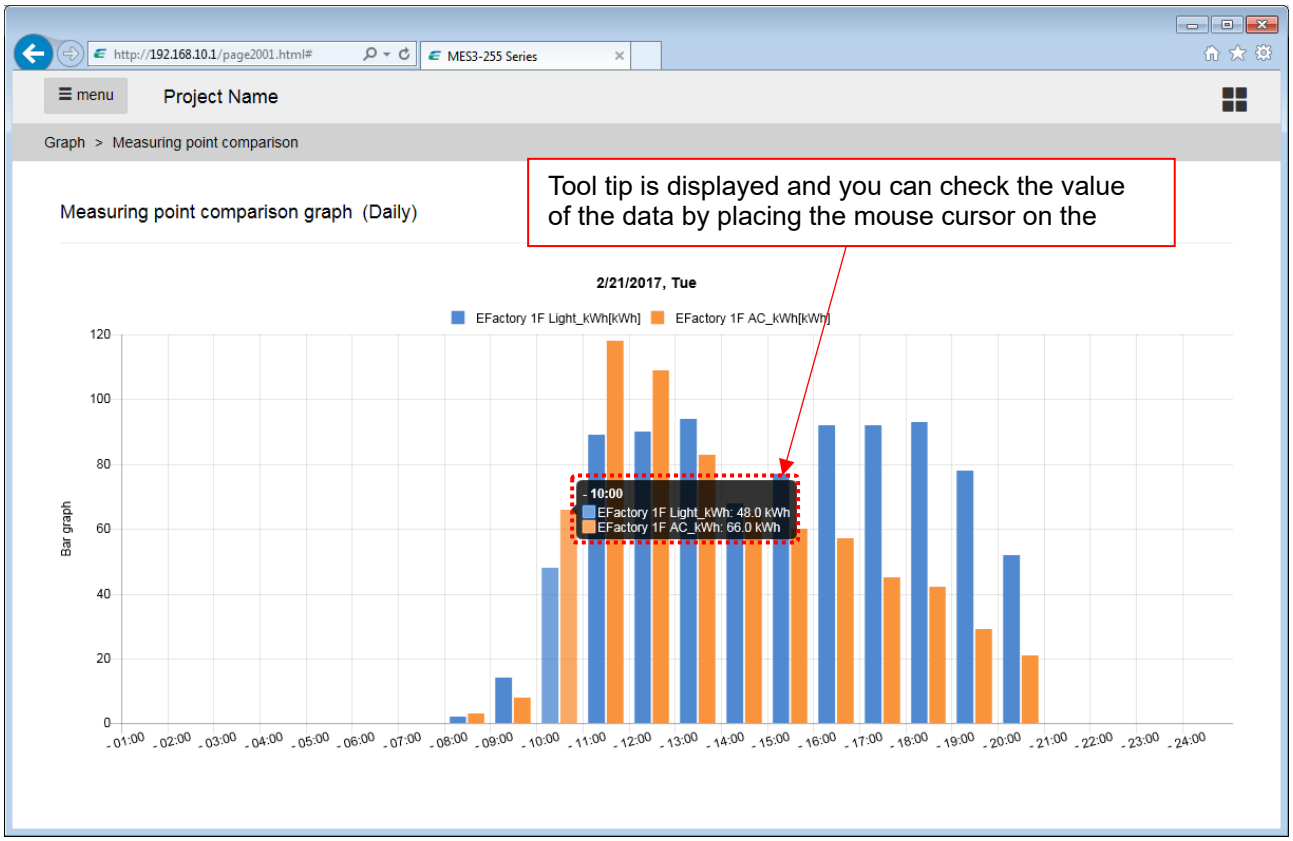
4.3.3 Non-display data

Display / non-display corresponding data can be by clicking on the legend at the top of the graph.



4.3.4 Tool tip

A tool tip is displayed and detailed data can be confirmed when placing the mouse cursor on each data of the graph.



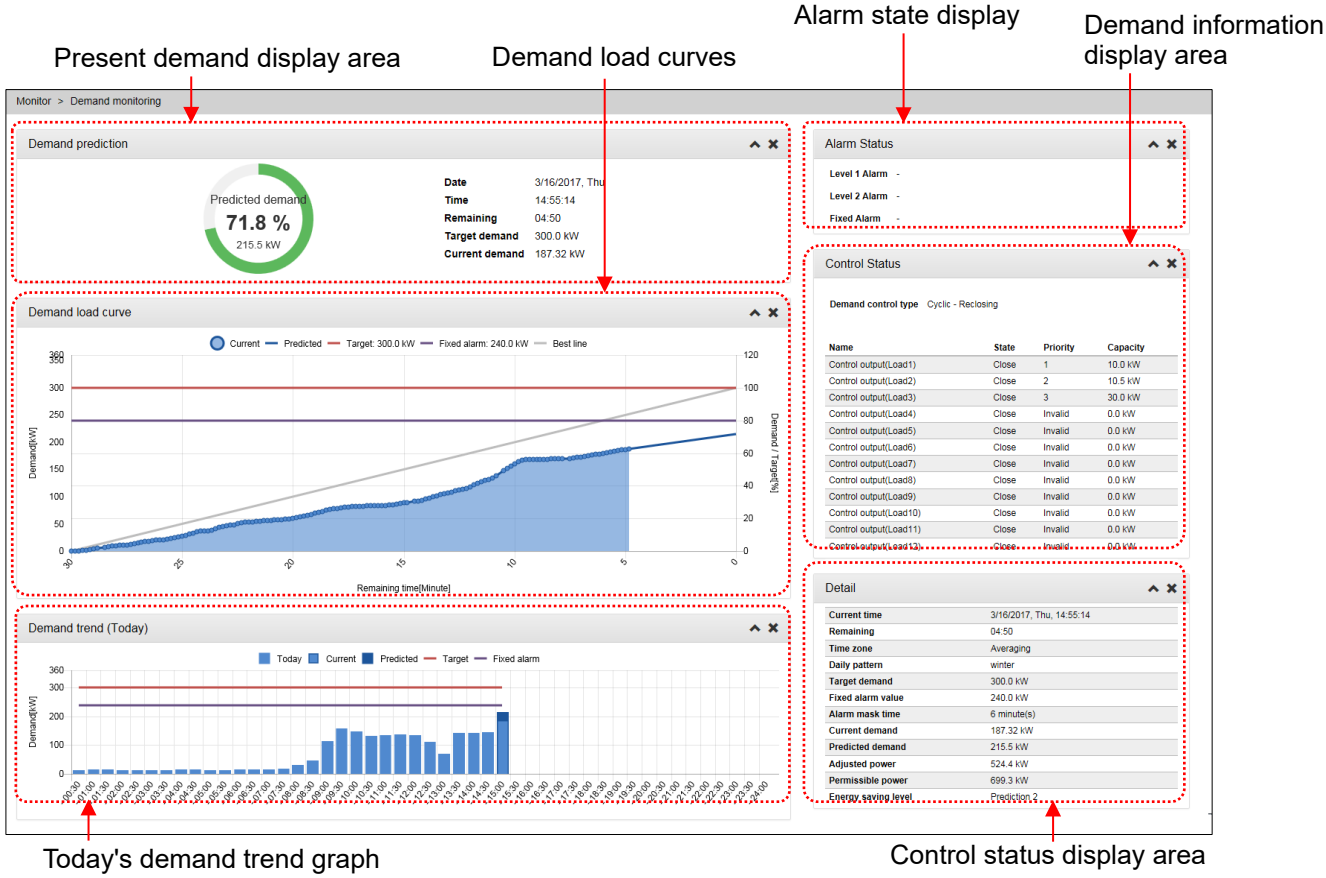
4.4 Monitor: Demand Value

For device with demand control function only

Display the present demand and demand load curves at the present time limit. The screen is automatically updated at 10-second intervals.

*1 Note that the data being displayed, alarm status, and control status may differ from the actual values /status because the screen is updated at 10-second intervals. For example, if the screen shows no Level 1 alarm, a Level 1 alarm may occur in the EcoWebServerIII main unit.

*2 It may not be displayed cleanly if the graph display area is small. Please enlarge the display area by hiding the side menu or enlarging the browser window.



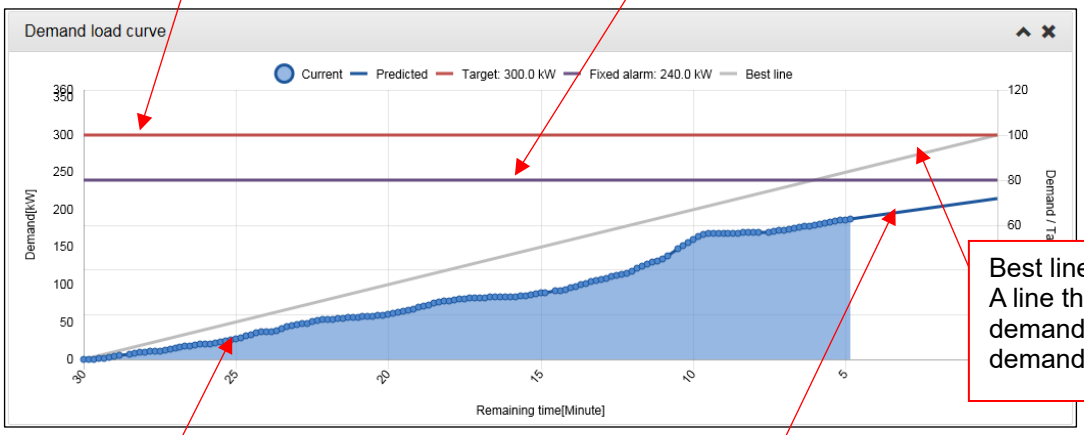
Demand prediction monitor

Predictive demand pie chart	Display the percentage of predicted demand for target demand [Predicted demand ÷ Target demand × 100 (%)] in a pie chart. The color of the pie chart changes with proportion. Green: [predict demand ÷ target demand × 100 (%)] <100 (%) Red: [predict demand ÷ target demand × 100 (%)] ≧ 100 (%)
Present value information	Display date, time, remaining time, target demand, current demand.

Demand load curves

Target demand:
A line of target demand

Fixed alarm value: A line of fixed alarm value.
It is displayed only when the alarm type is set to fixed alarm.



Best line:
A line that reaches the target demand at the end of the demand time limit

Demand curveline:
Demand value from the start of the demand time limit

Predict line:
Demand (predict value) at the end of the demand time limit if power is used at the present pace

X-axis of graph
Varies depending on the demand time limit specified by the setting software.

When the demand time limit is 15 min.

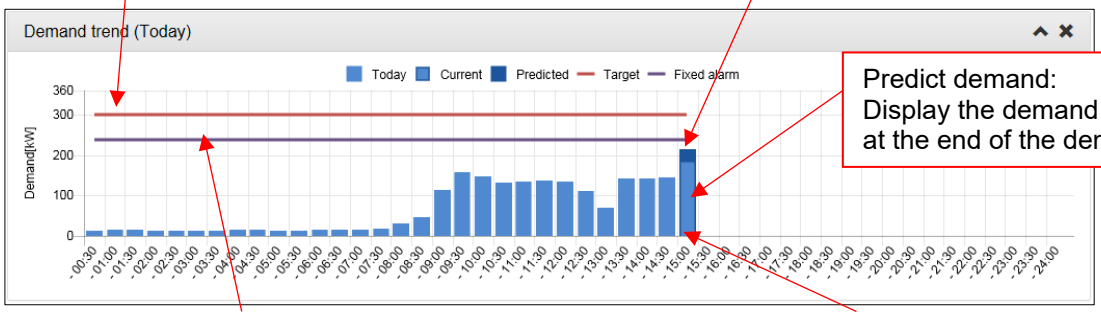
When the demand time limit is 30 min.

When the demand time limit is 60 min.

Today's demand trend graph

Target demand:
A line of target demand

Fixed alarm value:
A line of fixed alarm value



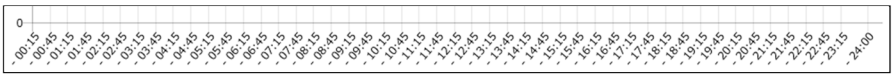
Predict demand:
Display the demand value (predict value) at the end of the demand time limit

Demand (maximum in the day):
Display in the maximum demand value in the day for each demand time limit in the bar graph.
It is displayed only when the alarm type is set to fixed alarm.

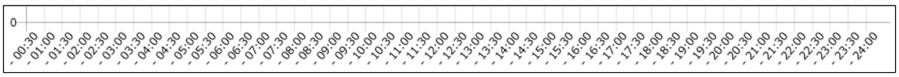
Present demand:
Display the demand value of present time limit

X-axis of graph
Varies depending on the demand time limit specified by the setting software.

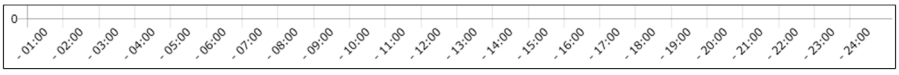
When the demand time limit is 15 min.



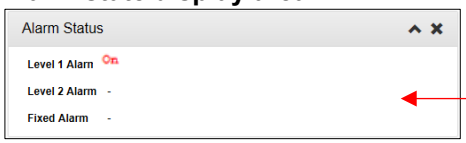
When the demand time limit is 30 min.



When the demand time limit is 60 min.



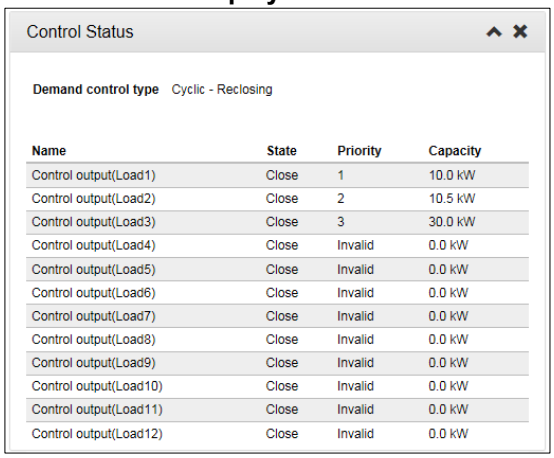
Alarm state display area



Display the alarm state of the limit alarm
when [Limit alarm] is selected in [Alarm Type].

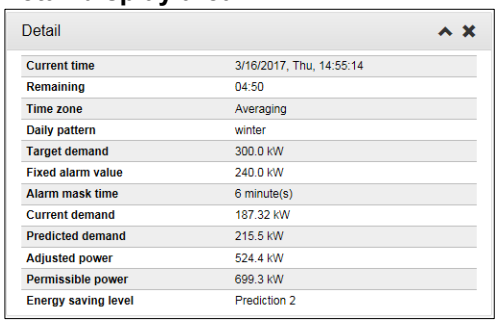
Level 1 alarm	[On] appears when "Predict demand > Target demand." This alerts that the target demand is exceeded at the end of the demand time limit if power is used at the present pace.
Level 2 alarm	[On] appears when "Adjust power (excess) ≥ Control load capacity to be closed." This alerts that the target demand is exceeded at the end of the demand time limit even if all loads to be closed are closed.
Fixed alarm	[On] appears when "Present demand ≥ Fixed alarm value." This alerts that the present demand has exceeded the fixed alarm value. It is displayed only when the alarm type is set to fixed alarm.
Limit alarm	[On] appears when "Present demand > Limit power." This alerts that the target demand is exceeded even if all loads other than the base power (load that cannot be closed) are closed. It is displayed only when the alarm type is set to limit alarm.
Energy saving level	Display the monitoring type ([Predict demand]/[Adjust power]) of the energy saving level and the present energy saving level value.

Control status display area



Control method	Display the control method set by the setting software.
Reclosing interval	Display only the control method is [Cyclic - Reclosing after Reclosing interval].
Name	Display the name of the control load.
State	Display the control load control state (Close, Open). Those that are not prioritized are placed in the "Close" state.
Priority	Display the priority of control. Numbers indicate priority and hyphens indicate ineffective (no demand controlled load).
Capacity	Display the capacity of the control load.

Detail display area

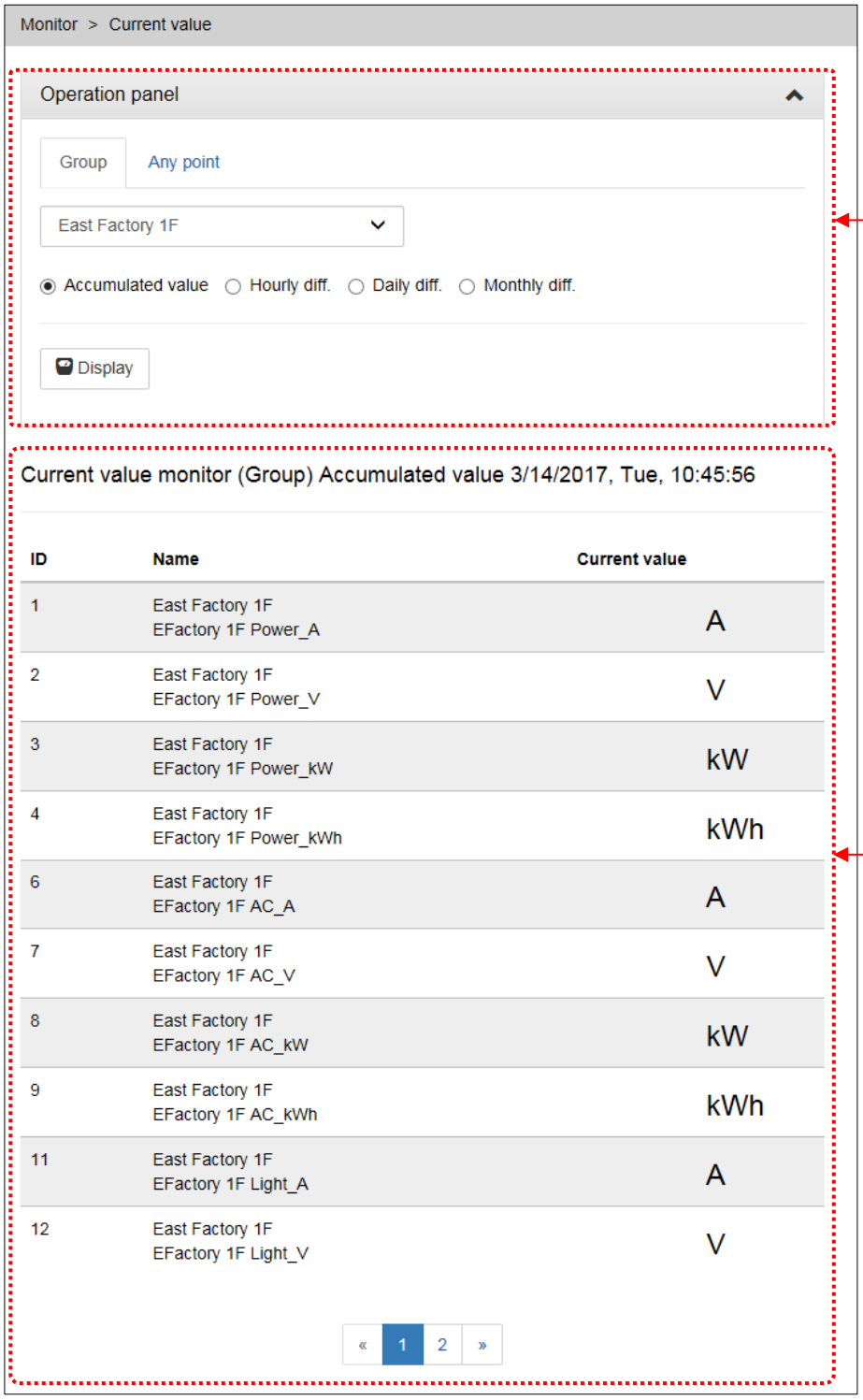


Current time	Display the present time.
Remaining	Display the remaining time of the present time limit.
Time zone	Display the time zone name of the present time limit.
Daily pattern	Display the date pattern name of today.
Target demand	Display the target demand for the current time limit.
Fixed alarm value	Display the fixed alarm value set by the setting software. It is displayed only when the alarm type is set to fixed alarm.
Alarm mask time	Display the alarm mask time set by the setting software. During the alarm mask time starting from the start of the demand time limit, no alarm occurs.
Current demand	Display the demand of the current time.
Predicted demand	Display the predicted demand for the current time.
Adjusted power	Display power that must be adjusted (opened or closed) to reach the target demand at the end of the demand time limit. A negative value refers to power that must be closed.
Permissible power	Display available power at present.
Power limit	This means that the target demand is exceeded when the present demand exceeds the limit power even if all loads other than the base power (load that cannot be closed) are closed. It is displayed only when the alarm type is set to limit alarm.
Energy saving level	Display the monitoring type (predicted demand, adjusted power) of the energy saving level and current energy saving level value. It is displayed only when energy saving level monitoring setting is available.

4.5 Monitor: Current Value

Display the current values of measuring points. The screen is automatically updated at 10-second intervals.
You can switch the display between [Group] or [Any point].
* If it is not displayed correctly, refer to [13.4 Troubleshooting].

- Group:
  Select any measuring points to display the current values.You can save a set of measuring points that you check frequently as a measuring point list, and load the list.
- Any point:
  Select a group to display the current values of the measuring points belonging to the group.
  By saving a set of frequently-viewed measurement points as an arbitrary list, you can display immediately after the next time.

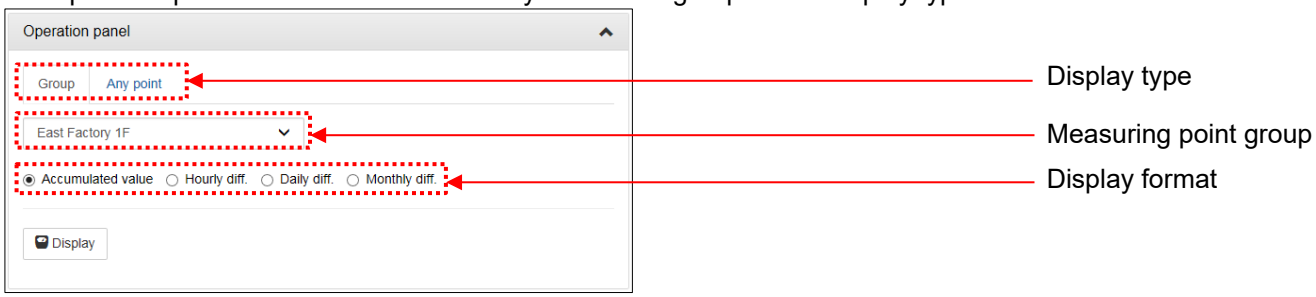


Operation panel

Current value display area

Operation panel (Group)

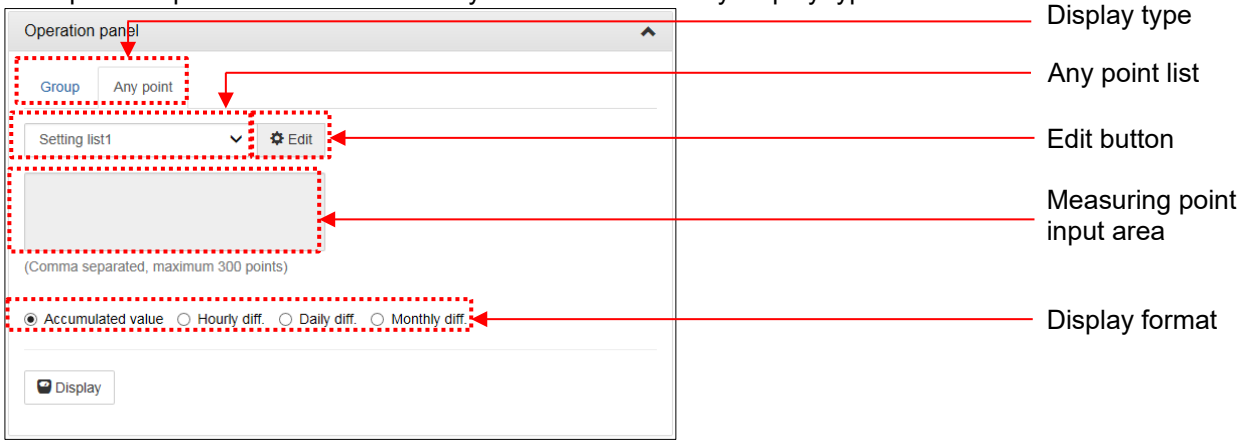
The operation panel will be as follows when you select a group as the display type.



Display type	Select the measurement type display type. (The group is currently selected.) Group: Select the measuring point group and display the registered points. Any point: Display arbitrary measuring points from all points.
Measuring point group	Select the measuring point group to display.
Display format	Select the data display format of electric energy / pulse quantity from Accumulated value, Hourly diff., Daily diff., Monthly diff.
Display button	Display the current value of measuring points belonging to the measuring point group.

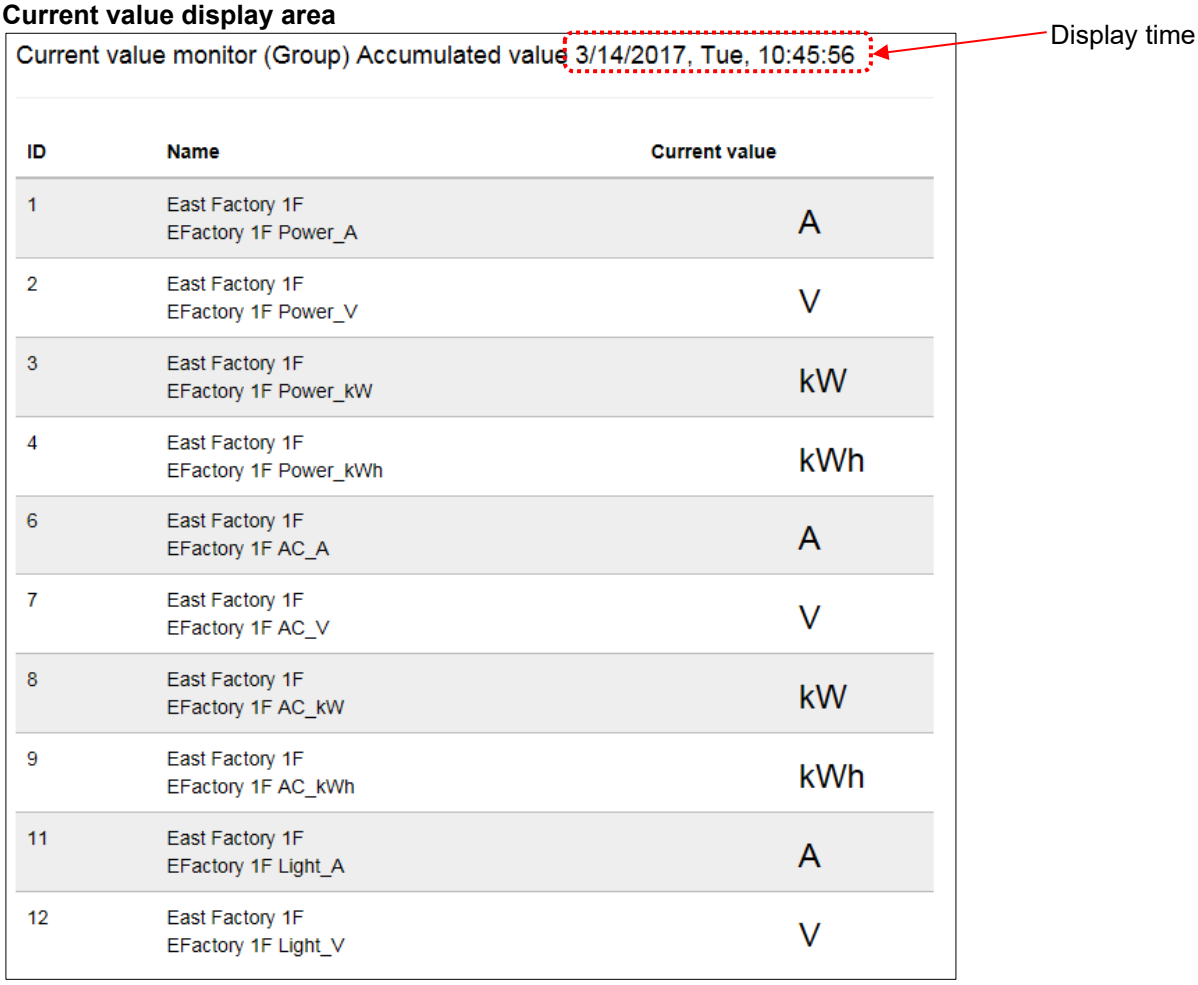
Operation panel (Any point)

The operation panel is as follows when you select an arbitrary display type.



Display type	Select the measurement type display type. (The group is currently selected.) Group: Select the measuring point group and display the registered points. Any point: Display arbitrary measuring points from all points.
Any point list	Select the measuring point group to display.
Edit button	Switch to optional list edit mode.
Measuring point input area	Enter the measurement point ID to display the current value, separated by commas. Up to 300 points are valid, and even if more input is made, the current value will not be displayed. * It can be changed only in edit mode.
Display format	Select the data display format of electric energy / pulse quantity from Accumulated value, Hourly diff., Daily diff., Monthly diff.
Display button	Display the current value of measuring points belonging to the measuring point group.

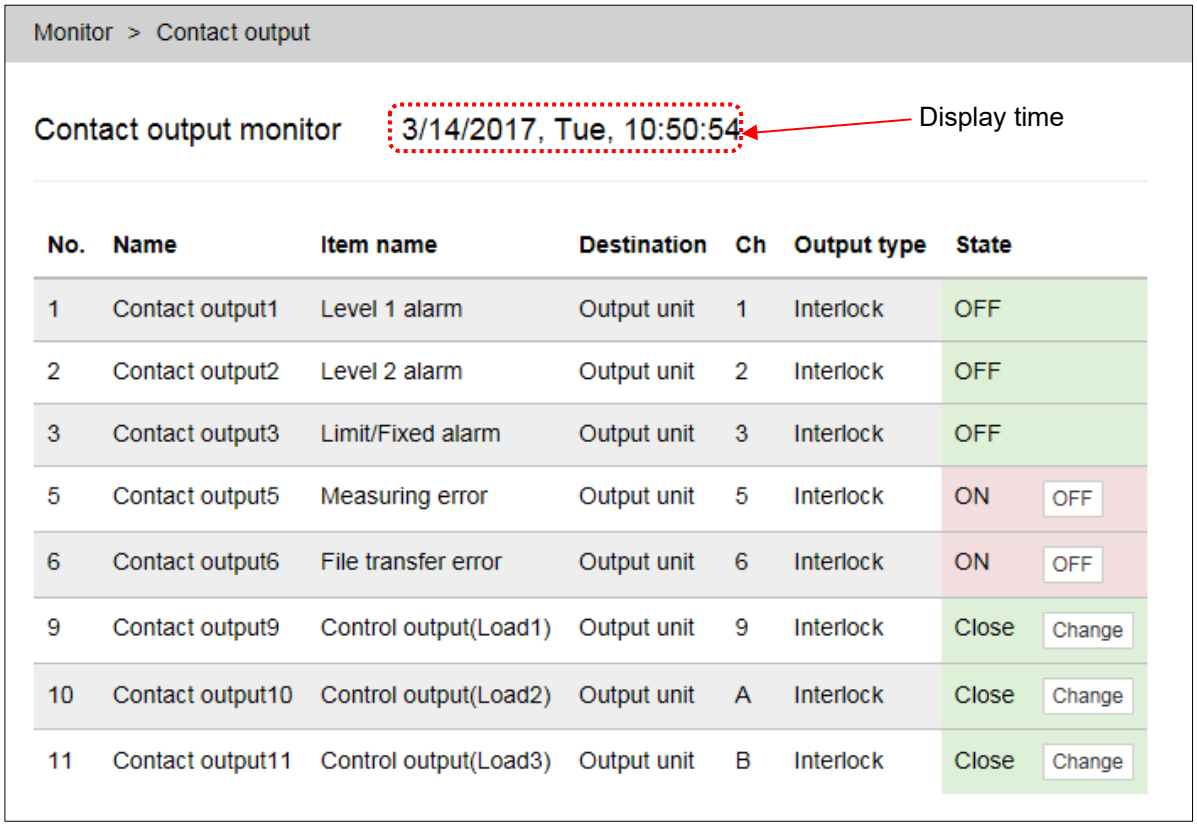
Current value display area



Display time	Display the time when current values are displayed.
ID	Display measuring points IDs. (10 points per page) When [Optional group] is selected in [Display type], IDs appear in the order in which they are entered in [Point list]. When [Fixed group] is selected in [Display type], IDs appear in the order in which they are added to the group.
Name	Display a group name in the upper portion, and a measuring point name in the lower portion.
Current Value	Display the current measuring values.
Page:	Select a page to display. If this field is dimmed, the data consists of only one page.
[<<] button / [>>] button	Display the previous or next page. If this field is dimmed, the data consists of only one page.

4.6 Monitor: Contact Output

Display the status (ON/OFF) of contact outputs. The screen is automatically updated at 10-second intervals.
You can manually turn off contacts that are set for outputting alarms.
You can manually open or close contacts that are set for controlling demand loads.

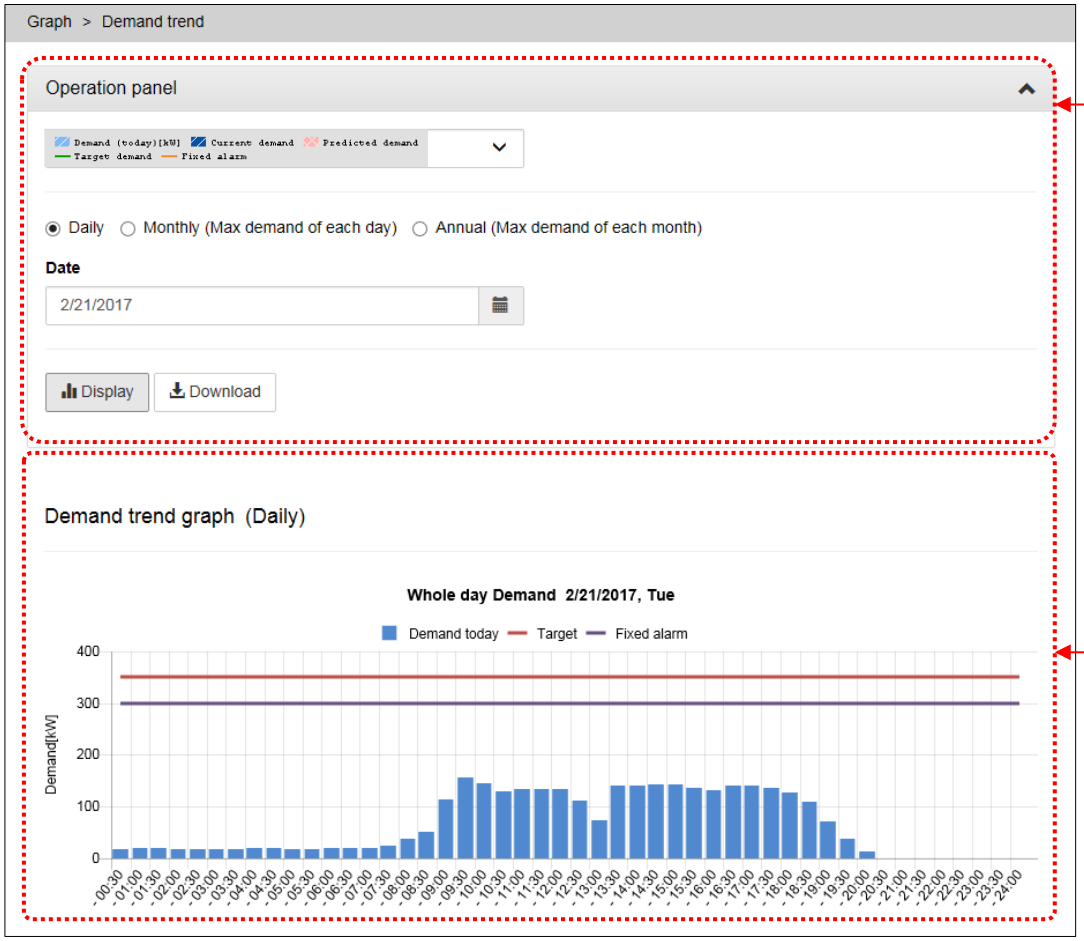


Display time	Display the time when contact status is displayed.
No.	Display the number of a contact output.
Name	Display the name of a contact output.
Item name	Display the item name of a contact output.
Destination	Display the destination.
Ch	Display the output channel.
Output type	Display the output type.
State	Display the current status of a contact.
Control	For contacts for outputting alarms is [ON], the [OFF] button appears. Click the [OFF] button to turn off the contact status after password authentication.
	For contacts for controlling demand loads, the [Change] button appears. Click the [Change] button to open or close the contact status after password authentication. (To close, click the [Change] button in the open status. To open, click the [Change] button in the closed status.)

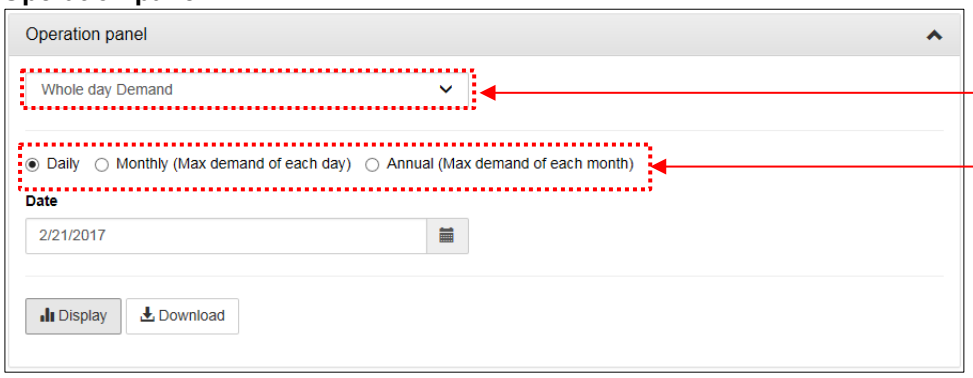
4.7 Graph: Demand Trend

For device with demand control function only

Use this screen to check past demand trend at yearly, monthly, or daily intervals.

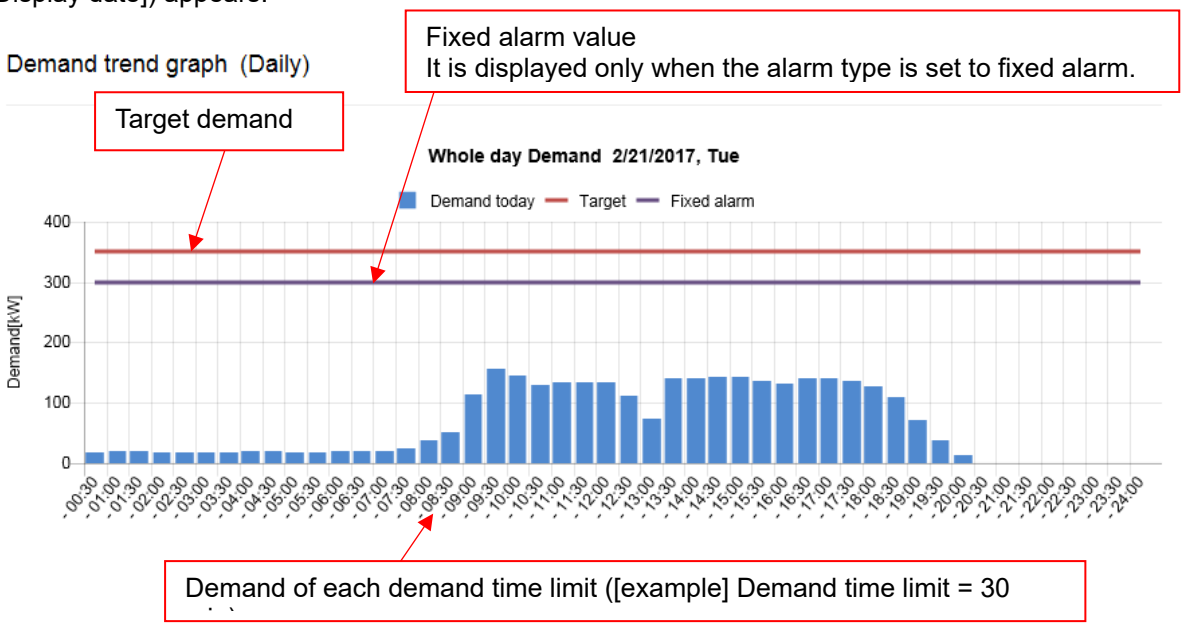


Operation panel

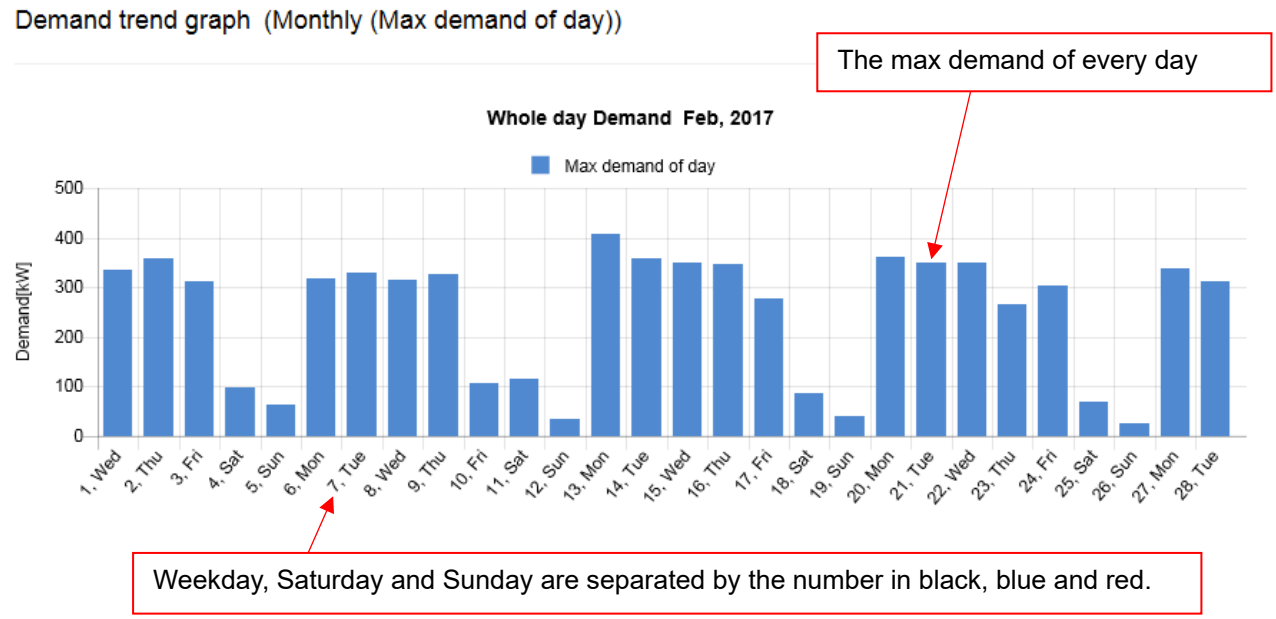


Display time-zone	Select a time zone of data to graph.
Display interval	Select the display interval of the graph from daily, Monthly (Max demand of day), and Annual (Max demand of month).
Display date	Click the button and select the date of the data to be displayed in the graph.
[Display] button	Display a graph under the specified conditions.
[Download] button	Downloads the graph data.

Graph area (daily)
When [Daily] is selected in [Display interval], the demand of every demand time limit (of the day selected in [Display date]) appears.

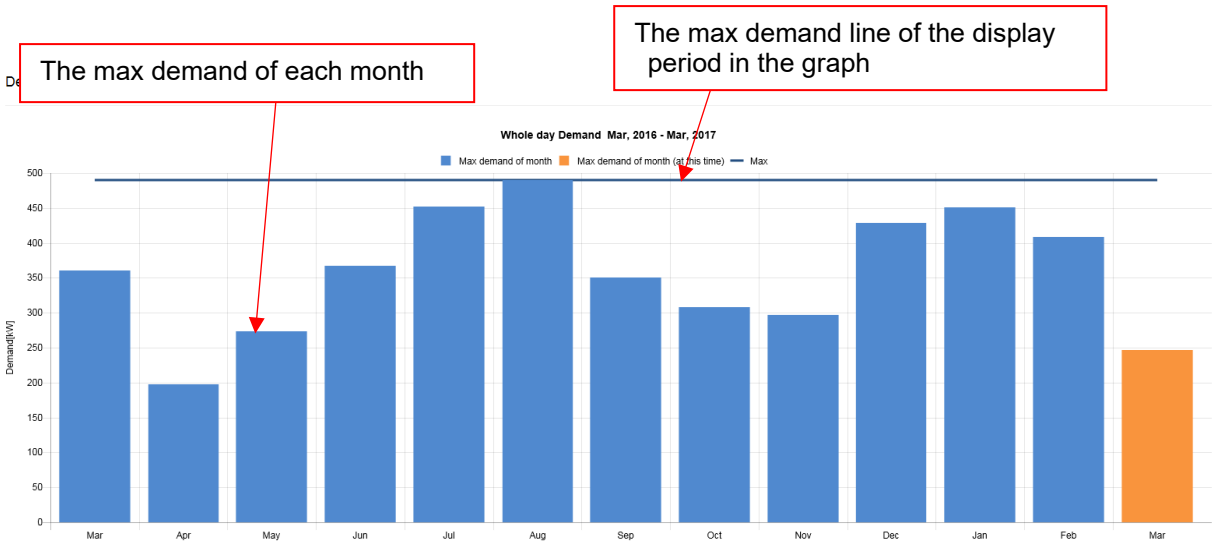


Graph area (monthly)
When [Monthly] is selected in [Display interval], the max demand of every day (of the year/month selected in [Display date]) appears.



Graph area (Annual)

When [Annual] is selected in [Display interval], the max demand of the past 13 months (Including the year/month selected in [Display date]) appears.



Occurrence time of max demand

Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Thu, 3/10/2016 09:30	Fri, 4/1/2016 10:00	Sun, 5/29/2016 17:00	Tue, 6/14/2016 16:00	Sat, 7/23/2016 09:30	Mon, 8/22/2016 09:30	Tue, 9/13/2016 15:30	Fri, 10/7/2016 14:00	Tue, 11/29/2016 09:30	Fri, 12/16/2016 09:30	Wed, 1/18/2017 16:30	Mon, 2/13/2017 15:00	Tue, 3/14/2017 10:00

Time when the max demand of each month is recorded

Display the year/month selected in [Display date] at the right end

4.8 Graph: Measuring Point Comparison

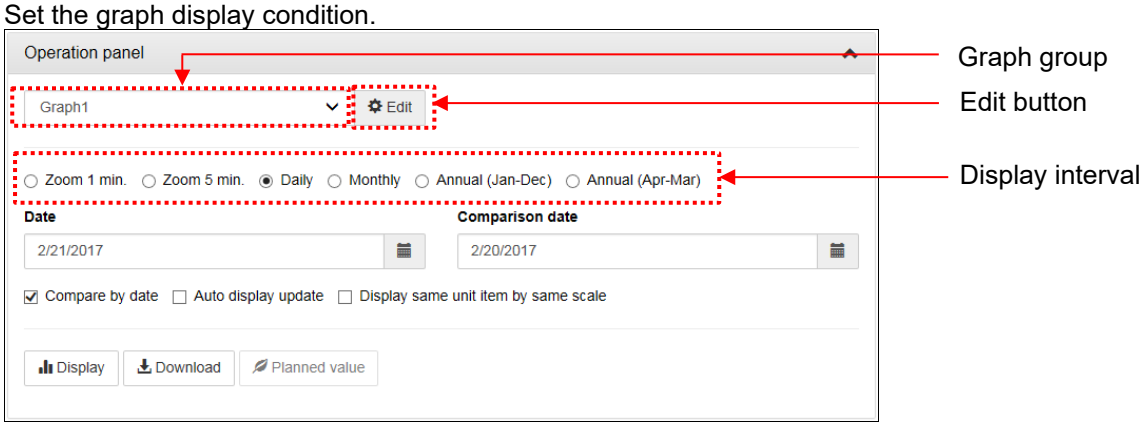
Select multiple measuring points to line up their graphs on the same date or display them in a stack graph.
Use this to compare and analyze power usage by department or by use (such as air conditioning or lighting).

Operation panel

Graph display

Operation panel

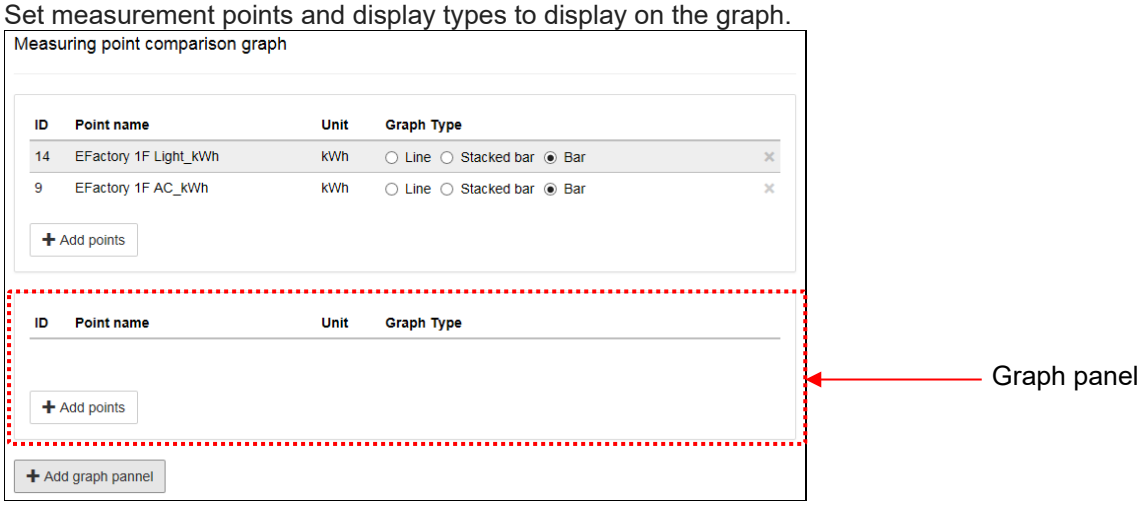
Set the graph display condition.



Graph group	It is a pattern of measurement points and display type. Click ▼ and select from the list.More setting method refers to [5.1 Comparing by measuring points].
Edit button	Switch to graph group edit mode.
Display interval	Selected from Zoom 1min, Zoom 5min, Daily, Monthly, and Annual.
Display date	Click the button 📅 and select the date of the data to be displayed in the graph. Select time only for zoom 1 min and zoom 5 min.
Auto display update	Graph will be automatically updated by putting a check.
Display button	The graph of the set conditions is displayed.
Download button	Download graph data.

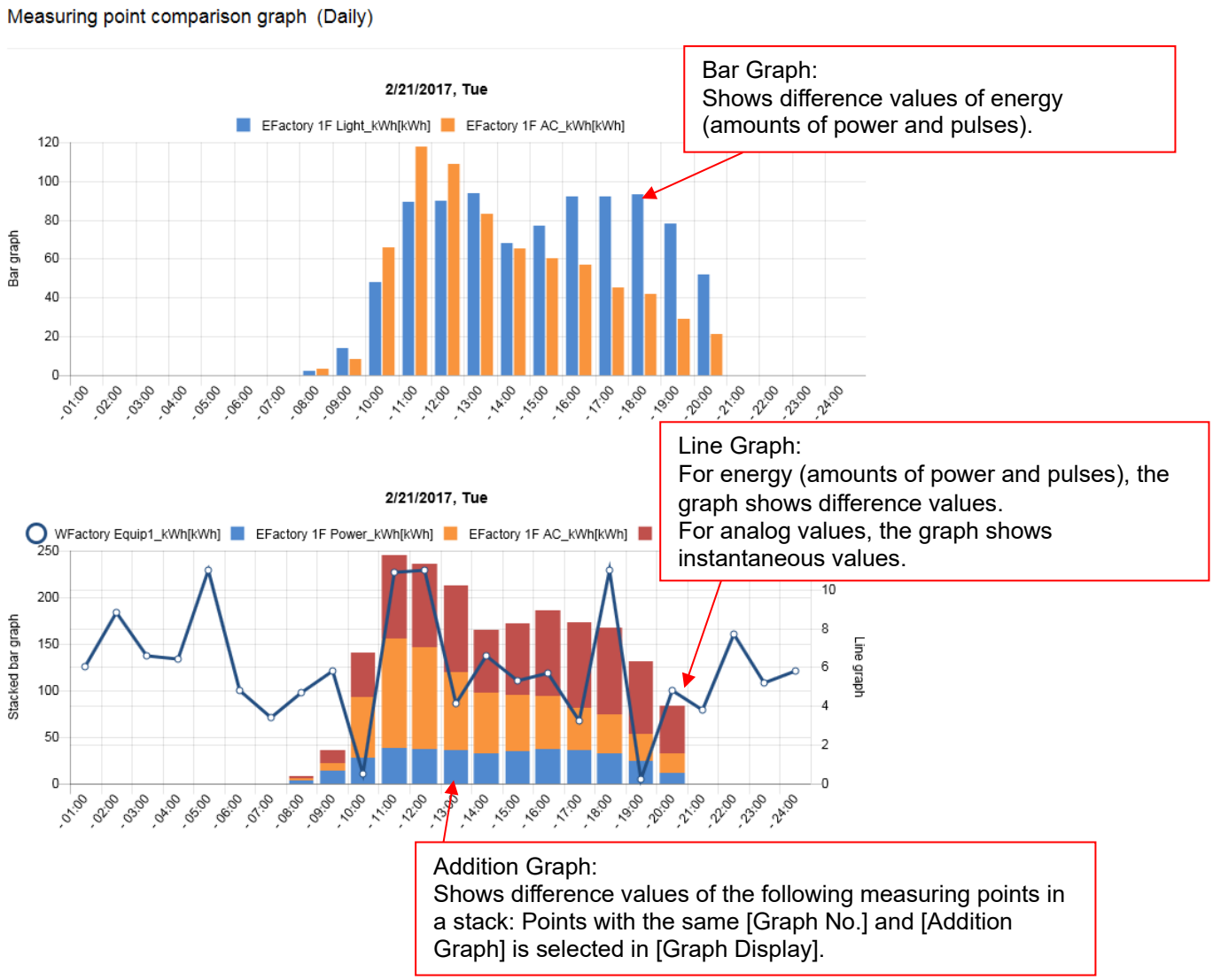
Graph group edit mode

Set measurement points and display types to display on the graph.



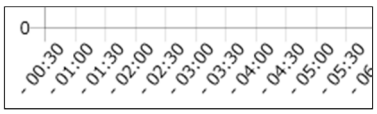
ID	Display the measuring point ID.
Measuring point name	Display the measuring point name.
Unit	Display the unit.
Display type	Select the graph display type. It is only a polygonal line for analog value measurement points, Select from polygonal line, stacking up, and bar for electric energy / pulse amount measuring points.
Add points button	Add measurement points to the graph panel.
Add graph panel	Add a graph panel. The graph panel display the set measurement points on one graph.

Graph display area
This area display graphs of the measuring points selected in [Display item]. (Up to 10 graphs)

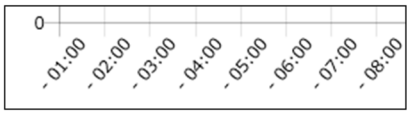


The horizontal axis of the graph
It depends on the daily logging cycle set in the setting software when the display interval is daily.

Daily logging cycle = 30 minutes



Daily logging cycle = 60 minutes



4.9 Graph: Date Comparison

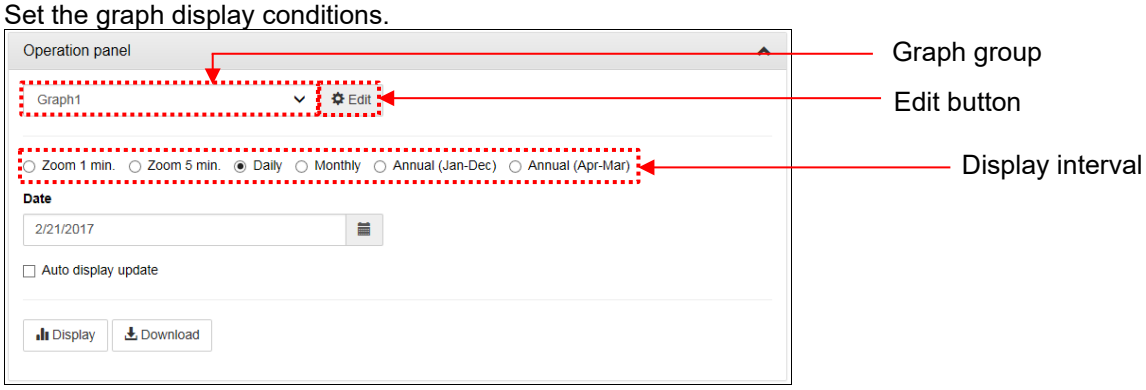
You can select multiple measuring points to line up their graphs on two different dates for comparison.
Use this to analyze power usage by comparing with the last year or last week.

Operation panel

Graph display

Operation panel

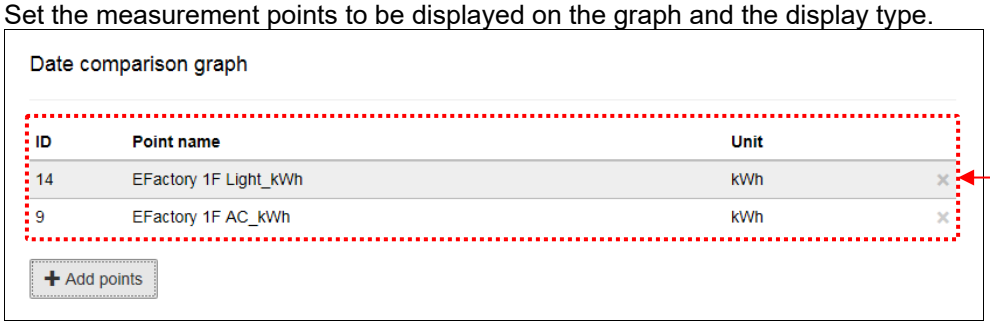
Set the graph display conditions.



Graph group	It is a pattern of measurement points and display type. Click ▼ and select from the list.More setting method refers to [5.2 Comparing by date].
Edit button	Switch to graph group edit mode.
Display interval	Selected from Zoom 1min, Zoom 5min, Daily, Monthly, and Annual.
Date /Comparison date	Click the button 📅 and select the date of the data to be displayed in the graph. Select time only for zoom 1 min and zoom 5 min.
Compare by date	Comparison date and time can be selected, and a graph of comparison date and time is displayed when putting check.
Auto display update	When you click the check button and click the display button, the graph is automatically updated. When automatic updating, the automatic update stop button is displayed, and clicking stops automatic updating.
Display same unit item by same scale	When checked, the scale of the same unit will be the same for the Y axis. Adjust to the scale of the graph with the largest value. When unchecked, the scale of the Y axis of each graph is determined by the maximum value of the measurement item being displayed.
Display button	The graph of the set conditions is displayed.
Download button	Download graph data
Planned value button	Transit to the screen for setting the planned value. It is effective only when you select Monthly, Annual (Jan- Dec), Annual (Apr-Mar) for the display interval. Please select the date comparison graph again from the side menu To display the date comparison graph after setting the planned value.

Graph group edit mode

Set the measurement points to be displayed on the graph and the display type.

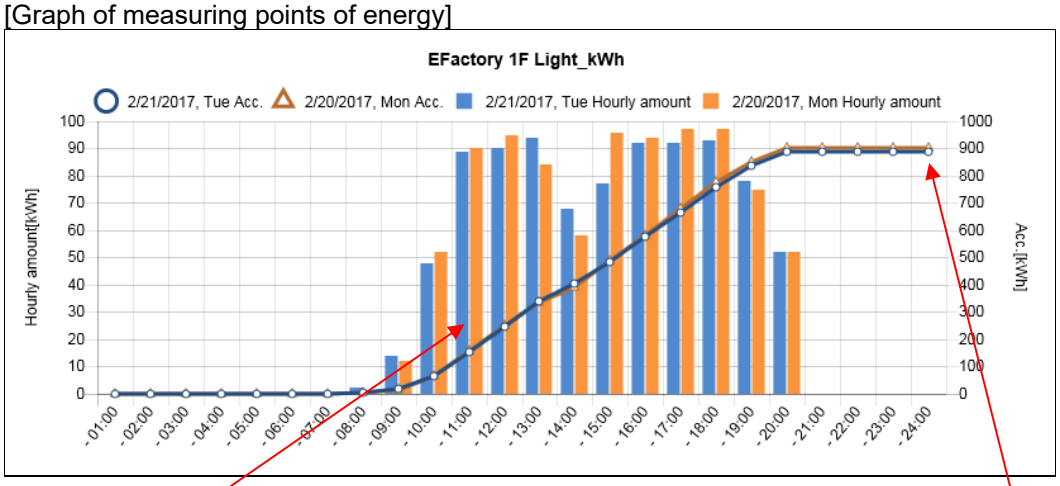


ID	Display the measuring point ID.
Measuring name	Display the measuring point name.
Unit	Display the unit.
Add point button	Add measuring points to the graph panel.

Graph display area

This area display graphs of the measuring points selected in [Display item]. (Up to 10 graphs)

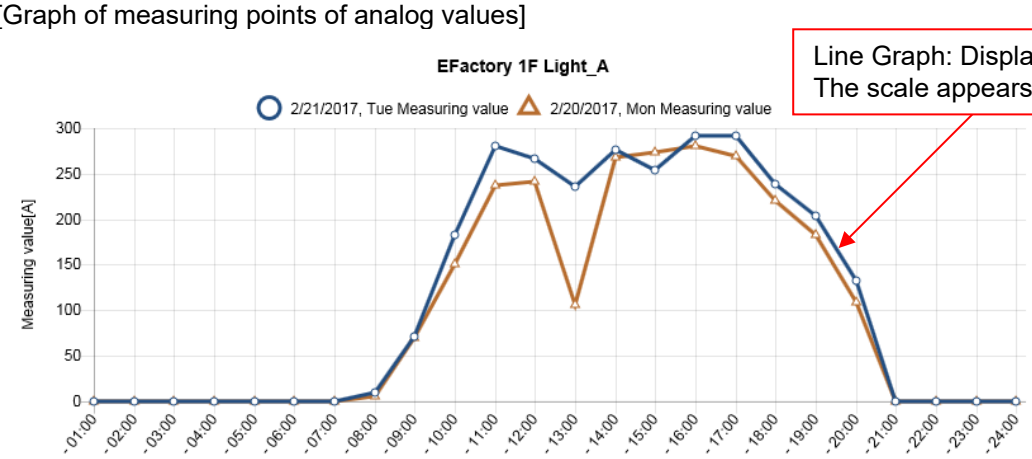
[Graph of measuring points of energy]



Bar Graph:
Display the amount used.
The scale appears on the Y-axis on the left.

Line Graph:
Display the accumulated value of the amount used.
The scale appears on the Y-axis on the right.

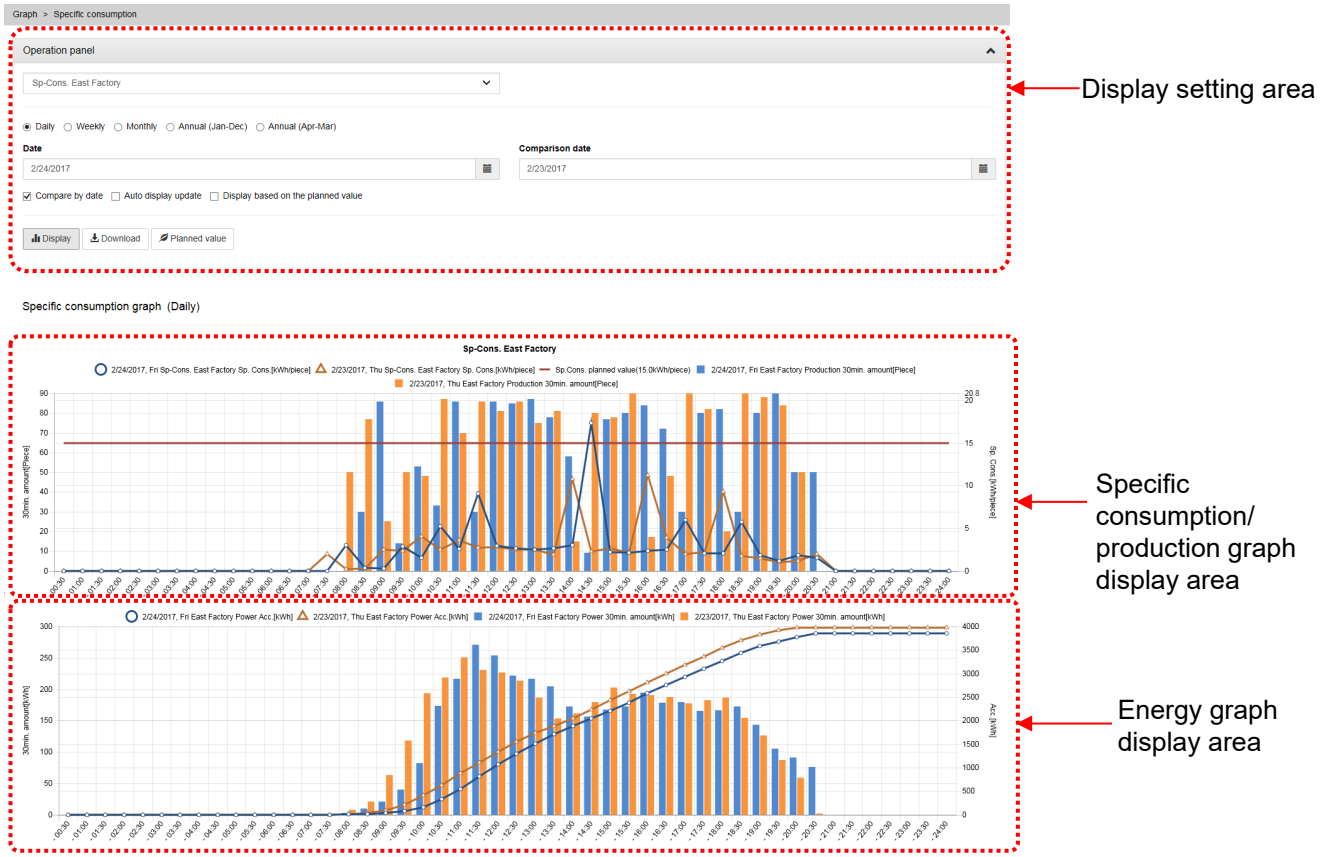
[Graph of measuring points of analog values]



Line Graph: Display instantaneous values.
The scale appears on the Y-axis on the left.

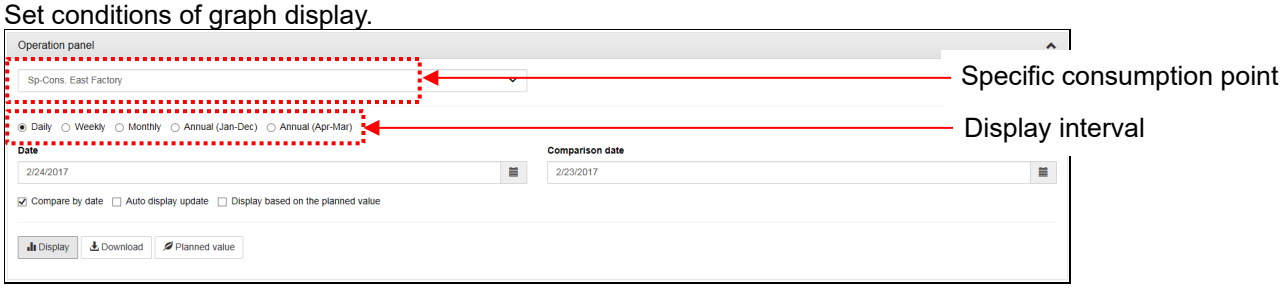
4.10 Graph: Specific Consumption

Use this to graph specific consumption data. You can grasp changes in production volume and specific consumption by comparing with the movement of energy volume. You can also compare with data of another date.



Operation panel

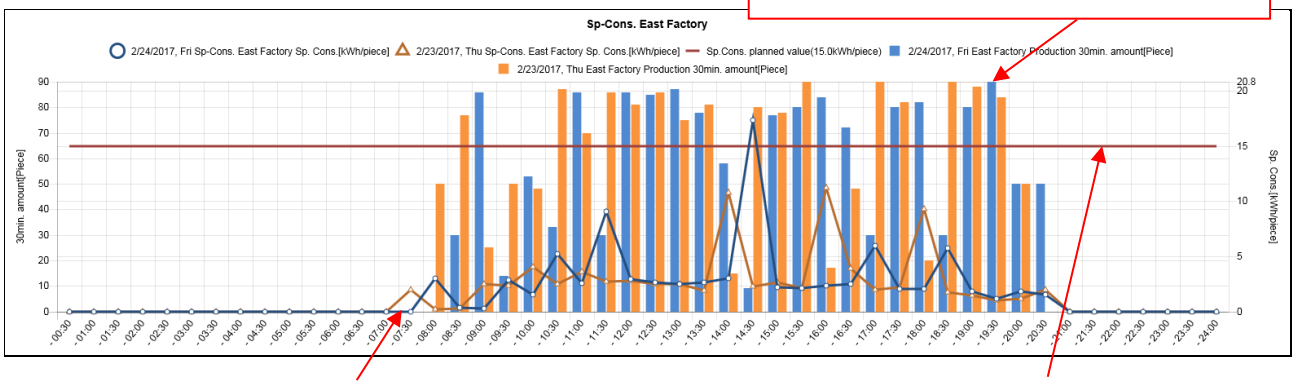
Set conditions of graph display.



Specific consumption point	Select a specific consumption point to display in a graph.
Display interval	Select a graph display interval from the following: [Annual (Year (Jan.-Dec.))], [Annual (Year (Apr.-Mar.))], [Monthly], [Weekly], or [Daily].
Date /Comparison date	Click the button and select the date of the data to be displayed in the graph.
Compare by date	When checked, comparison date and time can be selected, and a graph of comparison date and time is displayed.
Auto display update	Check this and click [view] button to update graphs automatically. When selected automatic update, display [automatic update stop] button. Click it to stop automatic update.
Display based on the planned value	Check this to adjust the scale based on the planned value. Uncheck this to adjust the scale so that the maximum value of the specific consumption stays within a graph. * If no planned value is set, the [Unchecked] display remains even if checked.
Display button	Display a graph under the specified conditions.
Download button	Downloads the graph data.
Planned value button	The planned value setting screen appears. When display the [Specific consumption Graph] after [plan] setting, select the [Specific consumption Graph] from side menu again.

Specific consumption/production graph display area
Specific consumption and production volume (denominator of specific consumption) are graphed.

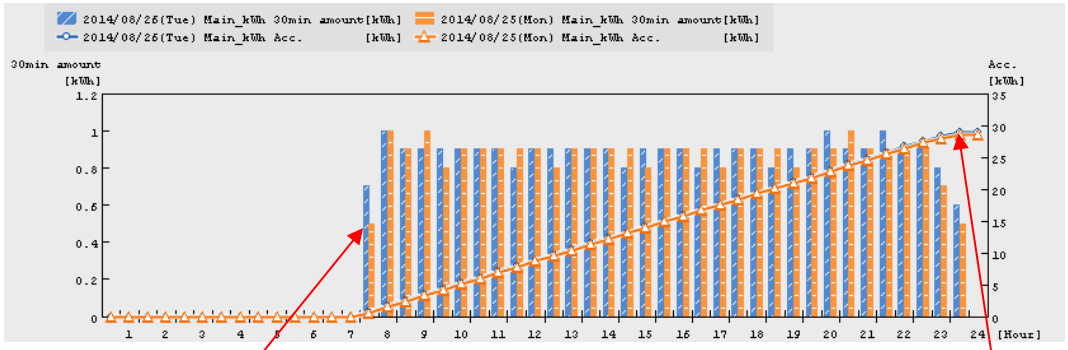
Line Graph:
Display the specific consumption.
The scale appears on the Y-axis on the right.



Bar Graph:
Display the production volume.
The scale appears on the Y-axis on the left.

Line:
Display the line of planned values of specific consumption.
The scale appears on the Y-axis on the right.

Energy graph display area
Energy volume (numerator of specific consumption) is graphed.



Bar Graph:
Display the energy volume.
The scale appears on the Y-axis on the left.

Line Graph:
Display the accumulated value of the energy volume.
The scale appears on the Y-axis on the right.

4.11 Graph: Equipment

Use this to graph equipment efficiency in addition to energy information by incorporating production information including operating time.

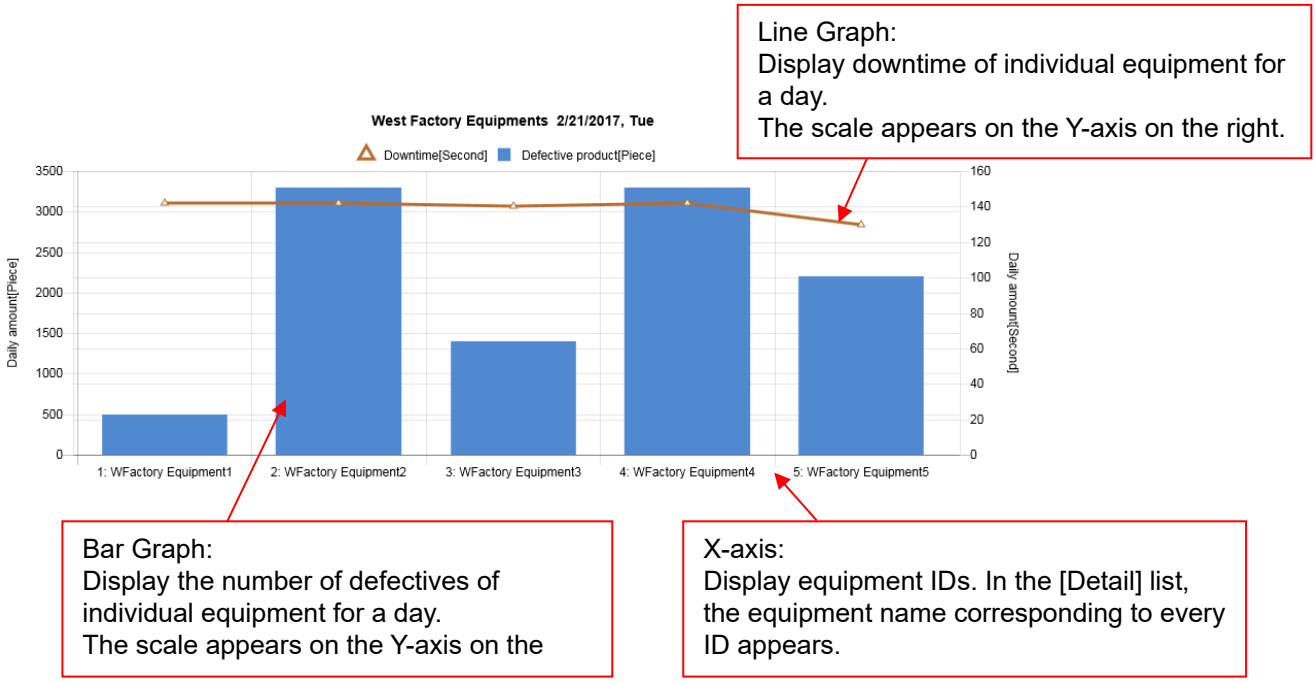
Operation panel

Set conditions of graph display.

Equipment group	Select the equipment group to display in the graph.
Display date	Select the date of the data to be displayed on the graph.
Display button	Display a graph under the specified conditions.
Download button	Downloads the group graph data. *To download equipment efficiency and detail graph data, use the [Download] button in the equipment efficiency graph display area.

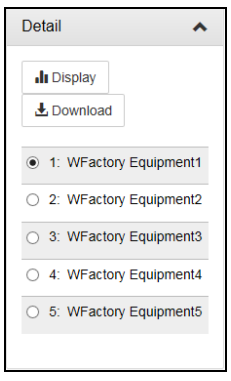
Group graph display area

The number of defectives and downtime of equipment included in an equipment group are graphed.

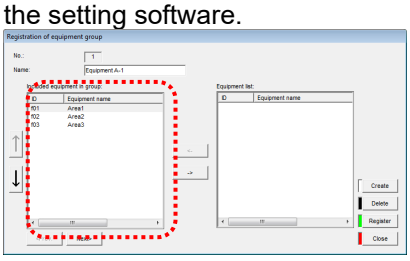


Detail list display area

Select equipment that you want to display detailed data, such as equipment efficiency.

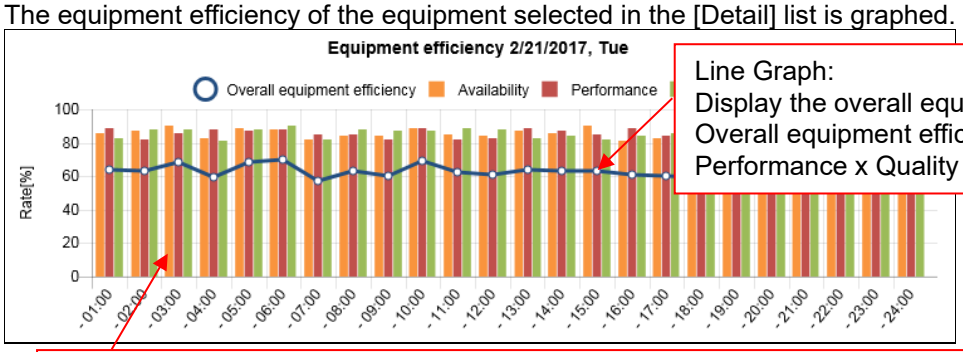


Click a name to display its detailed data.
Equipment names are listed in the order in which they are registered with [Group] of the setting software.



Equipment efficiency graph display area

The equipment efficiency of the equipment selected in the [Detail] list is graphed.



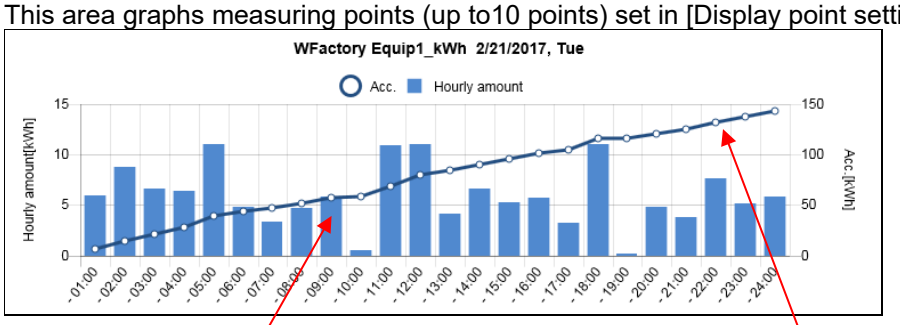
Line Graph:
Display the overall equipment efficiency (%).
Overall equipment efficiency = Availability x Performance x Quality

Bar Graph:
Display the availability (%), performance (%), and quality (%).
Availability = (Loading time - Downtime) ÷ Loading time
Performance = (Standard cycle time x Product) ÷ (Loading time - Downtime)
Quality = Non-defective product ÷ Product

Display button	Equipment efficiency graph and facility detail graph of the selected equipment name are displayed.
Download button	Downloads the equipment efficiency and detail graph data. *To download group graph data, use the [Download] button in the display setting area.

Detail graph display area

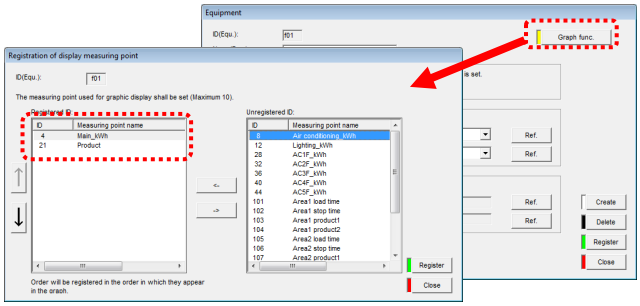
This area graphs measuring points (up to10 points) set in [Display point setting] of the setting software.



Bar Graph:
Display the amount of energy used.
The scale appears on the Y-axis on the left.

Line Graph:
Display the accumulated value of the amount used.
The scale appears on the Y-axis on the right.

Graphs are listed in the order in which they are set the setting software.

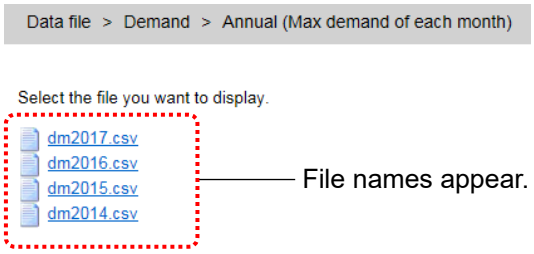


4.12 Data Files: Demand Data

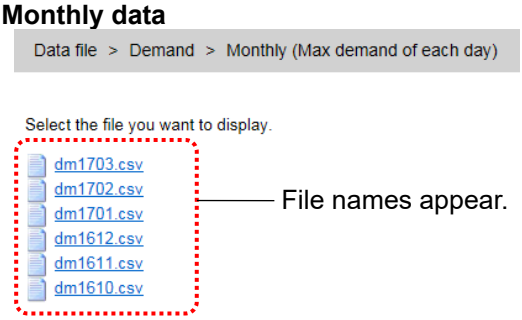
For device with demand control function only

You can download demand data you logged with EcoWebServerIII into CSV files.

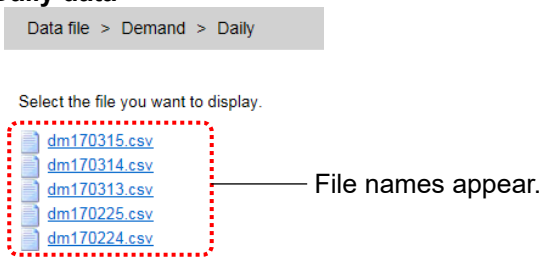
Annual data



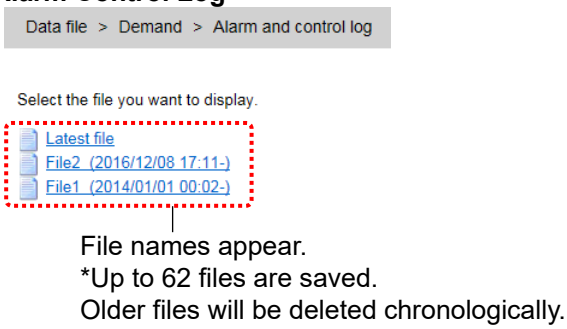
Monthly data



Daily data



Alarm Control Log

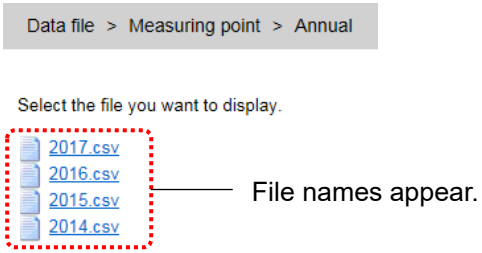


Item	File name	Description	Example
Annual data	dmYYYY.csv	Data in YYYY. Monthly data are recorded for a year.	dm2015.csv = Data in 2015
Monthly data	dmYYMM.csv	Data in MM, 20YY. Daily data are recorded for a month.	dm1505.csv = Data in May, 2015
Daily data	dmYYMMDD.csv	Data on MM DD, 20YY. Data of each demand time limit is recorded for a day.	dm150504.csv = Data on May 4, 2015
Alarm Control Log	Latest file	Logs from the present time back to the previous hour on the hour.	If the present time is 12:34, logs between 12:00 - 12:34
	File X (YYYY/MM/DD hh*mm -)	Logs from hh:mm on MM DD, YYYY. If the size of a file exceeds 128 KB, logs are recorded in the next file.	File 4 (2014/12/28 09:18 -) =Logs from 09:18 on Dec. 28, 2014

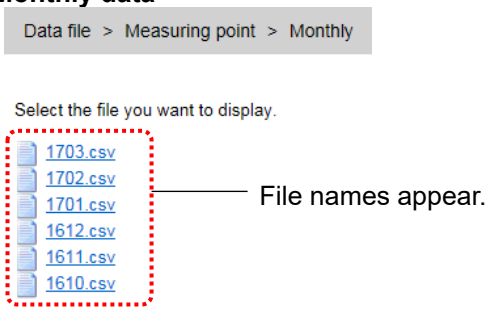
4.13 Data Files: Measuring Point Data

You can download data of Energy or current you logged with EcoWebServerIII into CSV files.

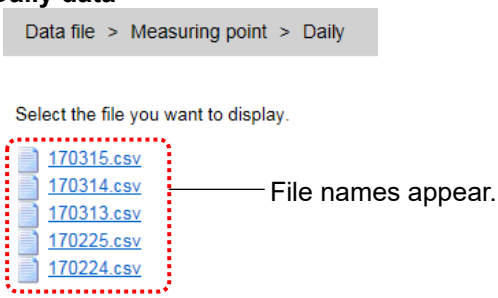
Annual data



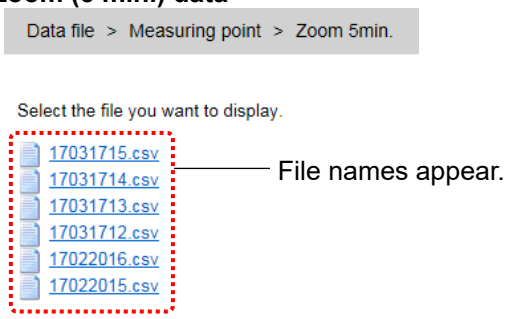
Monthly data



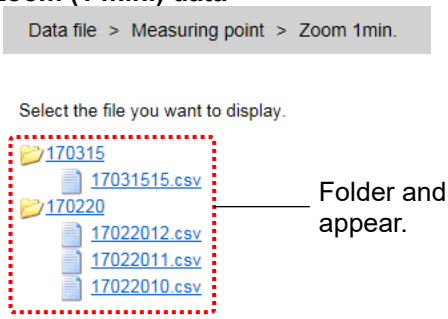
Daily data



Zoom (5 min.) data



Zoom (1 min.) data



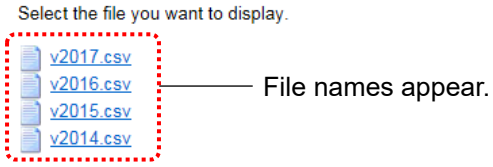
Item	File/folder name	Description	Example
Annual data	YYYY.csv	Data in YYYY. Monthly data are recorded for a year.	2015.csv = Data in 2015
Monthly data	YYMM.csv	Data in MM, 20YY. Daily data are recorded for a month.	1505.csv = Data in May, 2015
Daily data	YYMMDD.csv	Data on MM DD, 20YY. 15 min, half-hourly or hourly data are recorded for a day.	150504.csv = Data on May 4, 2015
Zoom (5 min.) data	YYMMDDHH.csv	Data at HH:00 on MM DD, 20YY. Five-minutely data are recorded for an hour.	15050323.csv =Data at 23:00 on May 3, 2015
Zoom (1 min.) data	YYMMDD	Folder on MM DD, 20YY.	150503 =Folder on May 3, 2015
	YYMMDDHH.csv	Data at HH:00 on MM DD, 20YY. Minutely data are recorded for an hour.	15050323.csv =Data at 23:00 on May 3, 2015

4.14 Data Files: Virtual Data

You can download virtual measuring point data that is computed from data of Energy or current you logged with EcoWebServerIII into CSV files.

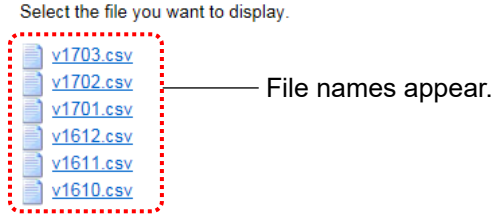
Annual data

Data file > Virtual measuring point > Annual



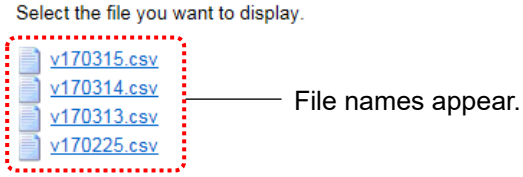
Monthly data

Data file > Virtual measuring point > Monthly



Daily data

Data file > Virtual measuring point > Daily



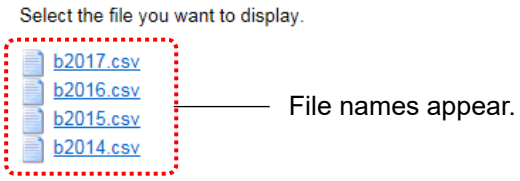
Item	File name	Description	Example
Annual data	vYYYY.csv	Data in YYYY. Monthly data are recorded for a year.	v2015.csv = Data in 2015
Monthly data	vYYMM.csv	Data in MM, 20YY. Daily data are recorded for a month.	v1505.csv = Data in May, 2015
Daily data	vYYMMDD.csv	Data on MM DD, 20YY. 15 min, half-hourly or hourly data are recorded for a day.	v150504.csv = Data on May 4, 2015

4.15 Data Files: Specific Consumption Data

You can download specific consumption data that is calculated from data of Energy or production you logged with EcoWebServerIII into CSV files.

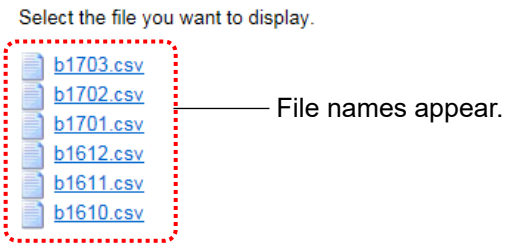
Annual data

Data file > Specific consumption > Annual



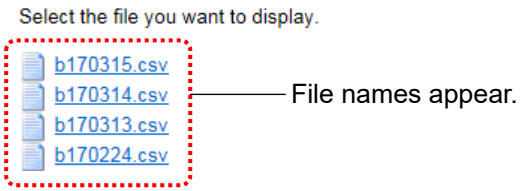
Monthly data

Data file > Specific consumption > Monthly



Daily data

Data file > Specific consumption > Daily

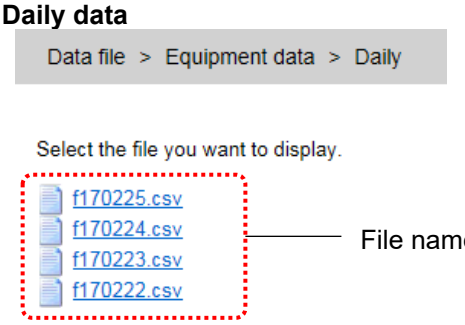


Item	File name	Description	Example
Annual data	bYYYY.csv	Data in YYYY. Monthly data are recorded for a year.	b2015.csv = Data in 2015
Monthly data	bYYMM.csv	Data in MM, 20YY. Daily data are recorded for a month.	b1505.csv = Data in May, 2015
Daily data	bYYMMDD.csv	Data on MM DD, 20YY. 15 min, half-hourly or hourly data are recorded for a day.	b150504.csv = Data on May 4, 2015

4.16 Data Files: Equipment Data

You can download measurement data that is collected from data of equipment you registered with EcoWebServerIII into CSV files.

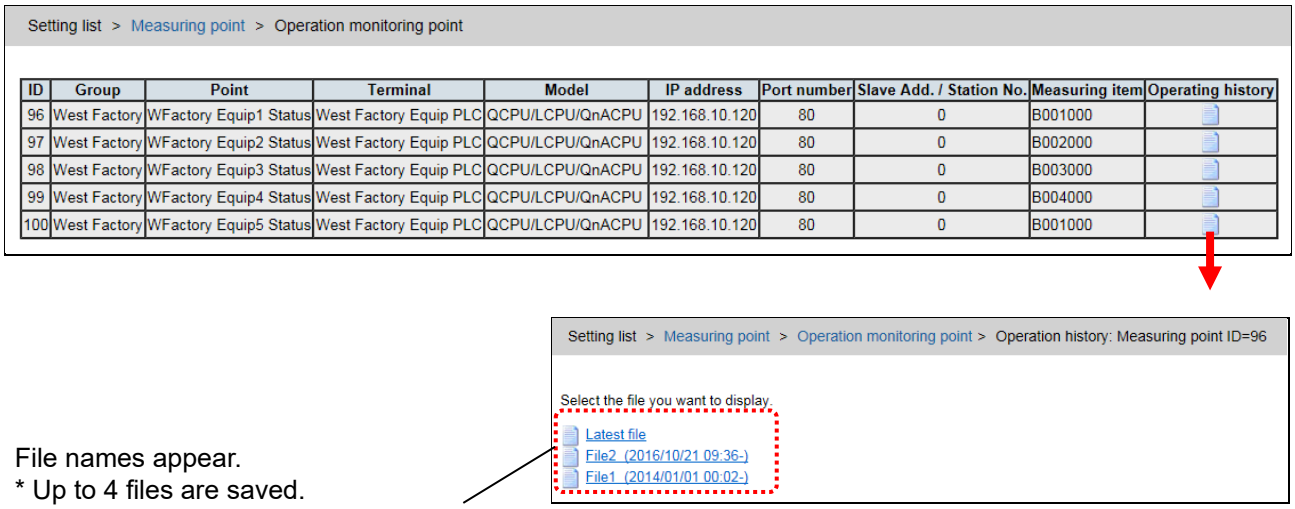
Daily data



Item	File name	Description	Example
Equipment data	fYYMMDD.csv	Data on MM DD, 20YY. 15 min, half-hourly or hourly data are recorded for a day.	f150504.csv = Data on May 4, 2015

4.17 Data Files: Operation History Data

You can download change history data of the ON/OFF state of operation monitoring points you logged with EcoWebServerIII.



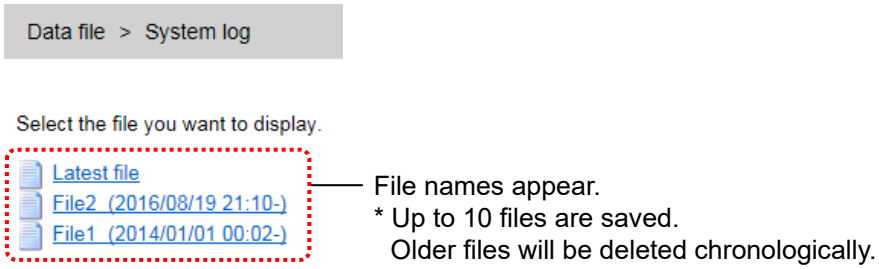
ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Operating history
96	West Factory	WFactory Equip1 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B001000	
97	West Factory	WFactory Equip2 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B002000	
98	West Factory	WFactory Equip3 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B003000	
99	West Factory	WFactory Equip4 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B004000	
100	West Factory	WFactory Equip5 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B001000	

File names appear.
* Up to 4 files are saved.
  Older files will be deleted chronologically.

Item	File name	Description	Example
Operation history	Latest file	Operation history data from the present time back to the previous hour on the hour.	If the present time is 12:34, operation history data between 12:00 - 12:34
	File X (YYYY/MM/DD hh*mm -)	Operation history data from hh:mm on MM DD, YYYY. If the size of a file exceeds 64 KB, logs are recorded in the next file.	File 3 (2011/01/30 10:55 -) =Operation history data from 10:55 on Jan. 30, 2011

4.18 Data Files: System Log

You can download system logs in which boot or errors occurred in EcoWebServerIII are recorded.
Use this to check the past operating condition of EcoWebServerIII.



Item	File name	Description	Example
System log	Latest file	System logs from the present time back to the previous hour on the hour.	If the present time is 12:34, operation history data between 12:00 - 12:34
	File X (YYYY/MM/DD hh*mm -)	System logs from hh:mm on MM DD, YYYY. If the size of a file exceeds 256 KB, logs are recorded in the next file.	File 4 (2014/12/04 15:21-) =System logs from 15:21 on Dec. 4 2014

4.19 Setting List: Demand Monitoring

For device with demand control function only
Display the contents of the demand control setting.

Demand monitoring
Display the logging setting of demand monitoring and the retention period of the file.

Setting list > Demand monitoring

	Logging period	Logging time	File format	File retention period
Annual (Max demand of each month)	Monthly	1day(s)0hour(s)	1 file per 1 year	5year(s)
Monthly (Max demand of each day)	Daily	0hour(s)	1 file per 1 month	60month(s)
Daily data	30min.	---	1 file per 1 day	186day(s)
Demand alarm and control log	Anytime	---	128KBx62File	

-Demand setting Detail
-Time zone setting Detail
-Calendar setting Detail
-Energy saving cooperation setting Detail

Demand setting
Display the contents of the basic, alarm, and control settings of the demand control function.

Setting list > Demand monitoring > Demand setting (basic, alarm, control)

Demand basic setting

Item	Contents
Name	Power receiving
VCT ratio	600
Pulse constant value	10000 pulse/kWh
Number of digits (Integer part)	5
multiplying factor	10
Demand time limit adjustment Type	Initial TS
Demand time limit	30 minutes

Time zone setting

Time zone	Time zone name	Target demand value	Base power	Fixed alarm value
1	Time zone 1	300.0 kW	-	240.0 kW
2	Time zone 2	300.0 kW	-	240.0 kW
3	Time zone 3	300.0 kW	-	240.0 kW
4	Time zone 4	300.0 kW	-	240.0 kW
5	Time zone 5	300.0 kW	-	240.0 kW
6	Time zone 6	300.0 kW	-	240.0 kW
7	Time zone 7	300.0 kW	-	240.0 kW
8	Time zone 8	300.0 kW	-	240.0 kW
9	Time zone 9	300.0 kW	-	240.0 kW
10	Time zone 10	300.0 kW	-	240.0 kW

Alarm setting

Item	Contents
Alarm/Control mask time	6 minutes
Alarm type	Fixed Alarm
Demand alarm destination	Item: Output No. Level 1 Alarm: 1 Level 2 Alarm: 2 Limit/Fixed alarm: 3 Error: Demand time limit adjustment by external pulse signal:

Demand control setting

Item	Contents
Demand control type	Cyclic - Reclosing
Reclosing interval	-

Demand control setting

Control No.	Load name	Priority order	Control capacity
1	Control output(Load1)	1	10.0 kW
2	Control output(Load2)	2	10.5 kW
3	Control output(Load3)	3	30.0 kW
4	Control output(Load4)	Invalid	-
5	Control output(Load5)	Invalid	-
6	Control output(Load6)	Invalid	-
7	Control output(Load7)	Invalid	-
8	Control output(Load8)	Invalid	-
9	Control output(Load9)	Invalid	-
10	Control output(Load10)	Invalid	-
11	Control output(Load11)	Invalid	-
12	Control output(Load12)	Invalid	-

Time zone setting

Display the contents of time zone name and the daily pattern setting.

Setting list > Demand monitoring > Time zone setting

Time zone name setting

Time zone	1	2	3	4	5
Name	Time zone 1	Time zone 2	Time zone 3	Time zone 4	Time zone 5
Time zone	6	7	8	9	10
Name	Time zone 6	Time zone 7	Time zone 8	Time zone 9	Time zone 10

Daily pattern setting *Display Time zone set in daily pattern

No.	Daily pattern name	Demand time limit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Daily pattern 01	0-30minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30-60minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Daily pattern 02	0-30minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30-60minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Daily pattern 03	0-30minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30-60minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Daily pattern 04	0-30minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30-60minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Daily pattern 05	0-30minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30-60minutes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Calendar setting

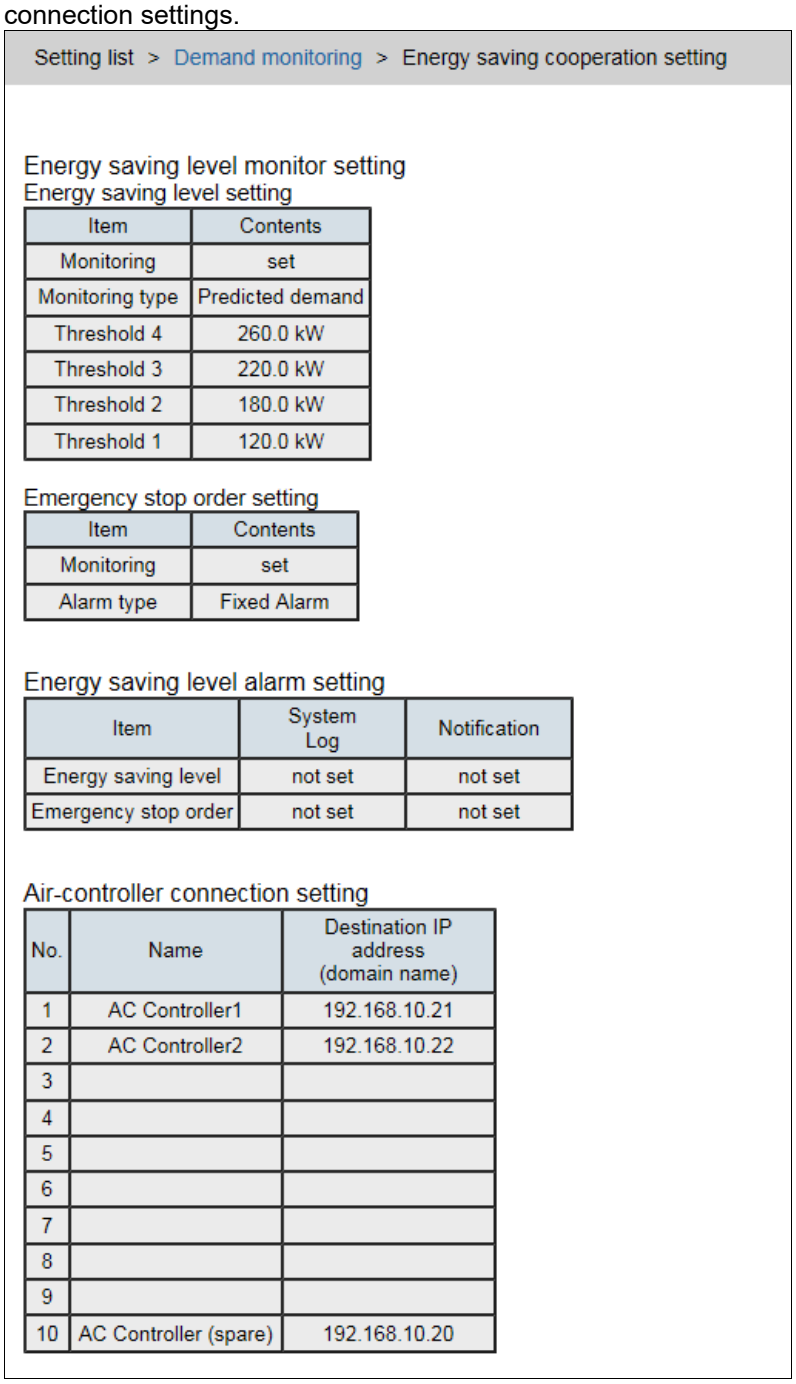
Display the contents of the date pattern set specified for every day.

Setting list > Demand monitoring > Calendar setting

Calendar setting *Display set daily pattern No..

	2017/01	2017/02	2017/03	2017/04	2017/05	2017/06	2017/07	2017/08	2017/09	2017/10	2017/11	2017/12
1	1	1	1	2	2	2	3	3	3	2	2	1
2	1	1	1	2	2	2	3	3	3	2	2	1
3	1	1	1	2	2	2	3	3	3	2	2	1
4	1	1	1	2	2	2	3	3	3	2	2	1
5	1	1	1	2	2	2	3	3	3	2	2	1
6	1	1	1	2	2	2	3	3	3	2	2	1
7	1	1	1	2	2	2	3	3	3	2	2	1
8	1	1	1	2	2	2	3	3	3	2	2	1
9	1	1	1	2	2	2	3	3	3	2	2	1
10	1	1	1	2	2	2	3	3	3	2	2	1
11	1	1	1	2	2	2	3	3	3	2	2	1
12	1	1	1	2	2	2	3	3	3	2	2	1
13	1	1	1	2	2	2	3	3	3	2	2	1
14	1	1	1	2	2	2	3	3	3	2	2	1
15	1	1	1	2	2	2	3	3	3	2	2	1

Energy saving level monitor setting
Display the contents of the energy saving level monitor, energy saving level alarm, and air-controller connection settings.



Setting list > Demand monitoring > Energy saving cooperation setting

Energy saving level monitor setting

Energy saving level setting

Item	Contents
Monitoring	set
Monitoring type	Predicted demand
Threshold 4	260.0 kW
Threshold 3	220.0 kW
Threshold 2	180.0 kW
Threshold 1	120.0 kW

Emergency stop order setting

Item	Contents
Monitoring	set
Alarm type	Fixed Alarm

Energy saving level alarm setting

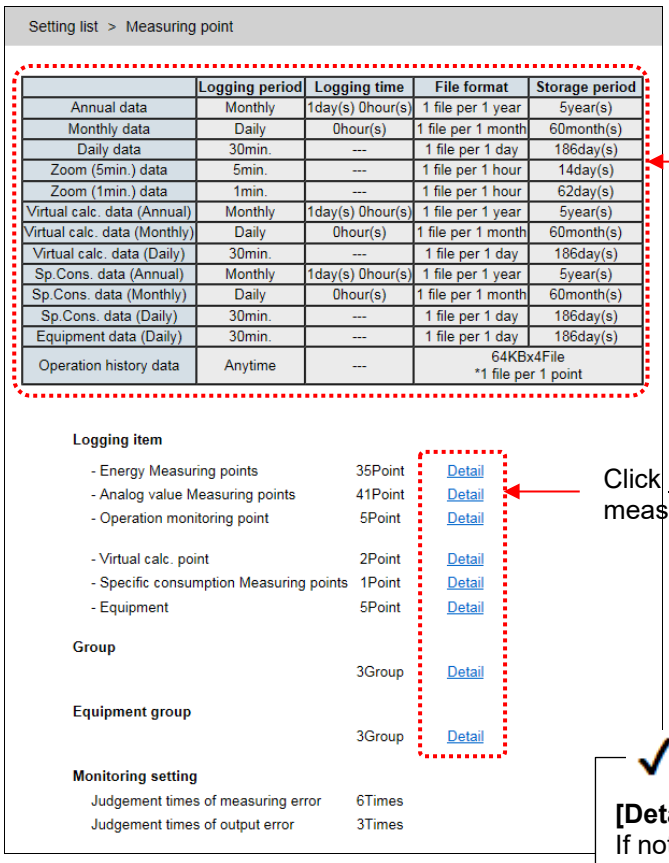
Item	System Log	Notification
Energy saving level	not set	not set
Emergency stop order	not set	not set

Air-controller connection setting

No.	Name	Destination IP address (domain name)
1	AC Controller1	192.168.10.21
2	AC Controller2	192.168.10.22
3		
4		
5		
6		
7		
8		
9		
10	AC Controller (spare)	192.168.10.20

4.20 Setting List: Measuring Point

Display the details on logging data and the settings of measuring points.



	Logging period	Logging time	File format	Storage period
Annual data	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Monthly data	Daily	0hour(s)	1 file per 1 month	60month(s)
Daily data	30min.	---	1 file per 1 day	186day(s)
Zoom (5min.) data	5min.	---	1 file per 1 hour	14day(s)
Zoom (1min.) data	1min.	---	1 file per 1 hour	62day(s)
Virtual calc. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Virtual calc. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Virtual calc. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Sp.Cons. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Sp.Cons. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Sp.Cons. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Equipment data (Daily)	30min.	---	1 file per 1 day	186day(s)
Operation history data	Anytime	---	64KBx4File *1 file per 1 point	

Information on various data collection appears.

Click Detail to display detailed information on measuring points and groups.

[Detail] links
If nothing has been set, [Detail] appears in black and no detailed information appears if clicked.

Examples of [Detail] information

[Energy measuring point]

Setting list > Measuring point > Energy measuring point

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
4	East Factory 1F	EFactory 1F Power_kWh	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Electric_energy(Import)	kWh
9	East Factory 1F	EFactory 1F AC_kWh	East Factory 1F AC	EMU4-A2	-	-	1	Electric_energy(Import)	kWh
14	East Factory 1F	EFactory 1F Light_kWh	East Factory 1F Light	EMU4-A2	-	-	1	Electric_energy(Import)	kWh
24	East Factory 2F	EFactory 2F Power_kWh	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Electric_energy(Import)	kWh

[Analog value measuring point]

Setting list > Measuring point > Analog value measuring point

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
1	East Factory 1F	EFactory 1F Power_A	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Current_Average	A
2	East Factory 1F	EFactory 1F Power_V	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Voltage_Average_line_voltage	V
3	East Factory 1F	EFactory 1F Power_kW	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Electric_power	kW
6	East Factory 1F	EFactory 1F AC_A	East Factory 1F AC	EMU4-A2	-	-	1	Current_Average	A
7	East Factory 1F	EFactory 1F AC_V	East Factory 1F AC	EMU4-A2	-	-	1	Voltage_Average_line_voltage	V
8	East Factory 1F	EFactory 1F AC_kW	East Factory 1F AC	EMU4-A2	-	-	1	Electric_power	kW

Monitoring of upper and lower limit

ID	Group	Point	Monitoring method	Lower limit value	Upper limit value	Unit
16	East Factory 1F	EFactory 1F North Temp	Upper limit	-	40	C
17	East Factory 1F	EFactory 1F North RH	Upper limit	-	70	%
18	East Factory 1F	EFactory 1F South Temp	Upper limit	-	40	C
19	East Factory 1F	EFactory 1F South RH	Upper limit	-	70	%
36	East Factory 2F	EFactory 2F North Temp	Upper limit	-	40	C
37	East Factory 2F	EFactory 2F North RH	Upper limit	-	70	%
38	East Factory 2F	EFactory 2F South Temp	Upper limit	-	40	C
39	East Factory 2F	EFactory 2F South RH	Upper limit	-	70	%

Appears when [Monitoring of upper and lower limit] is set.

[Operation monitoring point]

Setting list > Measuring point > Operation monitoring point

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Operating history
96	West Factory	WFactory Equip1 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B001000	
97	West Factory	WFactory Equip2 Status	West Factory Equip PLC	QCPU/LCPU/QnACPU	192.168.10.120	80	0	B002000	

Click this to display operation history data.

[Virtual measureing point]

Setting list > Measuring point > Virtual measuring point

ID :v1
Name :East Factory Power
Type :Energy
Expression :ID004+ID009+ID014+ID024+ID029+ID034
Unit :kWh

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
4	East Factory 1F	EFactory 1F Power_kWh	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Electric_energy(Import)	kWh
9	East Factory 1F	EFactory 1F AC_kWh	East Factory 1F AC	EMU4-A2	-	-	1	Electric_energy(Import)	kWh
14	East Factory 1F	EFactory 1F Light_kWh	East Factory 1F Light	EMU4-A2	-	-	1	Electric_energy(Import)	kWh
24	East Factory 2F	EFactory 2F Power_kWh	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Electric_energy(Import)	kWh
29	East Factory 2F	EFactory 2F AC_kWh	East Factory 2F AC	EMU4-A2	-	-	2	Electric_energy(Import)	kWh
34	East Factory 2F	EFactory 2F Light_kWh	East Factory 2F Light	EMU4-A2	-	-	2	Electric_energy(Import)	kWh

ID :v2
Name :East Factory Production
Type :Energy
Expression :ID042+ID044
Unit :Piece

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
42	East Factory 1F	EFactory 1F Production	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Pulse_count	Piece
44	East Factory 2F	EFactory 2F Production	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Pulse_count	Piece

The expressions set in [Virtual calc. point registration] of the setting software appear.

[Sp.Cons measuring point]

Setting list > Measuring point > Sp.Cons. measuring point

ID :b1
Name :East Factory
Unit :kWh/piece

	ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
Energy	v1	Virtual calc. point	East Factory Power	-	-	-	-	-	-	kWh
Production	v2	Virtual calc. point	East Factory Production	-	-	-	-	-	-	Piece

[Equipment]

Setting list > Measuring point > Equipment

Group :West Factory Equipments

ID :f01
Name :WFactory Equipment1
Standard cycle time :60 sec.

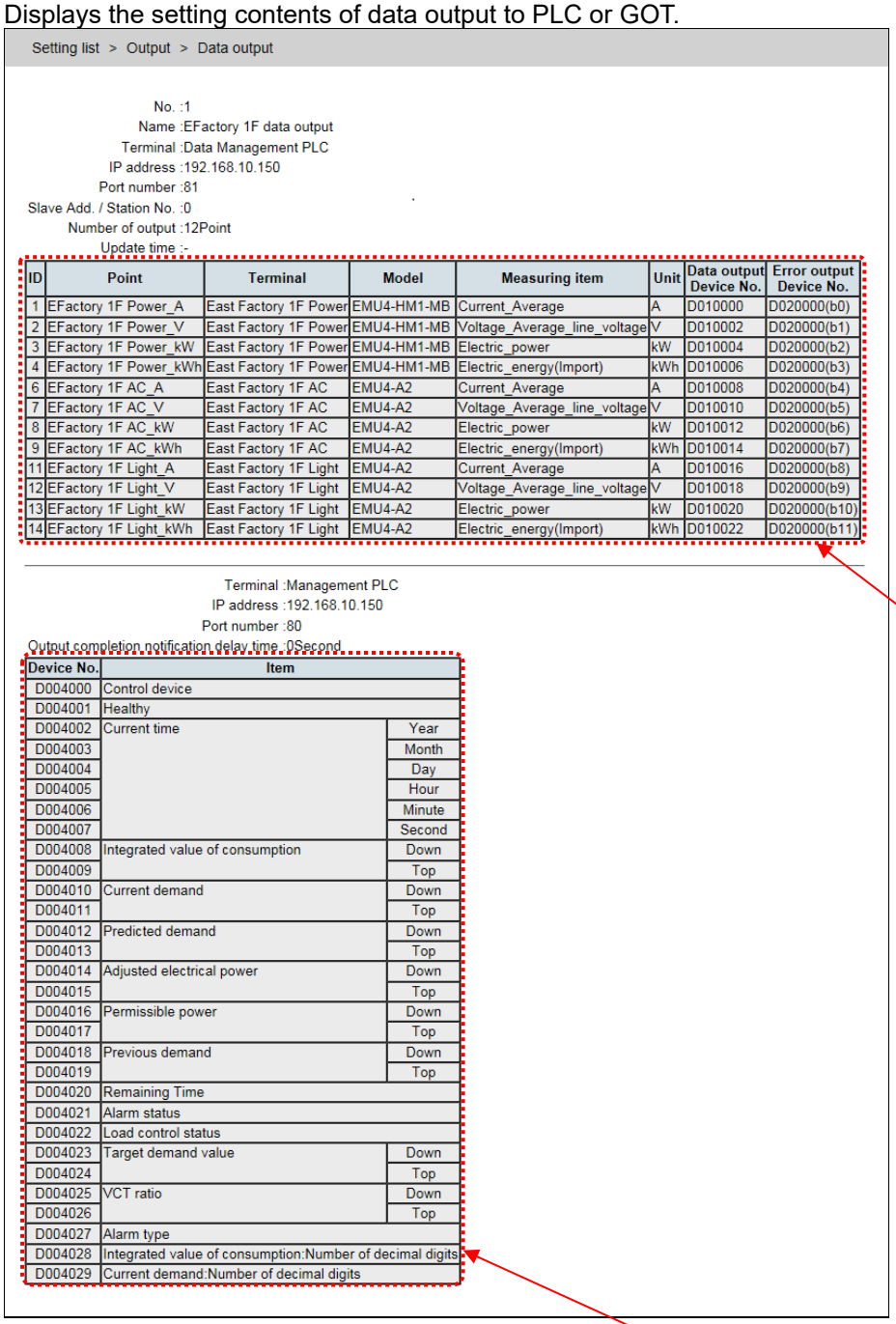
Item	ID	Point	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
Loading time	76	WFactory Equip1_OTime	QCPU/LCPU/QnACPU	192.168.10.120	80	0	D001000	Second
Downtime	77	WFactory Equip1_StopTime	QCPU/LCPU/QnACPU	192.168.10.120	80	0	D001100	Second
Product	78	WFactory Equip1_AProduct	QCPU/LCPU/QnACPU	192.168.10.120	80	0	D001200	Piece
Nondefective product	80	WFactory Equip1_Product	EMU4-HD1-MB	-	-	3	Pulse_count	Piece
Detail	49	WFactory Equip1_kWh	EMU4-HD1-MB	-	-	3	Electric_energy(Consumption)	kWh

The measuring points registered with [Display point setting] in [Equipment registration] of the setting software appear.

4.21 Setting List: Output

4.21.1 Data output

Displays the setting contents of data output to PLC or GOT.



Setting list > Output > Data output

No. :1
Name :EFactory 1F data output
Terminal :Data Management PLC
IP address :192.168.10.150
Port number :81
Slave Add. / Station No. :0
Number of output :12Point
Update time :-

ID	Point	Terminal	Model	Measuring item	Unit	Data output Device No.	Error output Device No.
1	EFactory 1F Power_A	East Factory 1F Power	EMU4-HM1-MB	Current_Average	A	D010000	D020000(b0)
2	EFactory 1F Power_V	East Factory 1F Power	EMU4-HM1-MB	Voltage_Average_line_voltage	V	D010002	D020000(b1)
3	EFactory 1F Power_kW	East Factory 1F Power	EMU4-HM1-MB	Electric_power	kW	D010004	D020000(b2)
4	EFactory 1F Power_kWh	East Factory 1F Power	EMU4-HM1-MB	Electric_energy(Import)	kWh	D010006	D020000(b3)
6	EFactory 1F AC_A	East Factory 1F AC	EMU4-A2	Current_Average	A	D010008	D020000(b4)
7	EFactory 1F AC_V	East Factory 1F AC	EMU4-A2	Voltage_Average_line_voltage	V	D010010	D020000(b5)
8	EFactory 1F AC_kW	East Factory 1F AC	EMU4-A2	Electric_power	kW	D010012	D020000(b6)
9	EFactory 1F AC_kWh	East Factory 1F AC	EMU4-A2	Electric_energy(Import)	kWh	D010014	D020000(b7)
11	EFactory 1F Light_A	East Factory 1F Light	EMU4-A2	Current_Average	A	D010016	D020000(b8)
12	EFactory 1F Light_V	East Factory 1F Light	EMU4-A2	Voltage_Average_line_voltage	V	D010018	D020000(b9)
13	EFactory 1F Light_kW	East Factory 1F Light	EMU4-A2	Electric_power	kW	D010020	D020000(b10)
14	EFactory 1F Light_kWh	East Factory 1F Light	EMU4-A2	Electric_energy(Import)	kWh	D010022	D020000(b11)

Terminal :Management PLC
IP address :192.168.10.150
Port number :80
Output completion notification delay time :0Second

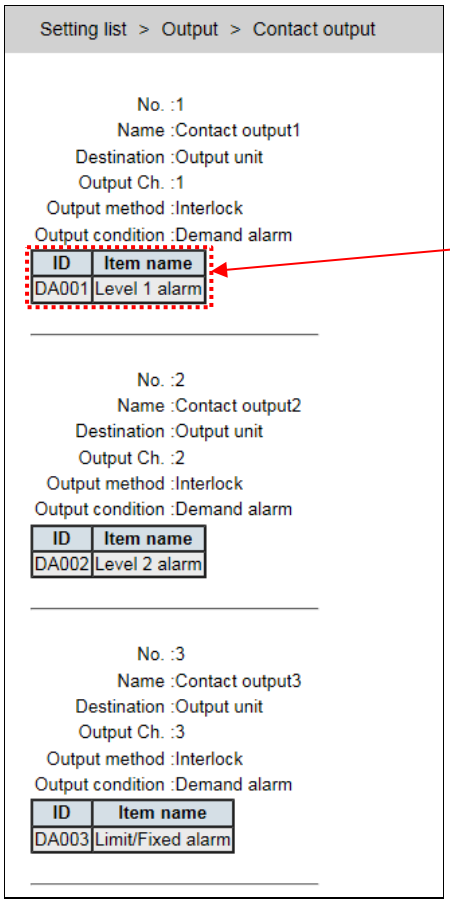
Device No.	Item	
D004000	Control device	
D004001	Healthy	
D004002	Current time	Year
D004003		Month
D004004		Day
D004005		Hour
D004006		Minute
D004007		Second
D004008	Integrated value of consumption	Down
D004009		Top
D004010	Current demand	Down
D004011		Top
D004012	Predicted demand	Down
D004013		Top
D004014	Adjusted electrical power	Down
D004015		Top
D004016	Permissible power	Down
D004017		Top
D004018	Previous demand	Down
D004019		Top
D004020	Remaining Time	
D004021	Alarm status	
D004022	Load control status	
D004023	Target demand value	Down
D004024		Top
D004025	VCT ratio	Down
D004026		Top
D004027	Alarm type	
D004028	Integrated value of consumption:Number of decimal digits	
D004029	Current demand:Number of decimal digits	

The output device and output items set in [Output] - [Data output] of setting software are displayed.

The output device and output items set in [Output] - [Data output (demand monitoring)] of setting software are displayed.
Only for demand monitoring function.

4.21.2 Setting List: Contact Output

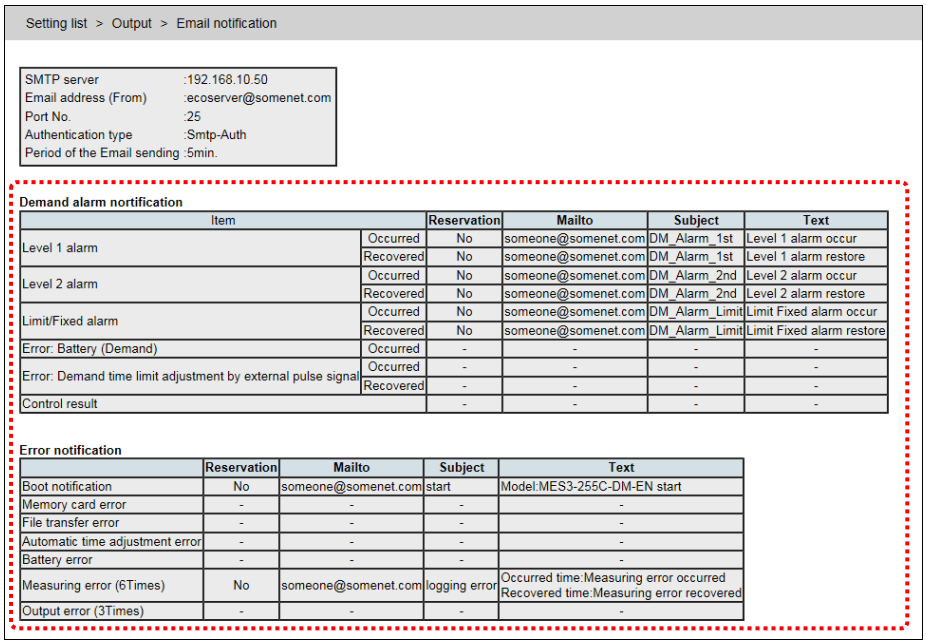
Display the contents of the contact outputs setting.



The contents that are set to the major and detail items of [Output setting] in [Output] of the setting software are displayed.

4.21.3 Setting List: Email Notification

Display the contents of the mail report setting.



Setting list > Output > Email notification

SMTP server	:192.168.10.50
Email address (From)	:ecoserver@somenet.com
Port No.	:25
Authentication type	:Smtp-Auth
Period of the Email sending	:5min.

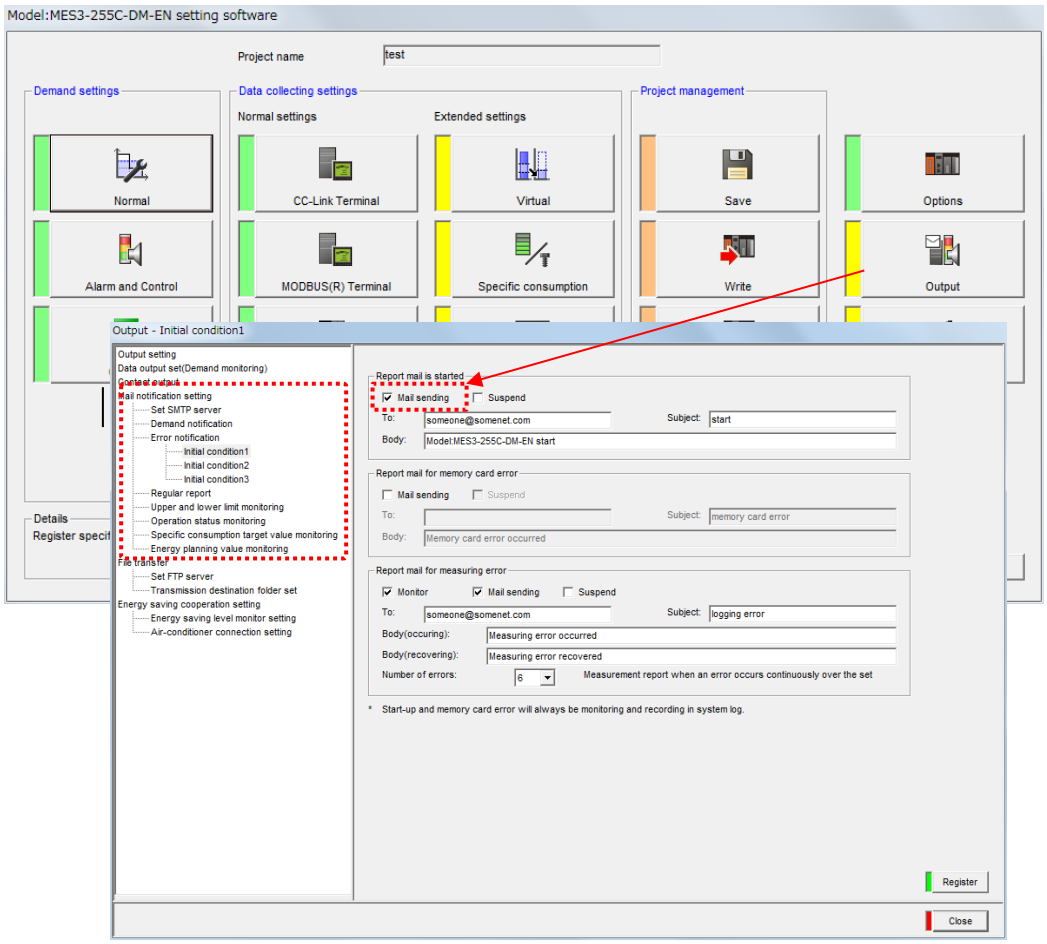
Demand alarm nortification

Item		Reservation	Mailto	Subject	Text
Level 1 alarm	Occurred	No	someone@somenet.com	DM_Alarm_1st	Level 1 alarm occur
	Recovered	No	someone@somenet.com	DM_Alarm_1st	Level 1 alarm restore
Level 2 alarm	Occurred	No	someone@somenet.com	DM_Alarm_2nd	Level 2 alarm occur
	Recovered	No	someone@somenet.com	DM_Alarm_2nd	Level 2 alarm restore
Limit/Fixed alarm	Occurred	No	someone@somenet.com	DM_Alarm_Limit	Limit Fixed alarm occur
	Recovered	No	someone@somenet.com	DM_Alarm_Limit	Limit Fixed alarm restore
Error: Battery (Demand)	Occurred	-	-	-	-
Error: Demand time limit adjustment by external pulse signal	Occurred	-	-	-	-
	Recovered	-	-	-	-
Control result		-	-	-	-

Error notification

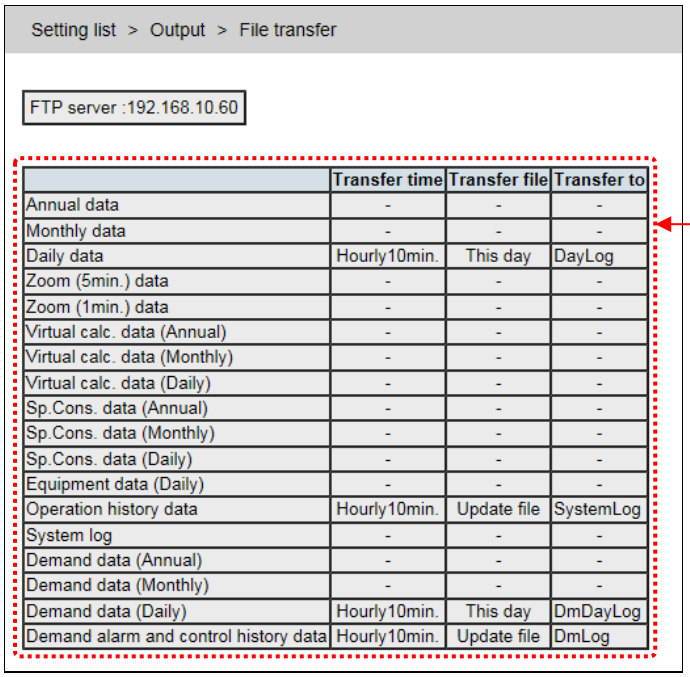
	Reservation	Mailto	Subject	Text
Boot notification	No	someone@somenet.com	start	Model:MES3-255C-DM-EN start
Memory card error	-	-	-	-
File transfer error	-	-	-	-
Automatic time adjustment error	-	-	-	-
Battery error	-	-	-	-
Measuring error (6Times)	No	someone@somenet.com	logging error	Occurred time:Measuring error occurred Recovered time:Measuring error recovered
Output error (3Times)	-	-	-	-

The setting of the items with [Mail sending] set in [Output] -> [Mail notification setting] -> [Error notification] -> [Initial condition 1] of the setting software appear.



4.21.4 Setting Value List: File Transfer

Display the contents of the file transfer setting.



	Transfer time	Transfer file	Transfer to
Annual data	-	-	-
Monthly data	-	-	-
Daily data	Hourly10min.	This day	DayLog
Zoom (5min.) data	-	-	-
Zoom (1min.) data	-	-	-
Virtual calc. data (Annual)	-	-	-
Virtual calc. data (Monthly)	-	-	-
Virtual calc. data (Daily)	-	-	-
Sp.Cons. data (Annual)	-	-	-
Sp.Cons. data (Monthly)	-	-	-
Sp.Cons. data (Daily)	-	-	-
Equipment data (Daily)	-	-	-
Operation history data	Hourly10min.	Update file	SystemLog
System log	-	-	-
Demand data (Annual)	-	-	-
Demand data (Monthly)	-	-	-
Demand data (Daily)	Hourly10min.	This day	DmDayLog
Demand alarm and control history data	Hourly10min.	Update file	DmLog

The contents set in [Output] -> [File transfer] of the setting software appear.

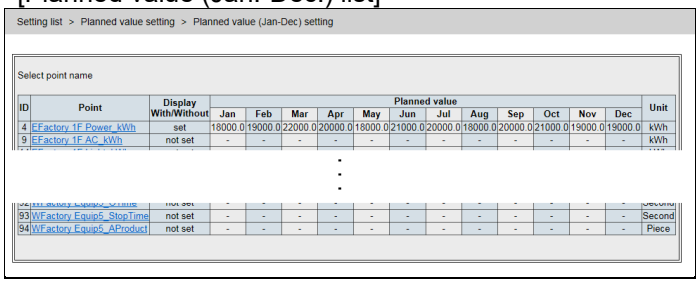
4.22 Setting List: Planned Value

You can set a monthly planned value of usage to an energy measuring point. For a specific consumption point, you can set a specific consumption planned value. When planned values are set, you can graph planned values in addition to actual result data. Also, if energy usage exceeds a plan or specific consumption exceeds a target, you can issue an alarm.

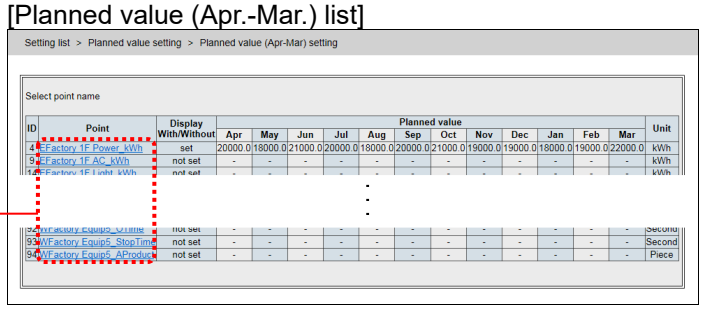
4.22.1 Annual Energy Planned Value Setting

Annual Energy Planned Value Setting screens

[Planned value (Jan.-Dec.) list]

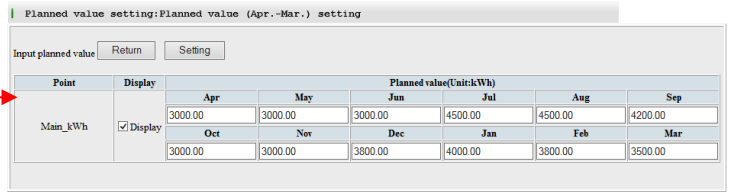


[Planned value (Apr.-Mar.) list]



ID	Display measuring points IDs.
Point	Click a name to display the planned value setting screen.
Display With/Without	Indicates that whether to display ([set]) or hide ([not set]) planned values on a measuring graph.
Planned value	Display planned values set by month. - For planned values for a year : Values of January to December appear - For planned values for a fiscal year : Values of April to March appear

Annual Energy Planned Value Setting screens (Click the measuring point name to display the planned value setting screen.)



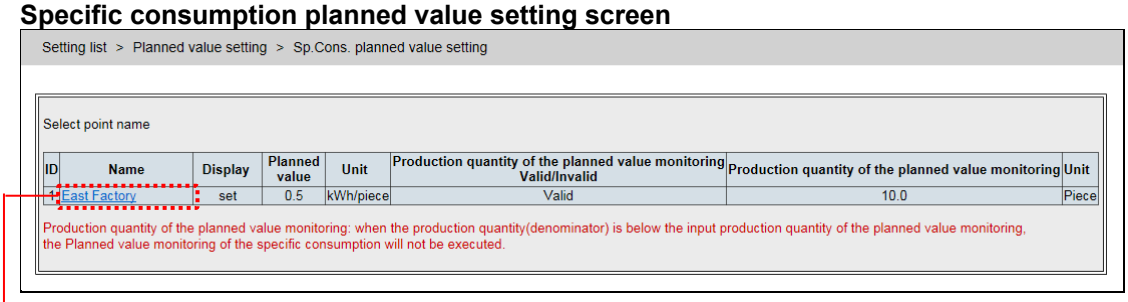
This figure shows an example of a fiscal year.

[Return] button	The planned value list screen appears.
[Setting] button	The setting confirmation screen appears. After entering planned values, click this button.
Point	Display measuring points names.
Display	Check this to display planned values on a measuring graph. *If you click the [Setting] button with this check box unchecked, the planned values you entered are deleted.
Planned value	Enter planned values for every month. Up to 11 single-byte characters including a

	decimal point can be entered.

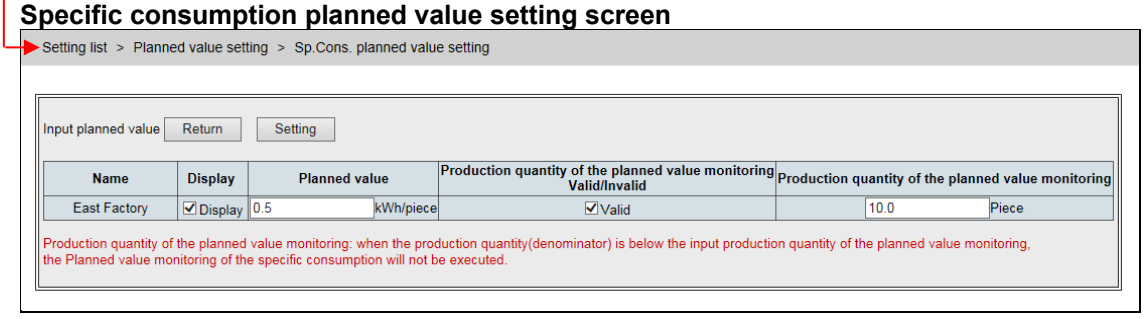
4.22.2 Specific consumption planned value setting

Specific consumption planned value setting screen



ID	Display specific consumption point IDs.
Name	Click a name to display the planned value setting screen.
Display	Indicates that whether to display ([Yes]) or hide ([No]) planned values on a specific consumption graph.
Planned value	Display the set planned values.
Unit	Display the unit of specific consumption.
Production quantity of the planned value monitoring Valid/Invalid	Display whether the production setting where planned value monitoring will start is valid or invalid.
Production quantity of the planned value monitoring	Display the production quantity where planned value monitoring will start. If the production quantity is less than or equal to [Production quantity of the planned value monitoring], specific consumption planned values are not monitored.
Unit (right end)	Display the unit of the production quantity.

Specific consumption planned value setting screen

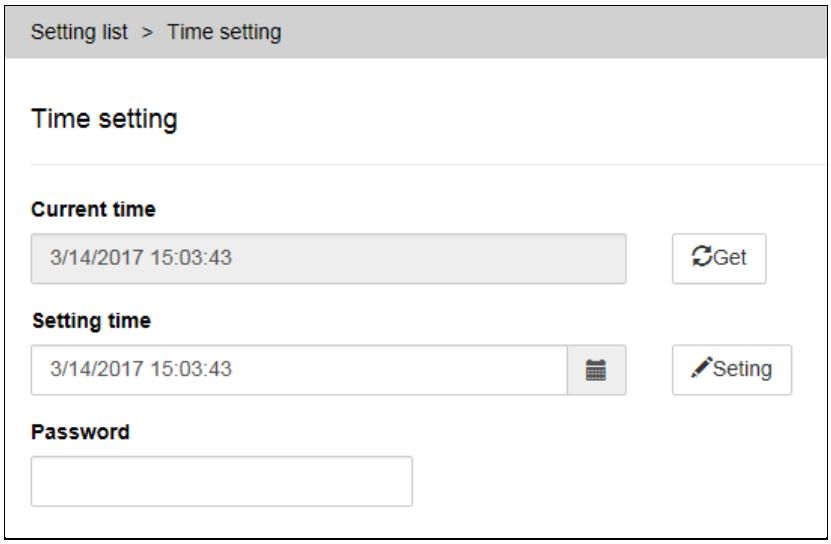


[Return] button	The planned value list screen appears.
[Setting] button	The setting confirmation screen appears. After entering planned values, click this button.
Name	Display specific consumption point names.
Display	Check this to display planned values on a specific consumption graph. *If you click the [Setting] button with this check box unchecked, the planned values you entered are deleted.
Planned value	Enter a specific consumption planned value. Up to 11 single-byte characters including a decimal point can be entered.
Production quantity of the planned value monitoring Valid/Invalid	Check this to enable the production setting where planned value monitoring will start.
Production quantity of the planned	Enter a production quantity where planned value monitoring will start. Up to 11 single-byte characters including a decimal point can be entered.

value monitoring	

4.23 Setting List: Time Set

Use this screen to display the present time of EcoWebServerIII or to reset the time.



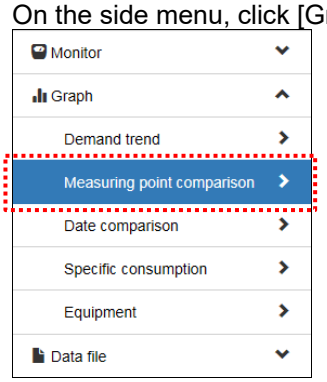
Current time	Display the date and time acquired when you display the Time adjustment screen or when you click the [Load] button.
[Load] button	Loads the date and time of EcoWebServerIII The loaded date and time appear in [Current time].
Setting time	Select a date and time to set. Use single-byte numerals.
[Setting] button	Enter the password and click the [Setting] button. EcoWebServerIII is restarted, and the date and time entered in [Setting time] is set to EcoWebServerIII.
Password	Use the maintenance password to set the date and time. The factory default password is "ecopass."
Time zone	Display the time zone set to EcoWebServerIII.
SNTP server	Display the name of an SNTP server that automatically adjusts the time. If [Automatic time adjust] is not set, a hyphen (-) appears.
Setting condition	Display the date and time when the time is adjusted automatically. If [Automatic time adjust] is not set, a hyphen (-) appears.

5. Displaying Measuring Graphs

5.1 Comparing by Measuring Point

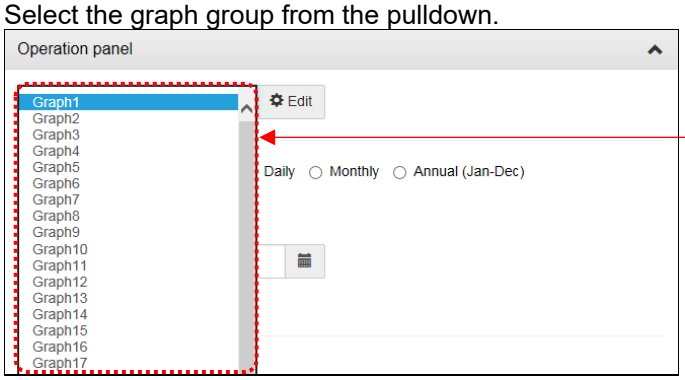
1 Display the Measuring Point Comparison Graph screen

On the side menu, click [Graph] -> [Measuring point comparison Graph].



2 Select graph group

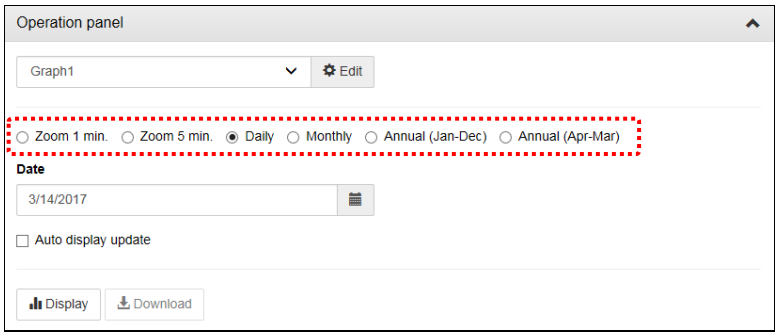
Select the graph group from the pulldown.



Click to expand the pulldown.

Set the graph group
It is necessary to set the measurement point and display type to be displayed in the graph group.
More details refer to [5.3 Saving graph settings (create graph group)]

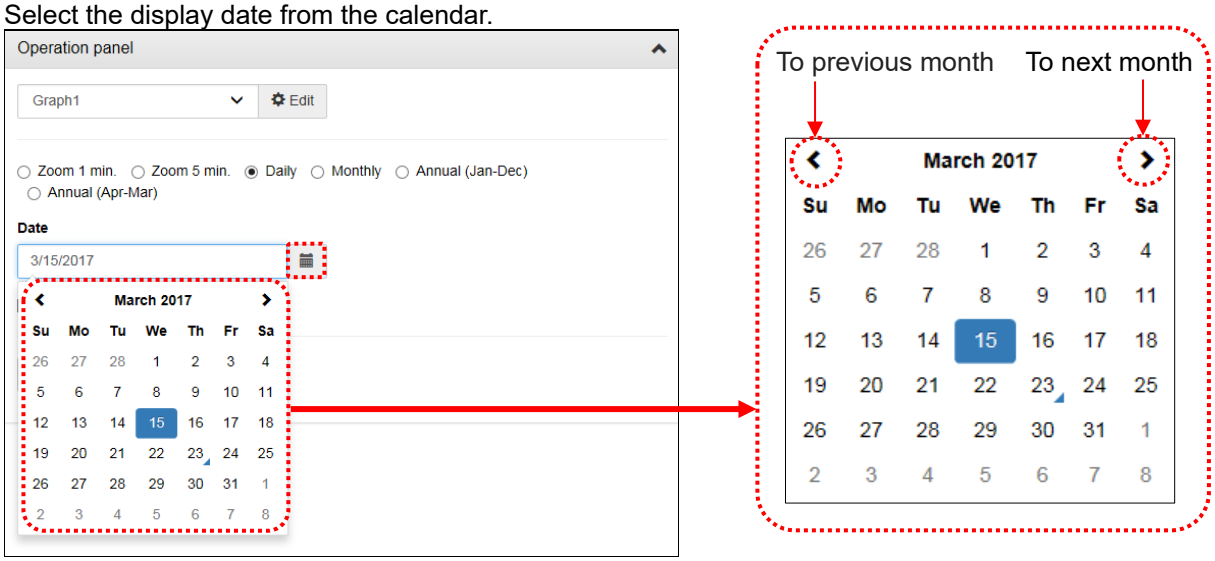
3 Select the display interval



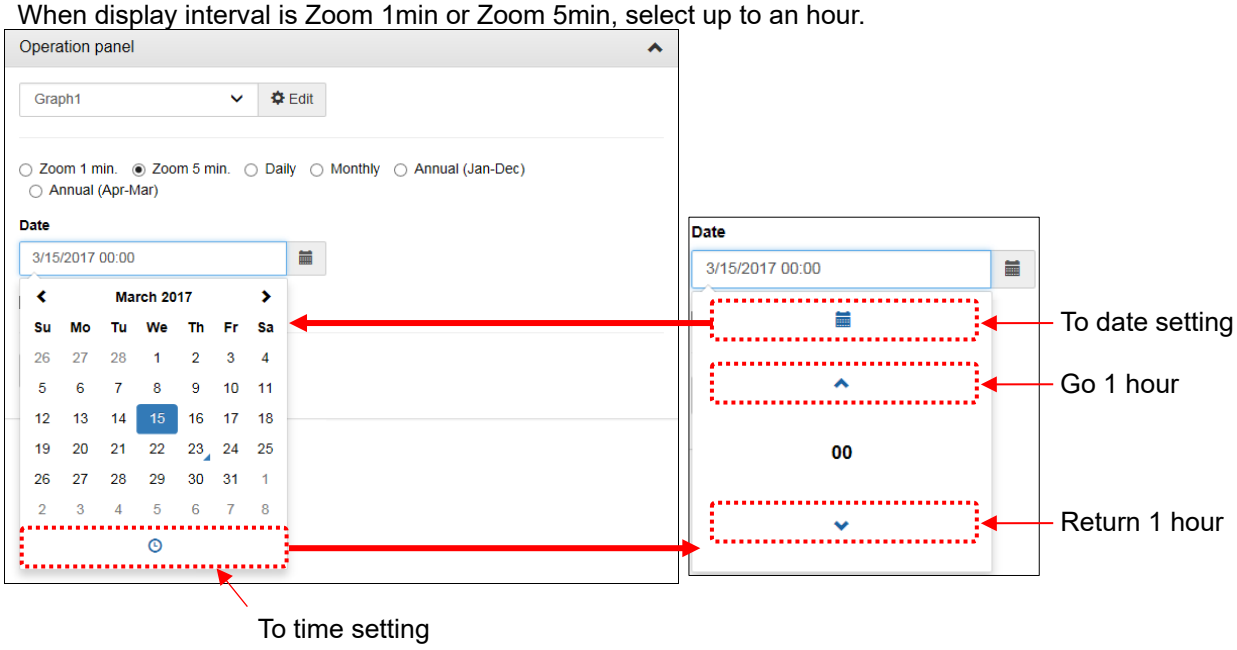
For virtual measuring points and demand measuring points (only with demand control function), there is no data for 1 min zoom, 5 min zoom, so even if you select 1 min zoom or 5 min zoom, the graph will not be displayed.

4 Select the display date

The calendar will be displayed when the button is clicked.
Select the display date from the calendar.

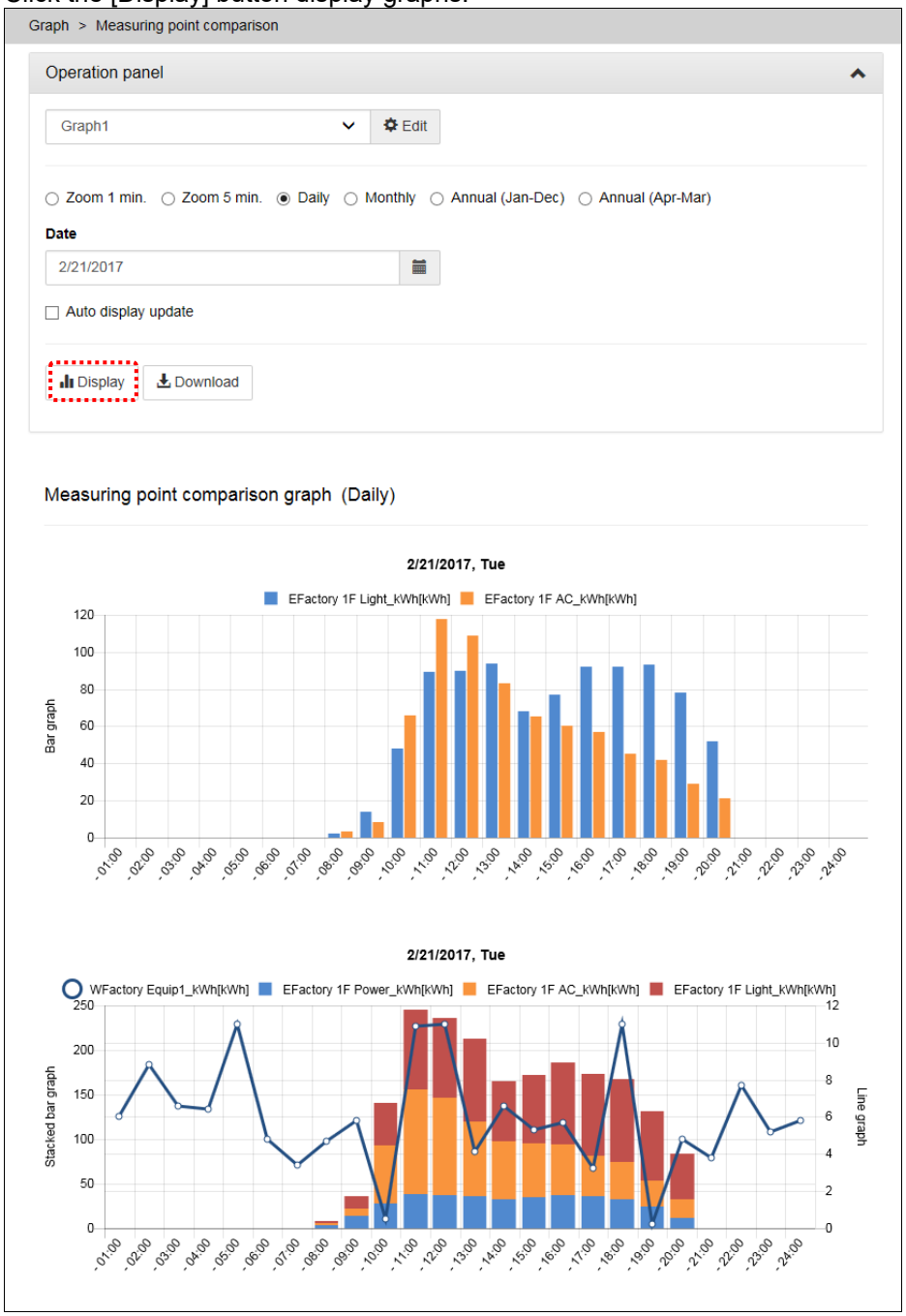


* When display interval is annual (Jan- Dec) or annual (Apr-Mar), select up to a year.
When display interval is monthly, select up to a month.
When display interval is daily, select up to a day.
When display interval is Zoom 1min or Zoom 5min, select up to an hour.



5 Click the [View] button

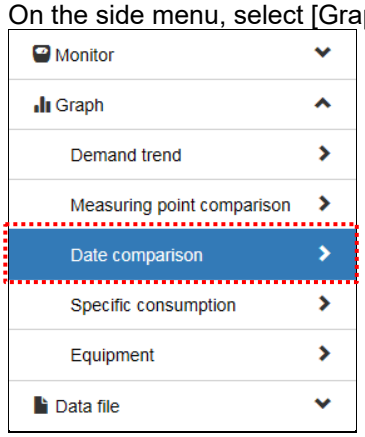
Click the [Display] button display graphs.



5.2 Comparing by Date - Time

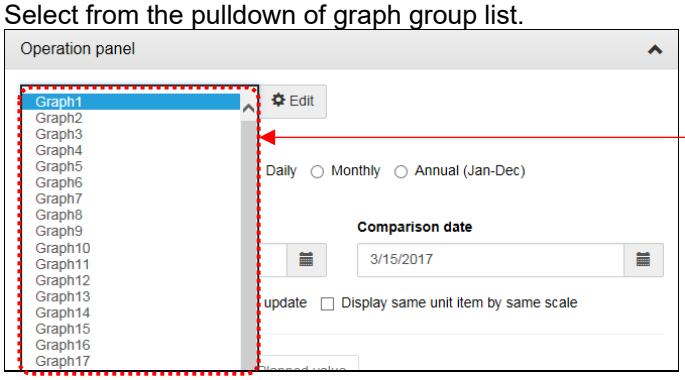
1 Display the Date Comparison Graph screen

On the side menu, select [Graph] -> [Date comparison Graph].



2 Select graph group

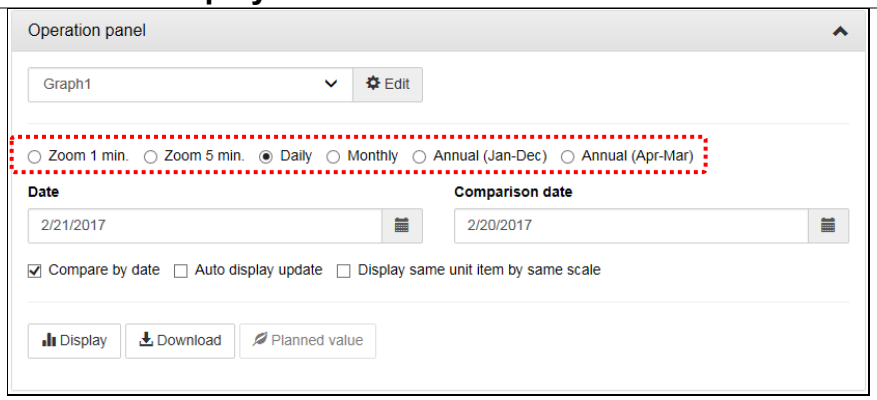
Select from the pulldown of graph group list.



Click to expand the pulldown.

✓ Set the graph group
It is necessary to set the measurement point and display type to be displayed in the graph group.
More details refer to [5.3 Saving graph settings (create graph group)]

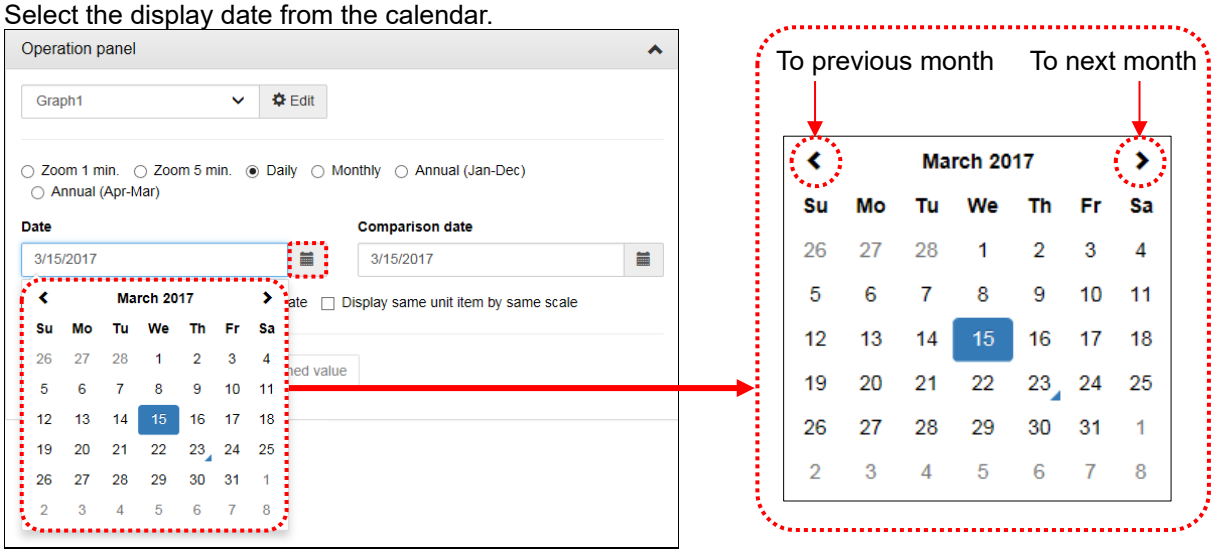
3 Select the display interval



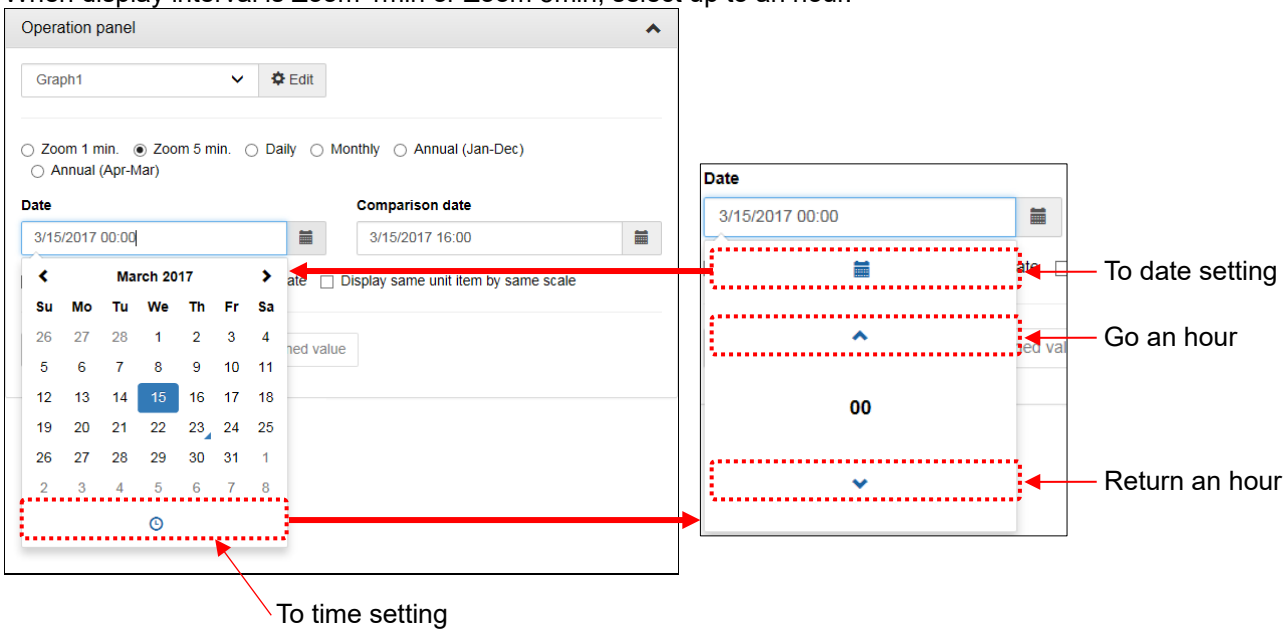
✓ For virtual measuring point and demand measuring points (with demand control function only), Zoom 1min and Zoom 5min is not exist, so Zoom 1min and Zoom 5min will be not appeared in the graph.

4 Select the display date and comparison date

The calendar will be displayed when the button  is clicked.
Select the display date from the calendar.

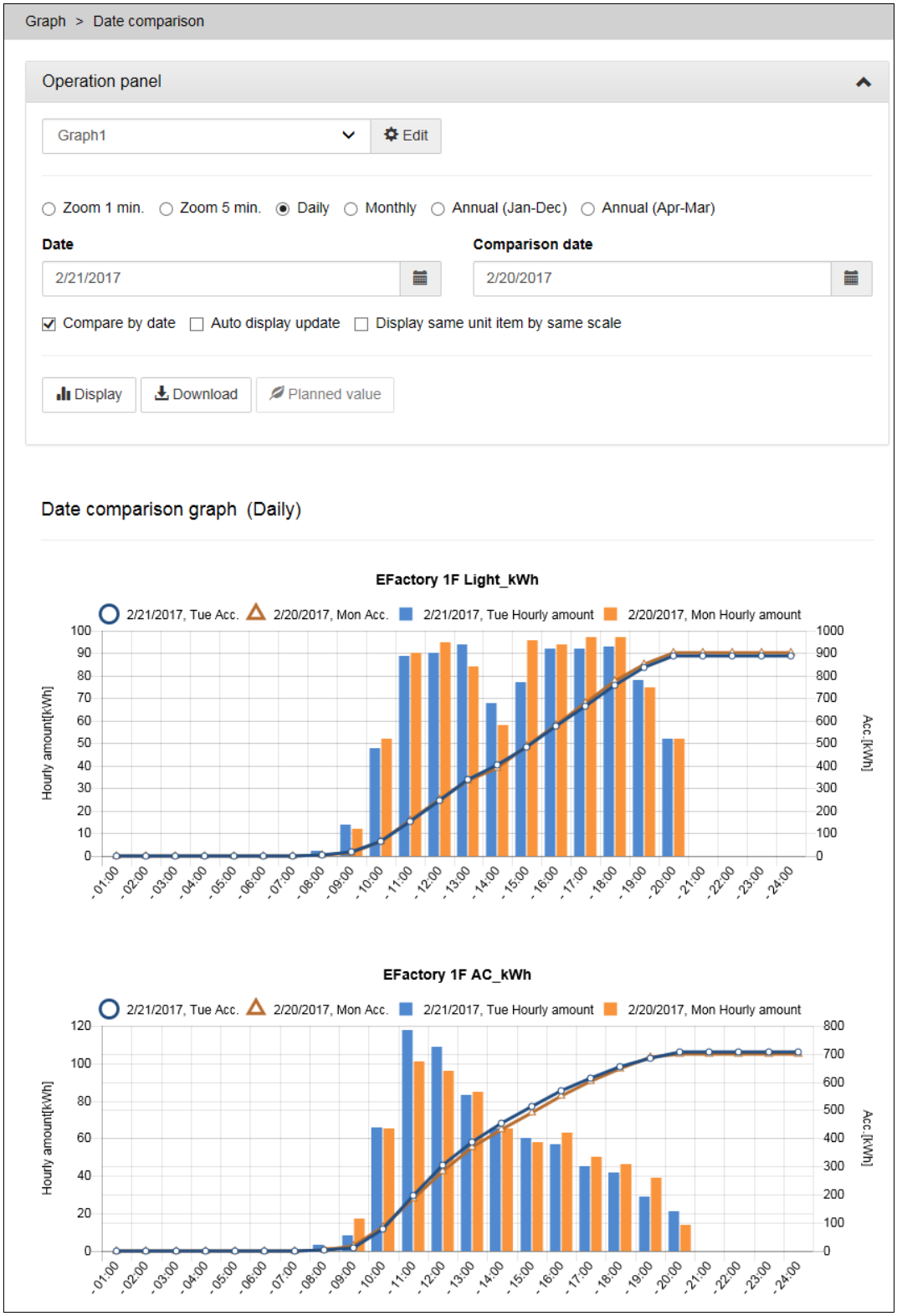


* When display interval is annual (Jan- Dec) or annual (Apr-Mar), select up to a year.
When display interval is monthly, select up to a month.
When display interval is daily, select up to a day.
When display interval is Zoom 1min or Zoom 5min, select up to an hour.



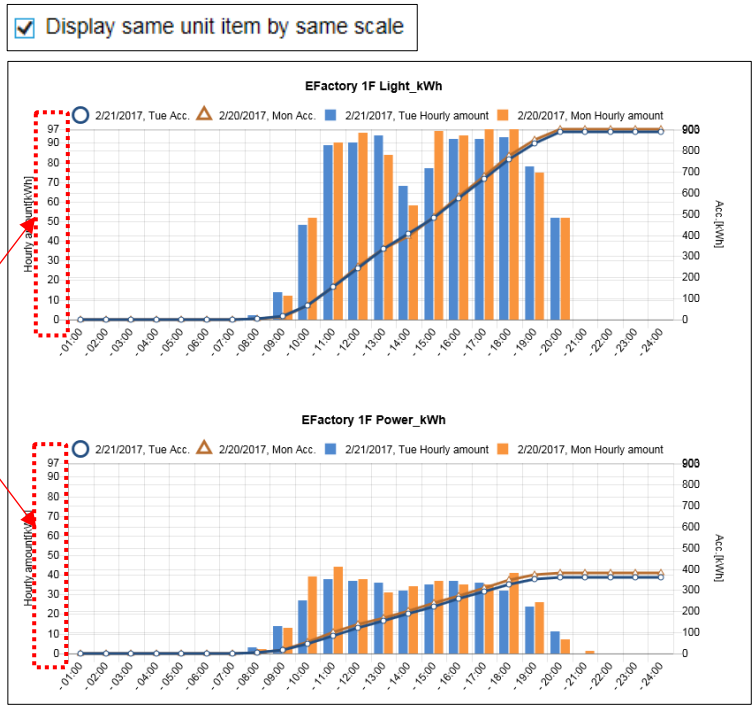
5 Click the [Display] button

Click the [Display] button display graphs in the graph display area.



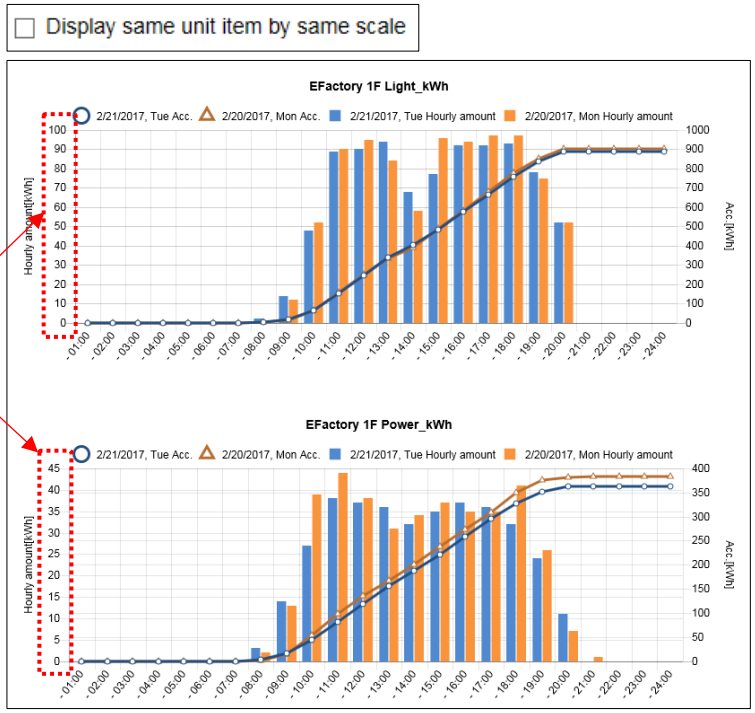
Display by same scale

Check [Display same unit item by same scale], you can be compared the measuring value easily (because the Y-axis scale is the same graph of the same unit).



Y-axis scale is the same

Uncheck [Display same unit item by same scale], each graph will auto scale.

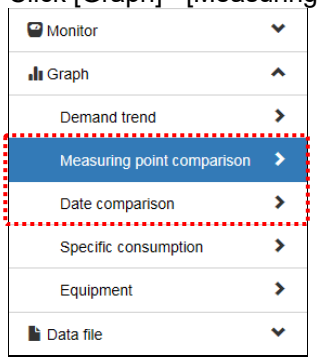


Auto scale

5.3 Saving graph settings (create graph group)

1 Display measuring point comparison graph or date comparison graph

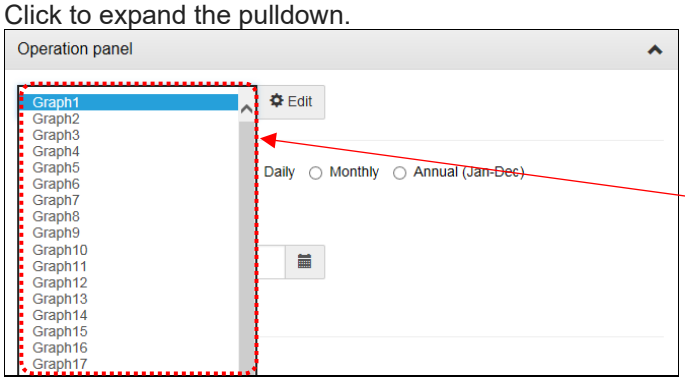
Click [Graph] - [Measuring point comparison] or [Date comparison] on the side menu.



Click either

2 Select graph group

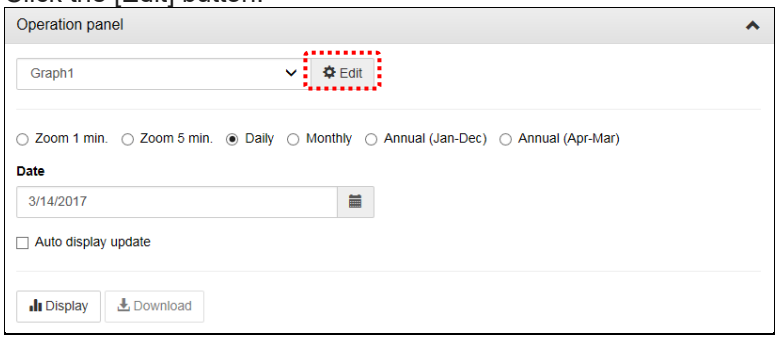
Click to expand the pulldown.



Click to expand the pulldown.

3 Switch to edit mode

Click the [Edit] button.



4 Set measuring points and graphs

Set measurement points and graphs based on the following (1) to (3).
In the case of date comparison, it is possible to set only (1).

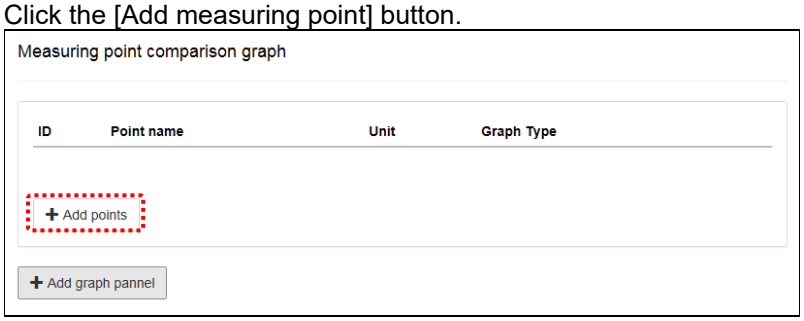
(1) Add and delete measurement points

Add / delete measuring points to be displayed on the graph.

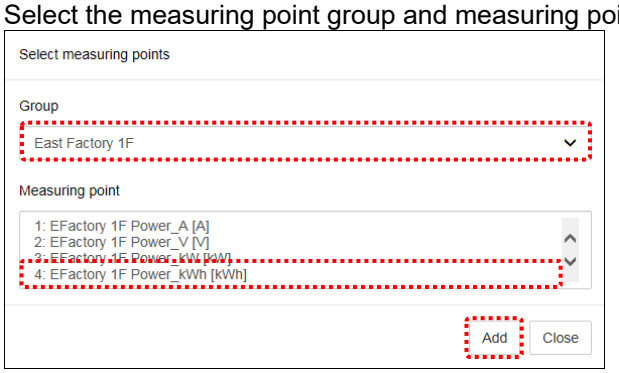
* Measuring point can be set up to 12 points in one graph group.

(a) Add measuring points

Click the [Add measuring point] button.

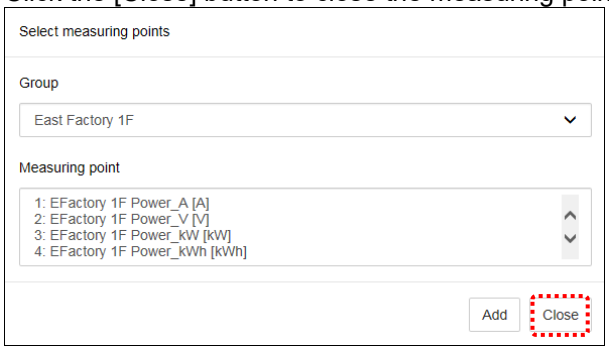


Select the measuring point group and measuring point, and click the [Add] button



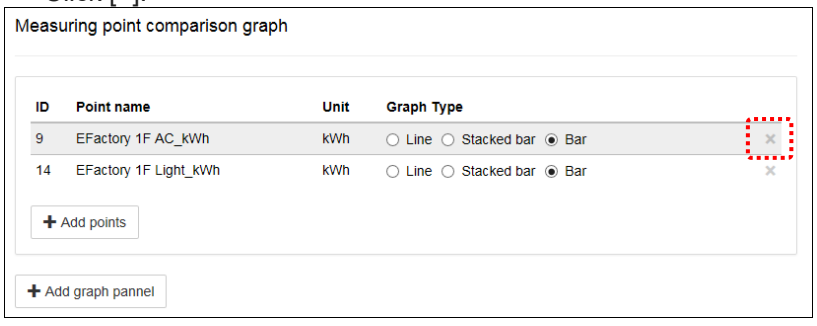
* Hold down [Ctrl] or [Shift] and select to select multiple measurement points.

Click the [Close] button to close the measuring point selection screen.



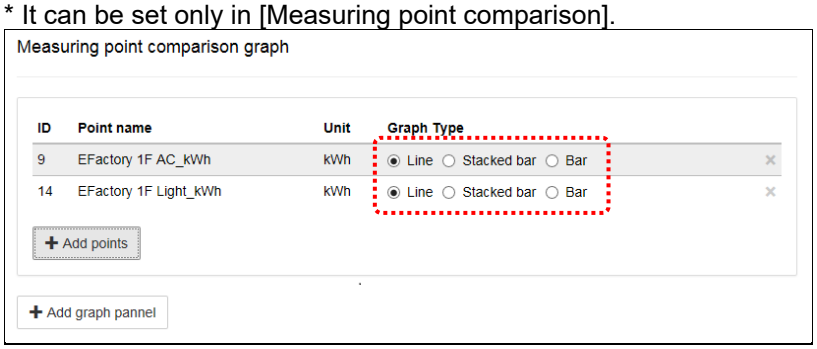
(b) Delete measurement point

Click [×].



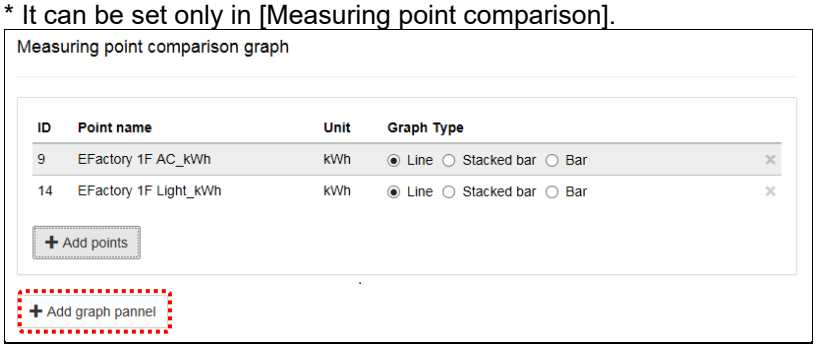
(2) Setting display type of measuring point

Set the display type of measuring points.
For electric energy / pulse, select from line chart, stacking graph, bar graph.
For analog values, it is only a line graph.
* It can be set only in [Measuring point comparison].



(3) Set of graph

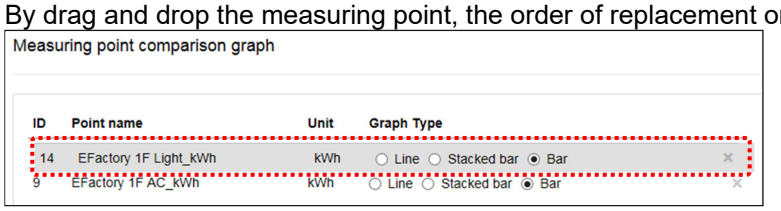
To display multiple graphs, click [Add graph panel].
* It can be set only in [Measuring point comparison].



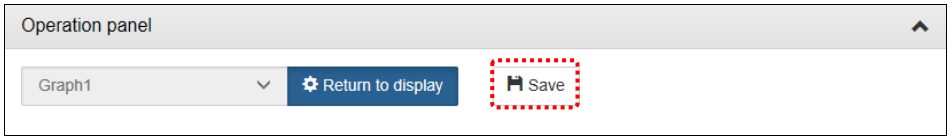
* If the measuring point in the graph panel has returned to the display mode in a state that has not been set, the graph panel will be removed.
* Up to 10 graph panels can be set in one graph group.

Reorder measurement points

By drag and drop the measuring point, the order of replacement or other graph panel can be moved.

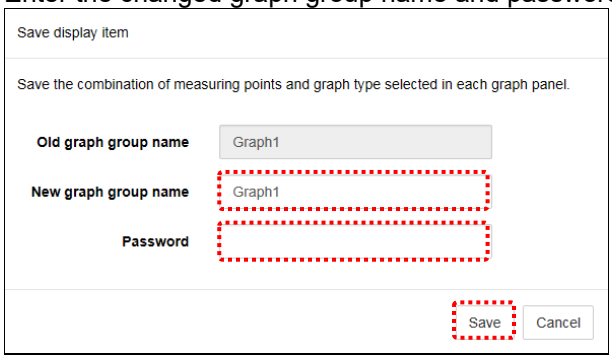


5 [Click the [Save] button



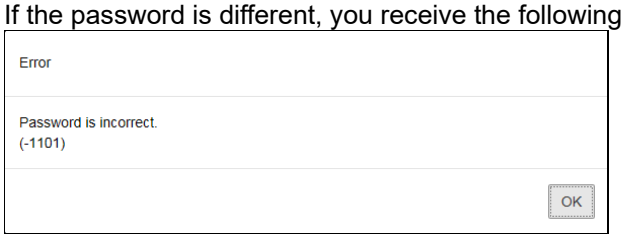
6 Save the graph group

Enter the changed graph group name and password for maintenance and click the [Save] button.



* Factory default password: ecopass

If the password is different, you receive the following error message.



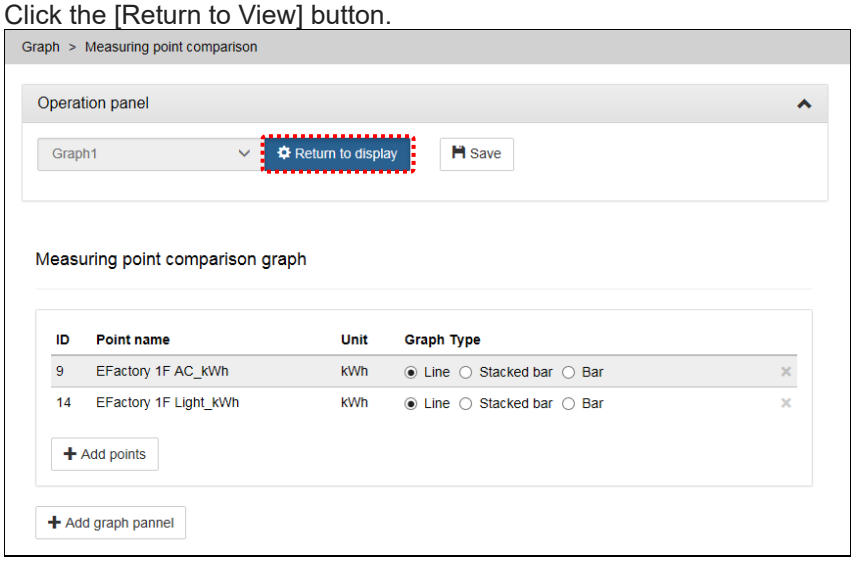
Graph display is also possible without saving

[Back to the View] button can be click to return display mode, you can graph display without saving any list.

* When you move from the side menu to another screen, settings that have not been saved will be deleted.

7 Return to display mode

Click the [Return to View] button.

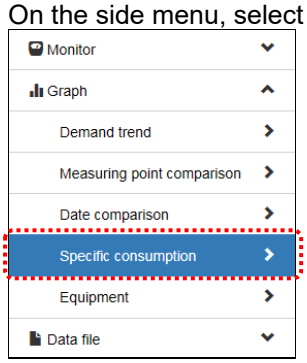


* The graph is displayed with the current setting when return to the display mode.

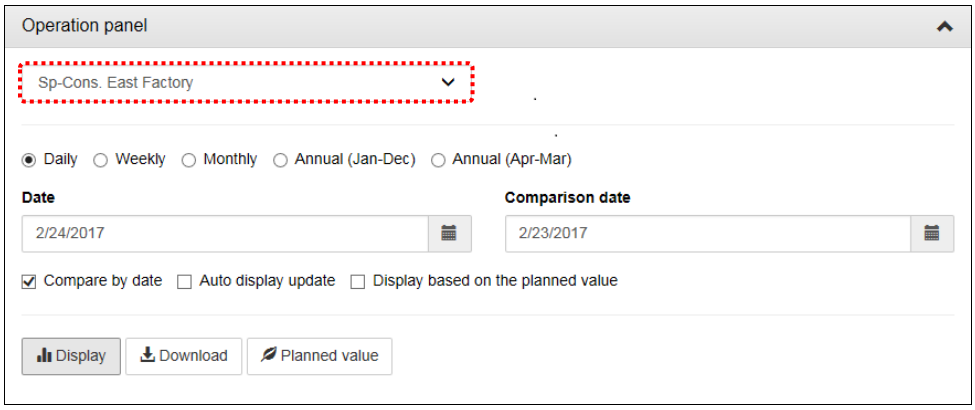
5.4 Confirming Production Efficiency (Specific Consumption)

1 Display the Specific Consumption Graph screen

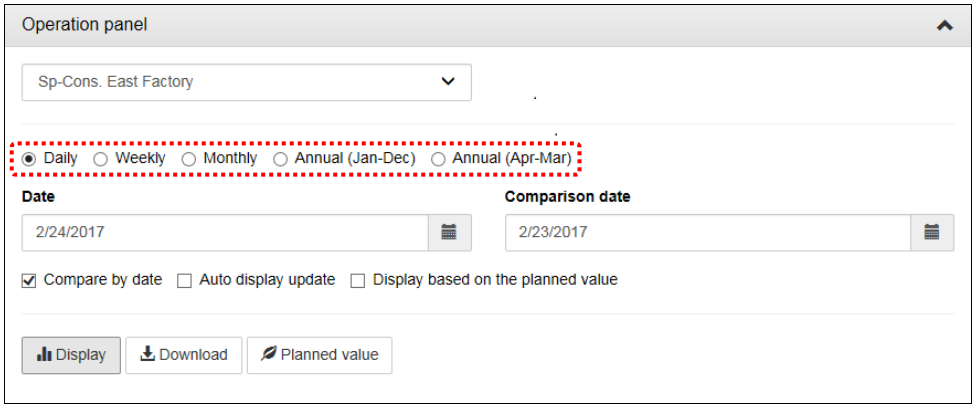
On the side menu, select [Graph] -> [Specific consumption].



2 Select the specific consumption point



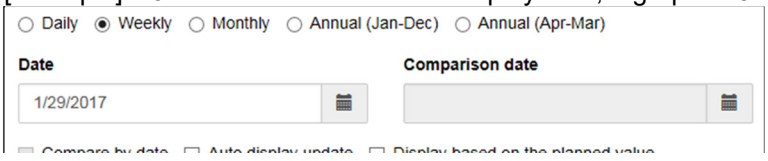
3 Select the display interval



In case of weekly graph

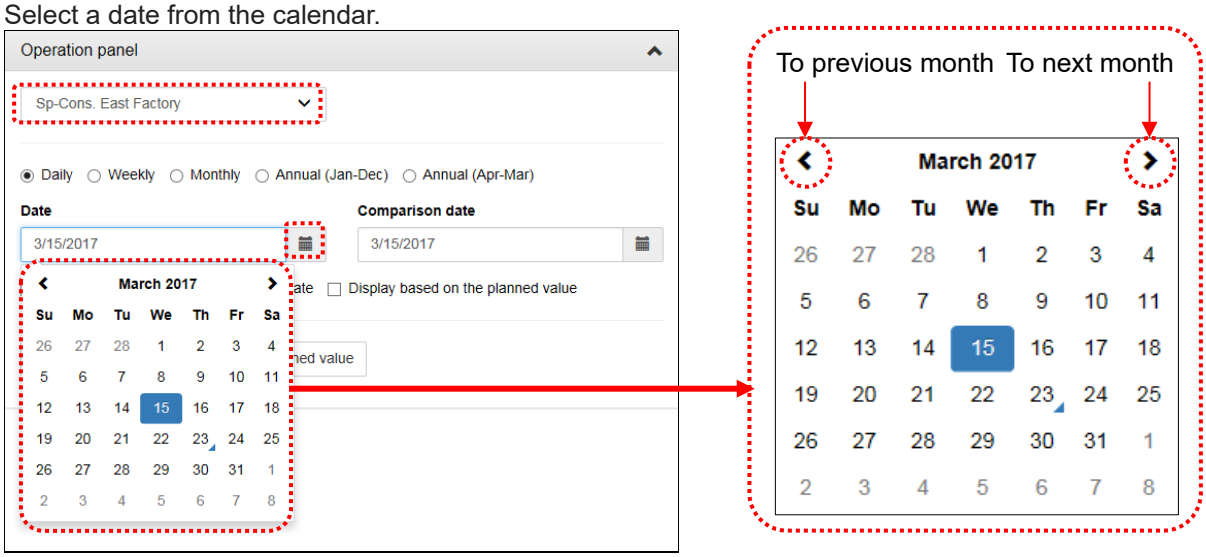
Comparison date will not be selected when the past one week is selected in the display date. .

[Example] If Jan.12 is selected as the display date, a graph of Jan.6-Jan.12 will be displayed.



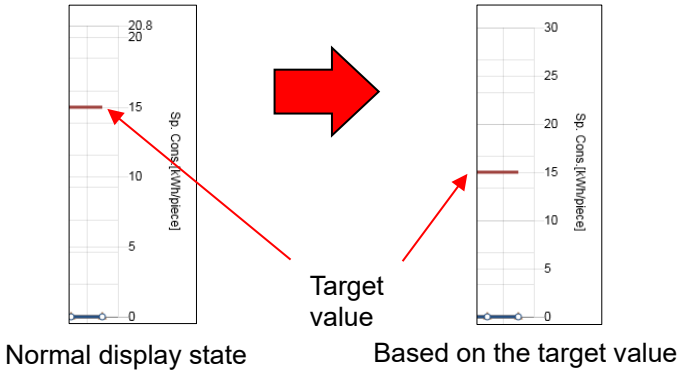
4 Select the display date

The calendar will be displayed when the button is clicked.
Select a date from the calendar.



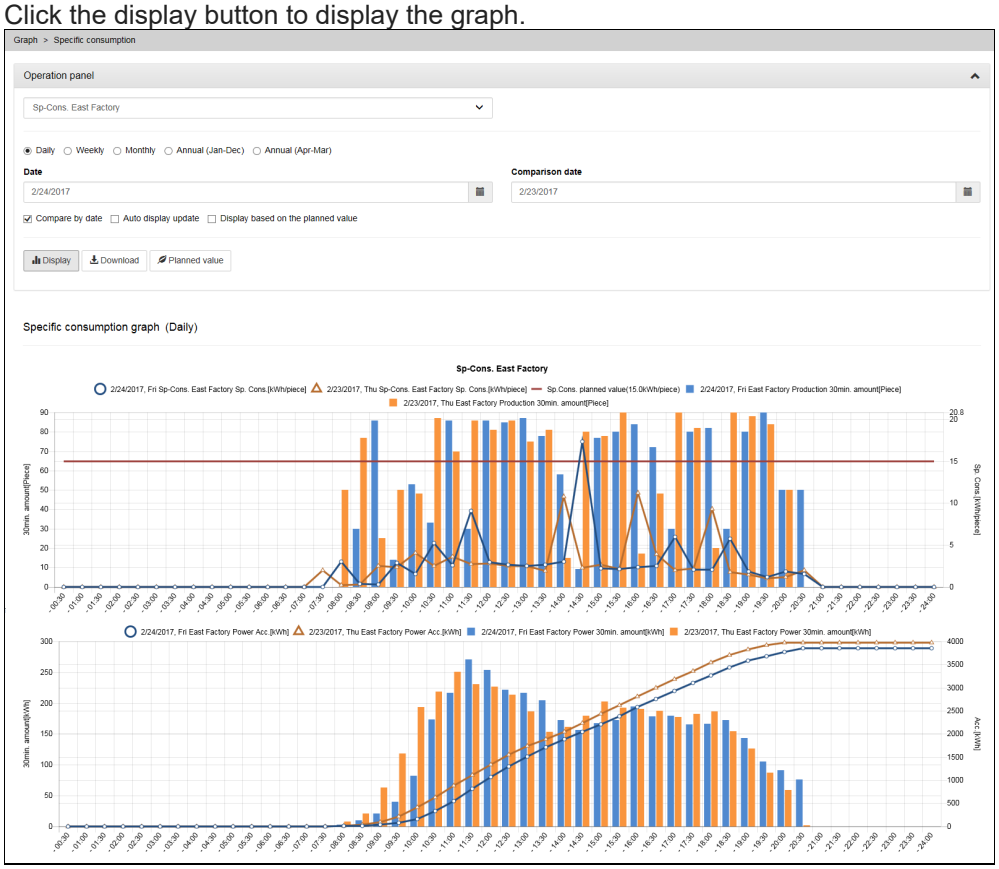
* When display interval is annual (Jan- Dec) or annual (Apr-Mar), select up to a year.
When display interval is monthly, select up to a month.
When display interval is daily, select up to a day.

Display based on target value
Center of the graph will become the target value when [Display based on target value] is checked.



5 Click the [View] button

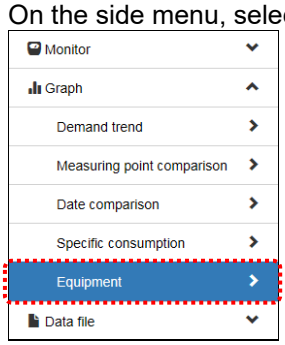
Click the display button to display the graph.



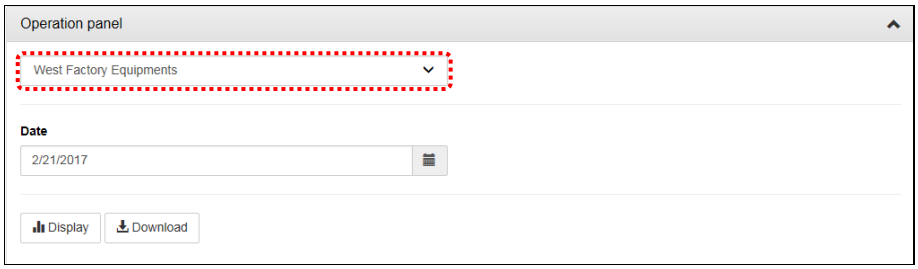
5.5 Confirming Equipment Efficiency (Equipment Graph)

1 Display the Graph screen

On the side menu, select [Equipment Graph] -> [Graph].



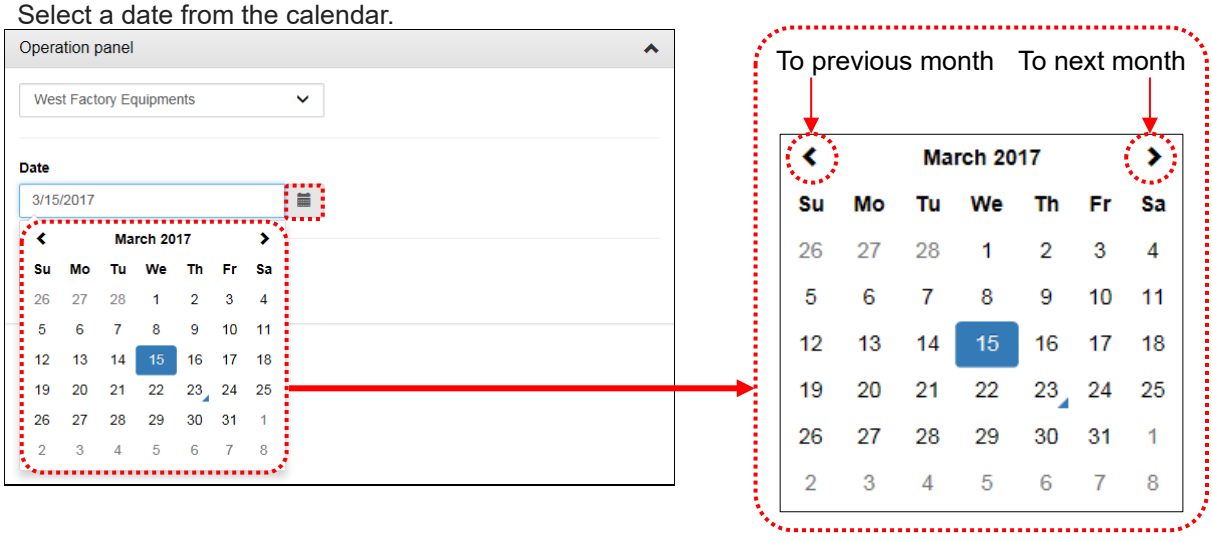
2 Select equipment group



3 Select the display date

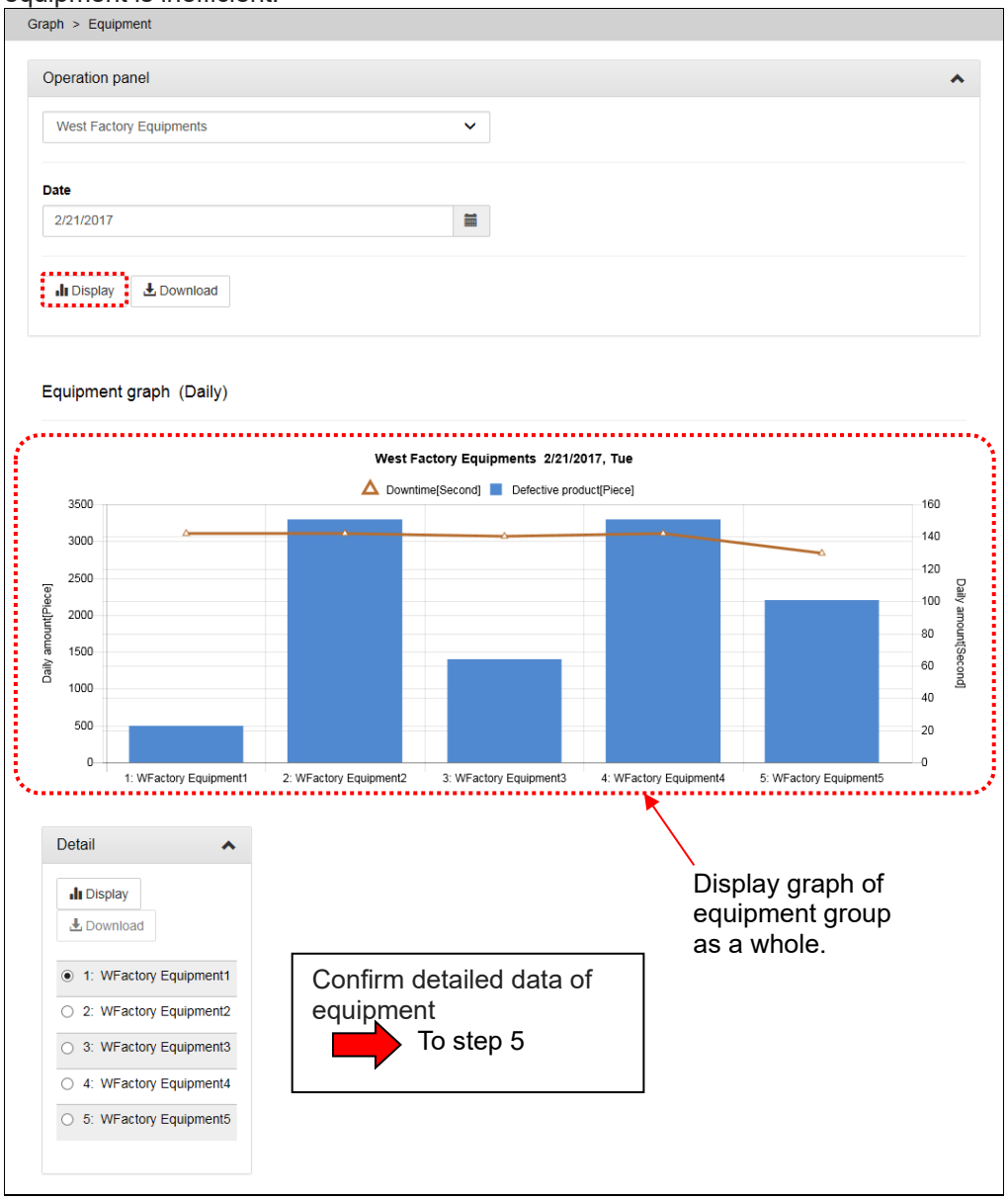
The calendar will be displayed when the button is clicked.

Select a date from the calendar.



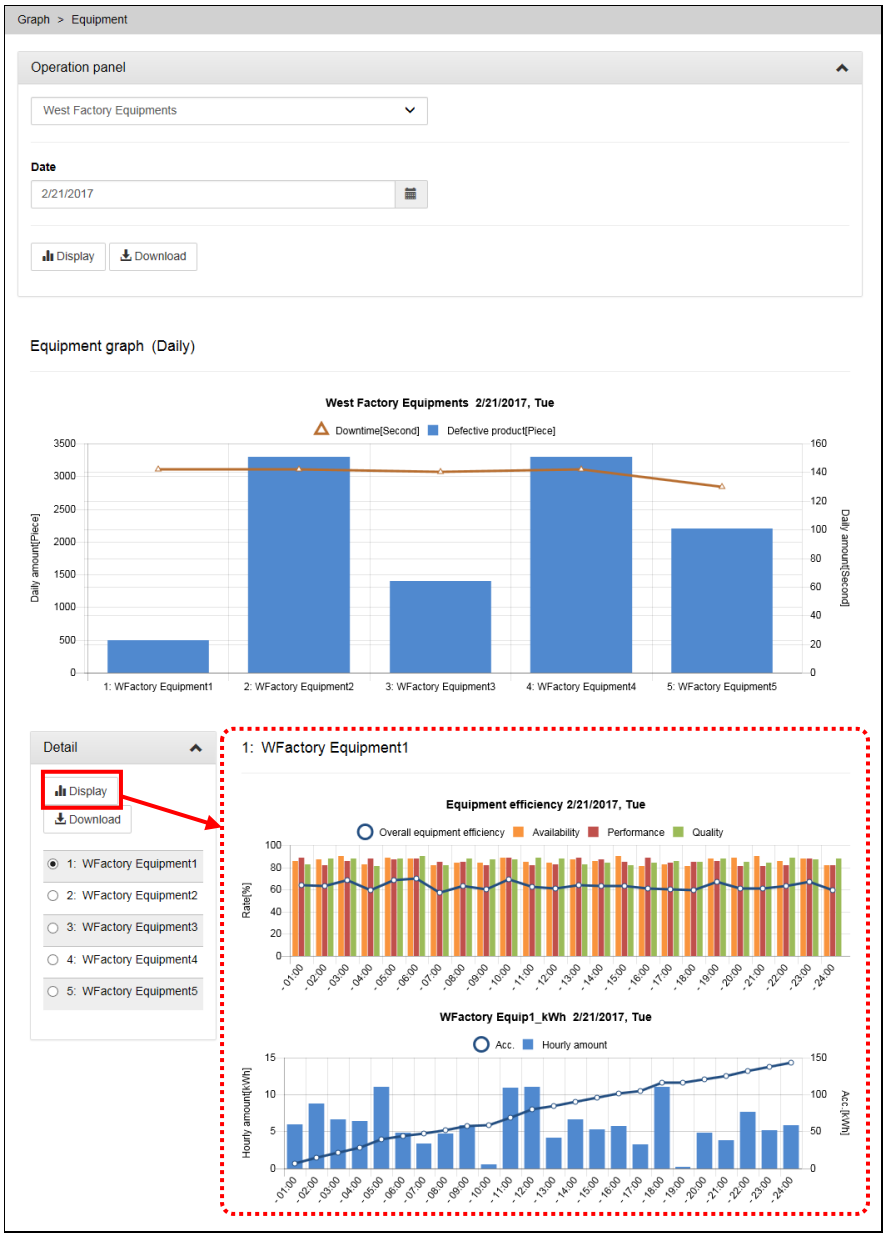
4 Click the display button

Click the [Display] button to display the graph.
The number of defects for one day and the stop time are displayed in the facility, and you can see which equipment is inefficient.



5 Select equipment

From the [Detail] list, select equipment you want to confirm.
Click an equipment name display equipment efficiency and detail graphs. You can analyze them in more detail.
(A detail graph is a graph of the measuring points set in [Display point setting] of the setting software.)



How to calculate equipment efficiency

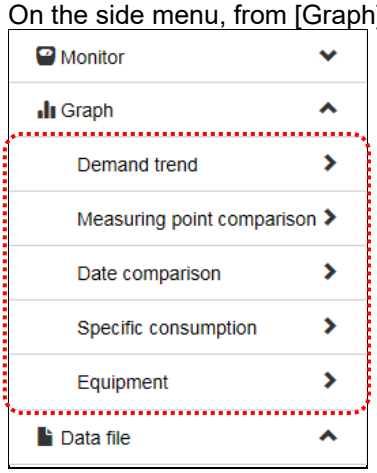
- Availability = (Loading time - Downtime) ÷ Loading time
  An index for the operation time. The longer the downtime, the worse the availability.
- Performance = (Standard cycle time x Product) ÷ (Loading time - Downtime)
  An index for the equipment performance. The longer the operation time, the worse the performance.
- Quality = Non-defective product ÷ Product
  The ratio of the number of non-defective products to the number of products. The more the number of defective products, the worse the quality.
- Overall equipment efficiency = Availability x Performance x Quality
  A comprehensive index for equipment efficiency. This is useful to grasp equipment

5.6 Downloading Graph Data

To download data of a graph being displayed into a CSV file, click the [Download] button on every graph screen.

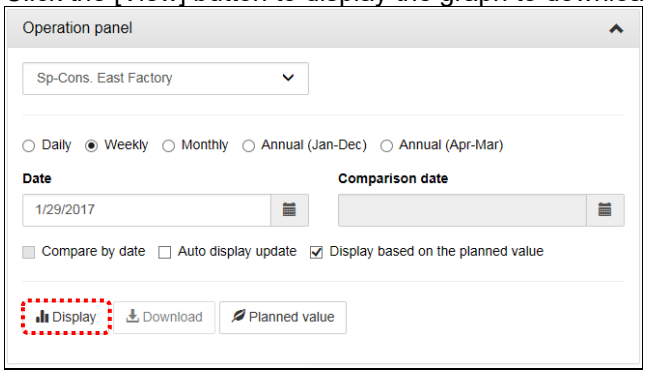
1 Display the Graph screen

On the side menu, from [Graph], select a type of graph you want to download.



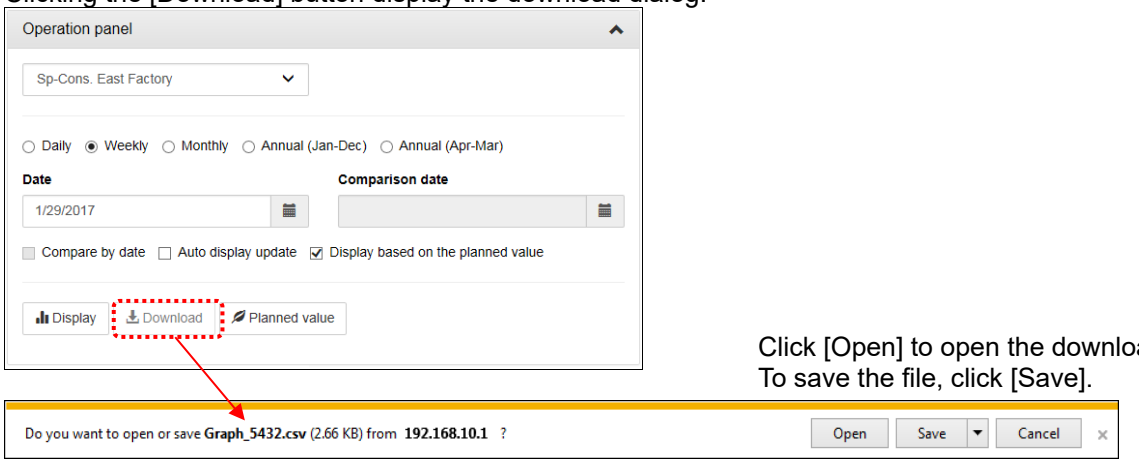
2 Click the [View] button

Click the [View] button to display the graph to download.



3 Click the [Download] button

Clicking the [Download] button display the download dialog.



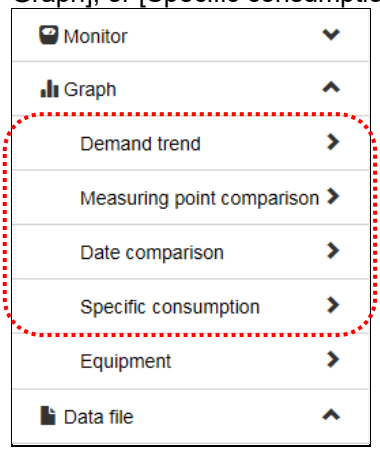
Click [Open] to open the downloaded file.
To save the file, click [Save].

Note that behavior after you click the [Download] button may vary depending on the version or setting of the web browser.

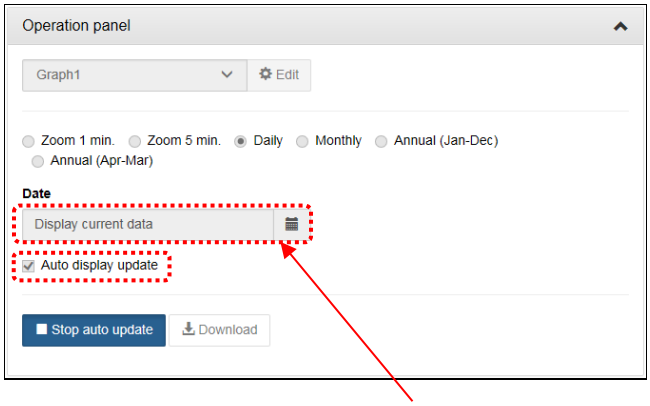
5.7 Automatically Updating Graphs

1 Display the Graph screen

On the side menu, from [Graph Display], select [Measuring Point Comparison Graph], [Date Comparison Graph], or [Specific consumption graph].



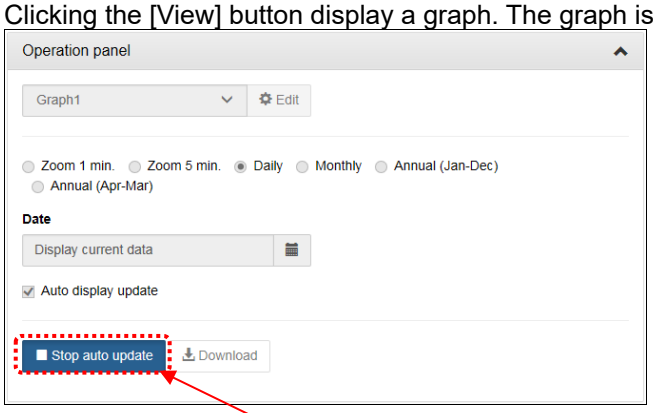
2 Check [Automatic graph update]



Checking [Automatic graph update] fixes [Date] to the current date (today for [Daily]).

3 Click the [View] button

Clicking the [View] button display a graph. The graph is automatically updated at regular intervals.



If you click the [View] button, the button changes into the [Stop update] button. Other items excluding the [Stop update] button are disabled. Clicking the [Stop update] stops the automatic update.

Automatic update interval
In case of monthly, annual (Jan-Dec) and annual (Apr-Mar), graphs are updated for 1hour interval.
In case of zoom 5min, or zoom 1min, graphs are updated for 1min interval.

Number of displayable clients simultaneously
Up to five clients can be automatically updated simultaneously.
*If you display two graphs on a PC, the number of clients is two.

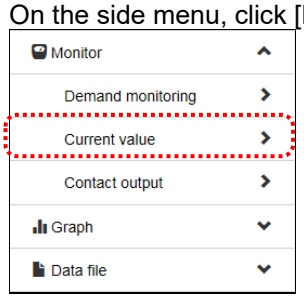
6. Display Current Measuring Values

6.1 View the Current Values of Selected Measuring Points

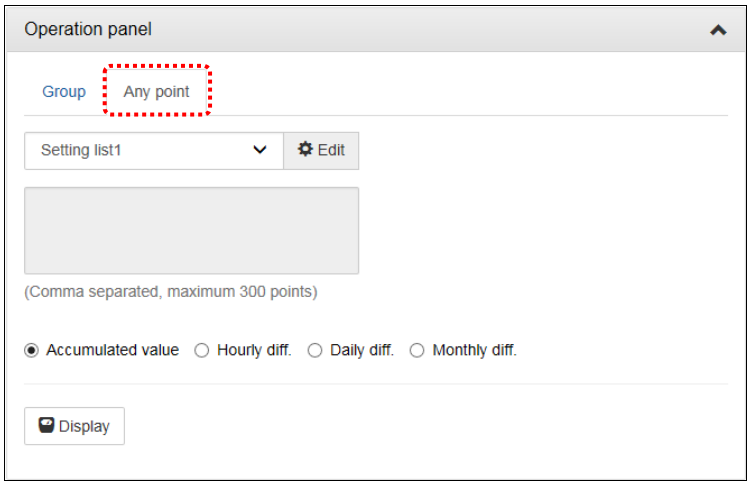
* If it is not displayed correctly, refer to [13.4 Troubleshooting].

1 Display the Current Value Monitor screen

On the side menu, click [Real-time Monitor] -> [Current value Monitor].

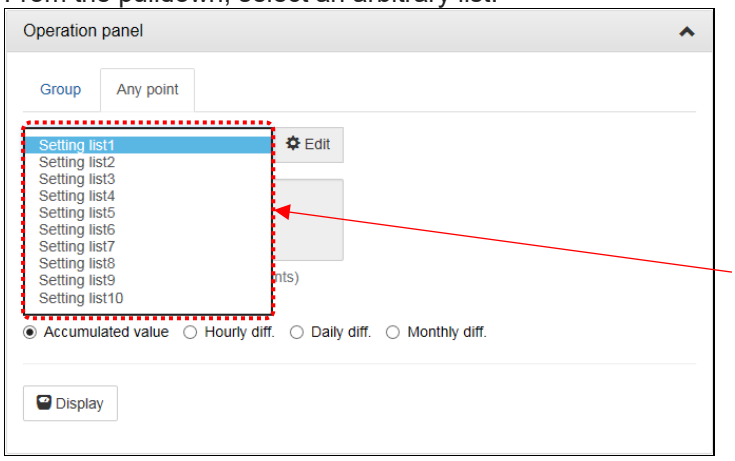


2 Select an arbitrary display type



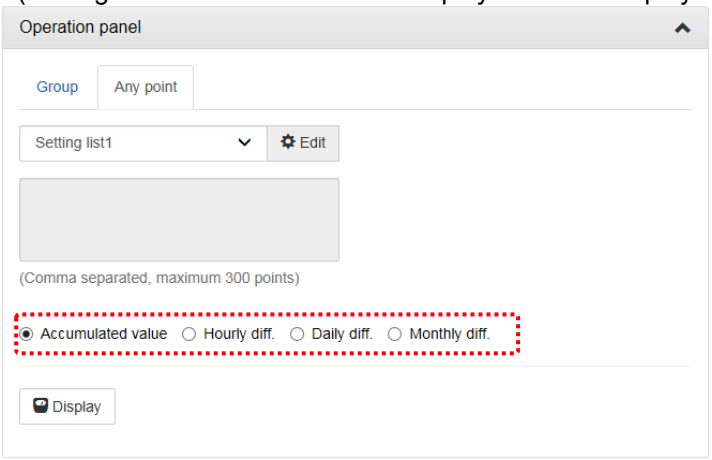
3 Select an arbitrary list

From the pulldown, select an arbitrary list.



4 Select display format

Select the data display format of power / pulse.
(Analog value be selected which display format to display the current indicated value)

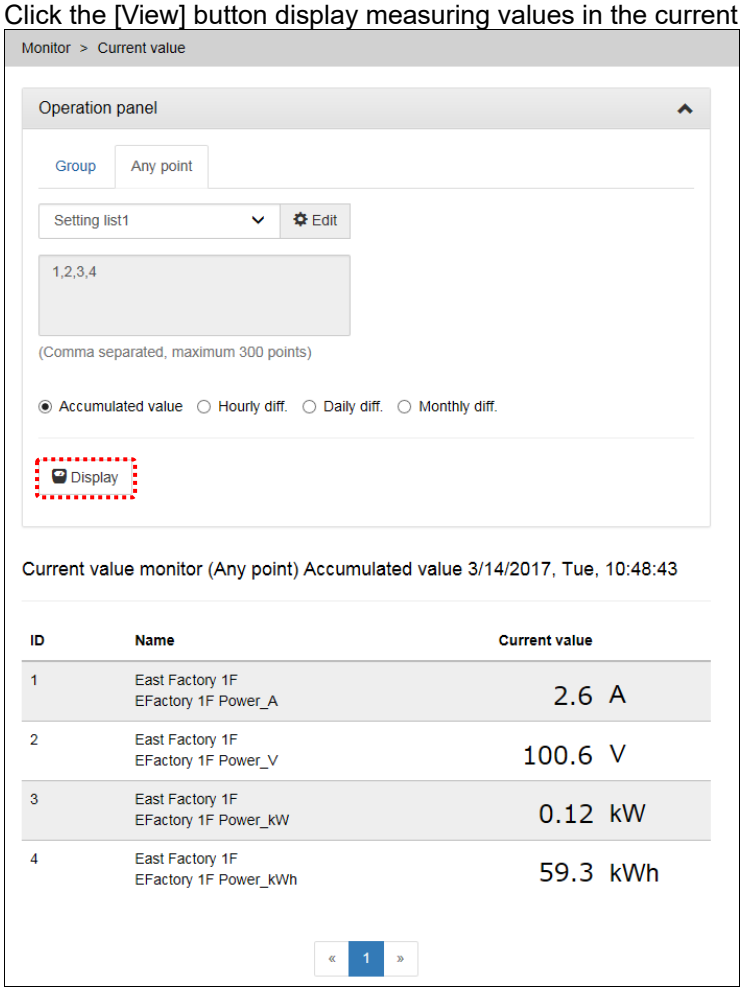


Item	Contents
Cumulative value	Display current instruction value
Time difference	Display difference value from previous time
Day difference	Display difference value from last monthly total value
Month difference	Display difference value from last year's aggregate value

* Monthly aggregate value is aggregated at monthly logging time.
* Annual aggregate values are aggregated at annual logging date and time.

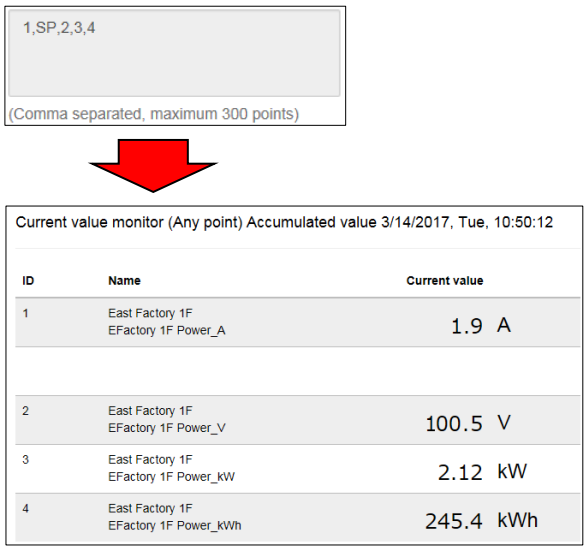
5 Click the [View] button

Click the [View] button display measuring values in the current value display area.



How to skip a line

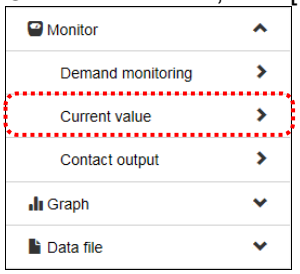
To skip a line for adjusting a page number, type "SP" instead of a measuring point ID to make a line blank.



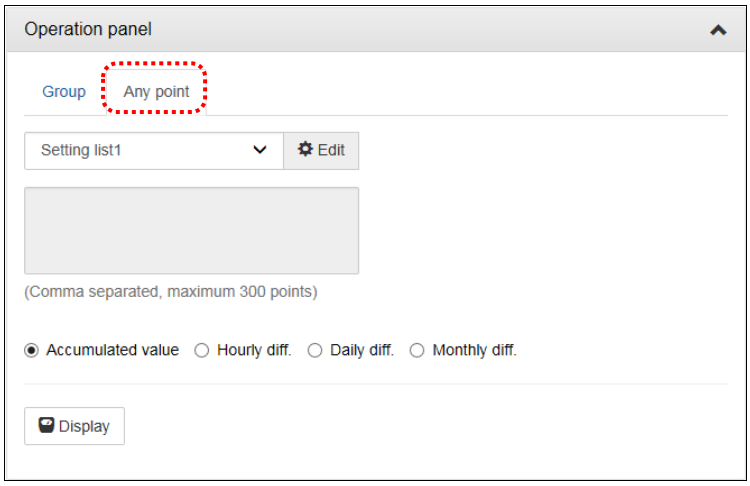
6.2 Save the Selected Measuring Points (Making a Setting List)

1 Display the Current Value Monitor screen

On the side menu, click [Real-time Monitor] -> [Current value Monitor].

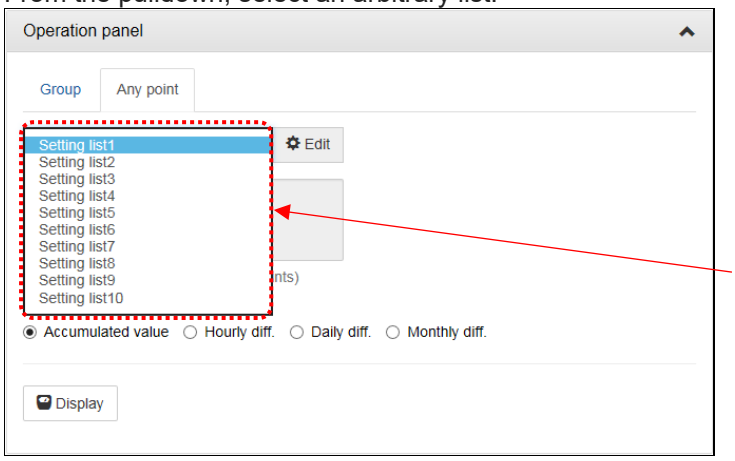


2 Select an arbitrary display type



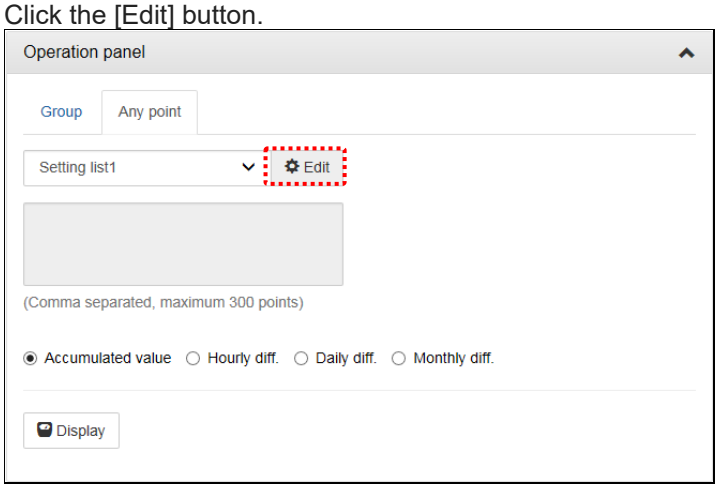
3 Select an arbitrary list

From the pulldown, select an arbitrary list.



4 Switch to edit mode

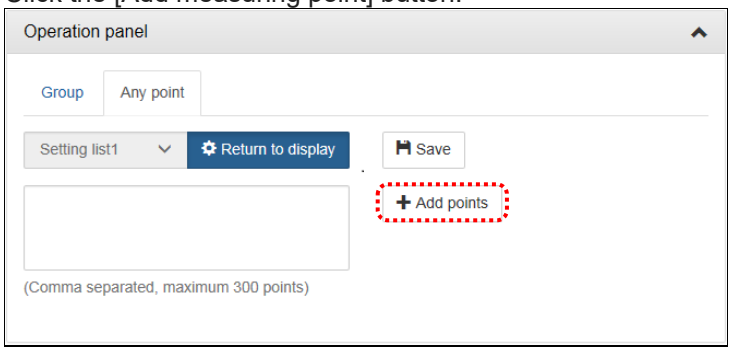
Click the [Edit] button.



5 Add the measuring point you want to display to the arbitrary list

Add the measuring points to the arbitrary list with the following procedure.

Click the [Add measuring point] button.

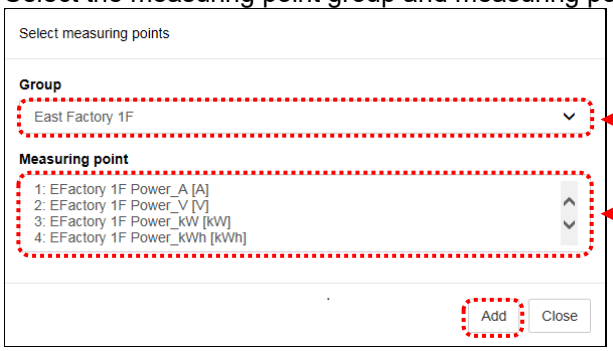


It can also be input directly from the keyboard

You can also directly enter the measuring point ID in the measuring point input area. For direct input, enter the measuring point ID with a comma separator.

[Example] When you want to display measurement point IDs 12, 13, 14

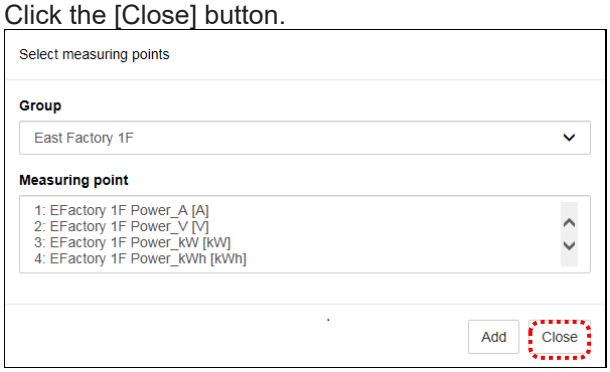
Select the measuring point group and measuring point, and click the [Add] button.



Measuring point group

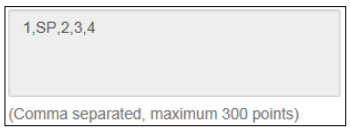
Measuring point group

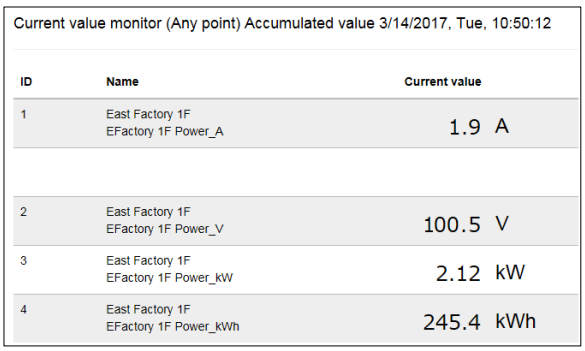
Click the [Close] button.



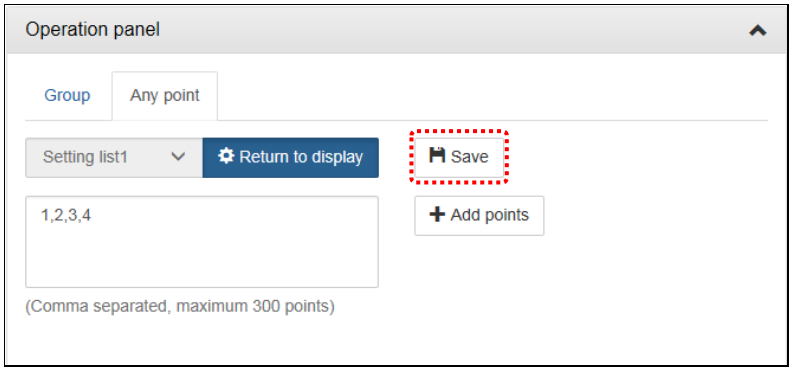
How to skip a line

To skip a line for adjusting a page number, type "SP" instead of a measuring point ID to make a line blank.





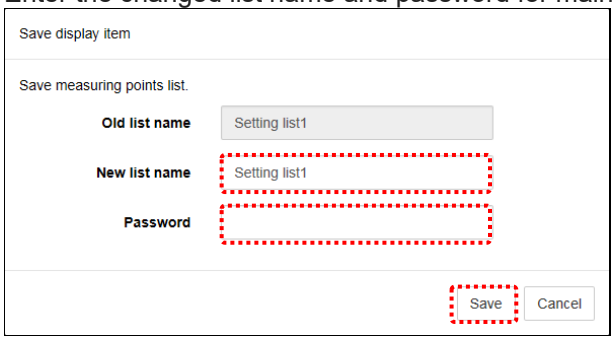
6 Click the [Save] button



Graph display is also possible without saving
You can display the graph without saving it to the arbitrary list by clicking the [Return to Display] button and returning to the display mode.
*** If you move from the side menu to another screen, settings that are not saved will be deleted.**

7 Save arbitrary list

Enter the changed list name and password for maintenance and click the [Save] button.



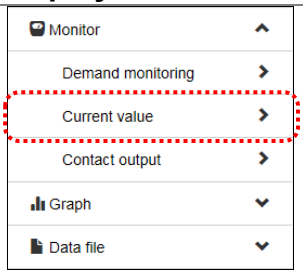
* Factory default password: ecopass

If the password is different, you receive the following error message.

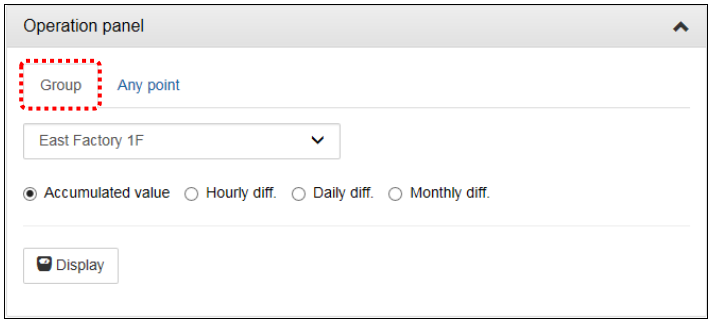
6.3 Viewing Current Values by Group

Display current values by group. Groups have been set by the setting software.

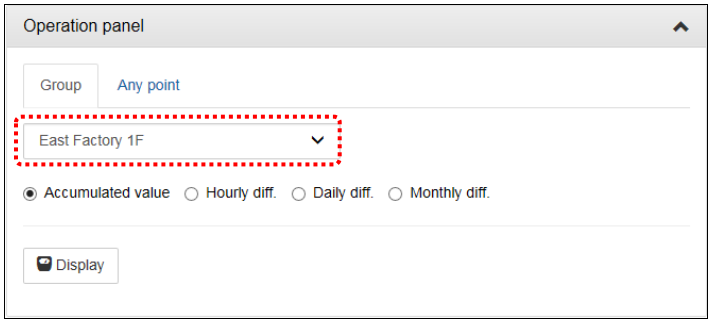
1 Display the Current Value Monitor screen



2 Select Group as display type

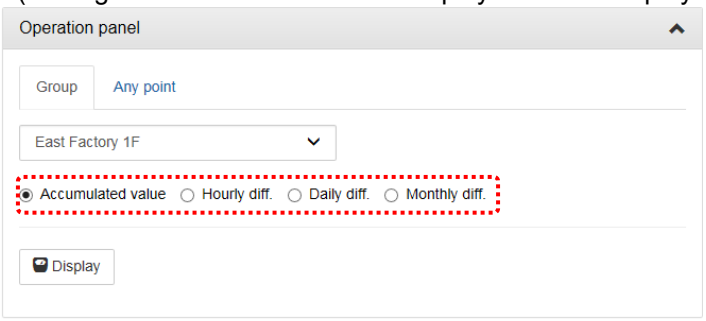


3 Select measurement point group



4 Select display format

Select the data display format of power / pulse.
(Analog value be selected which display format to display the current indicated value)

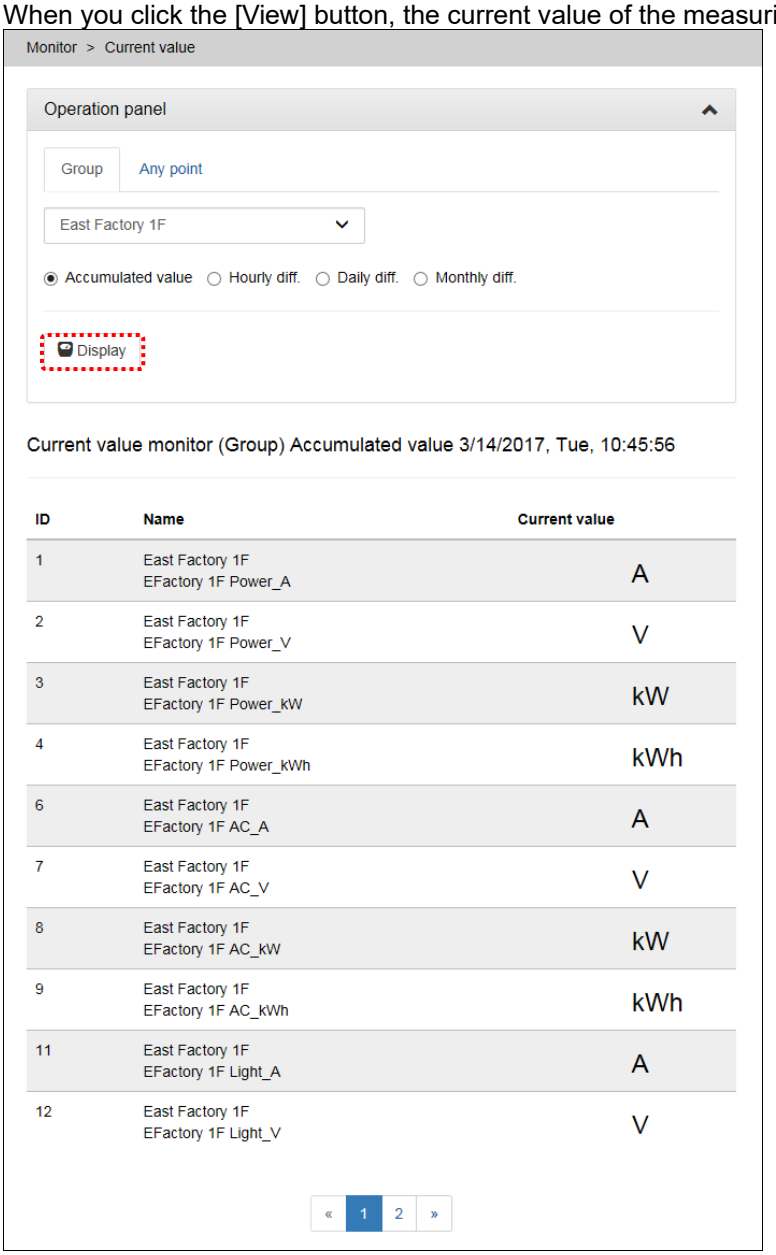


Item	Contents
Cumulative value	Display current instruction value
Time difference	Display difference value from previous time
Day difference	Display difference value from last monthly total value
Month difference	Display difference value from last year's aggregate value

* Monthly aggregate value is aggregated at monthly logging time.
* Annual aggregate values are aggregated at annual logging date and time.

5 Click the [View] button

When you click the [View] button, the current value of the measuring points in the group are displayed.



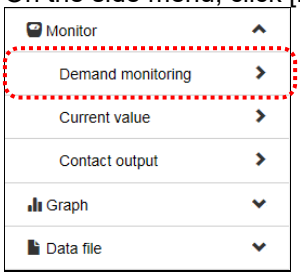
7. Demand control, Demand Trend

7.1 Confirming Present/Today's Demand Trends

For device with demand control function only

1 Display the Demand Value Monitor screen

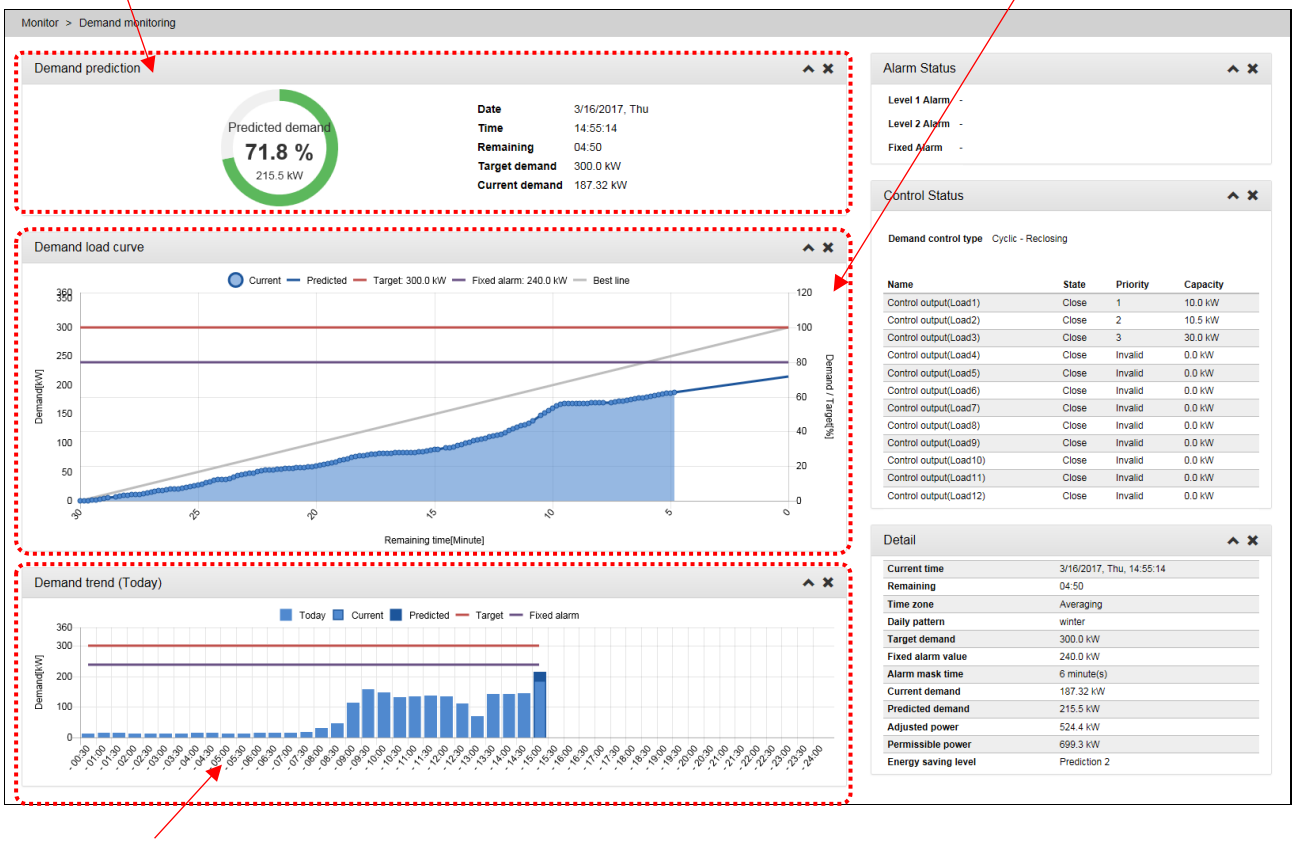
On the side menu, click [Real-time Monitor] -> [Demand value Monitor].



2 Demand data appear

Confirm the present demand.

Confirm the demand trend of the present time limit with the demand load curve.



Confirm the demand trend of today with the today's demand trend graph.

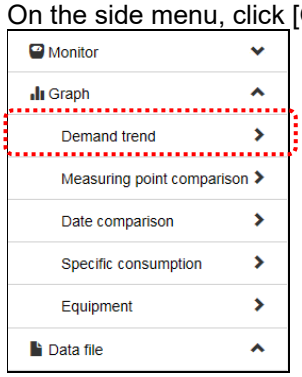
For details on the screen display, see "4.4 Monitor: Demand Value."

7.2 Confirm Past Demand Trends

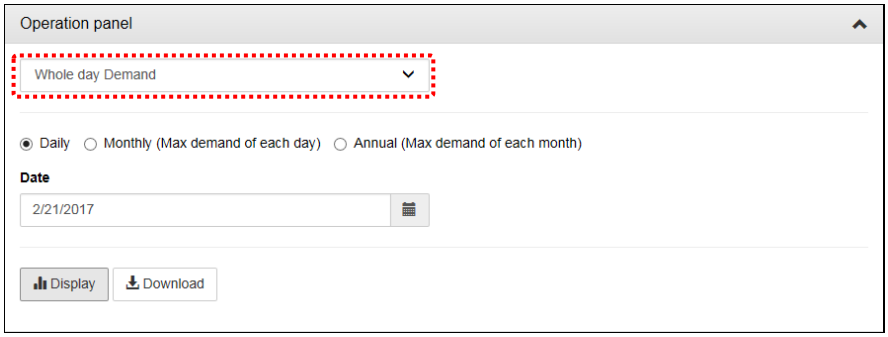
For device with demand control function only.

1 Display the Demand trend Graph screen

On the side menu, click [Graph] -> [Demand trend Graph].

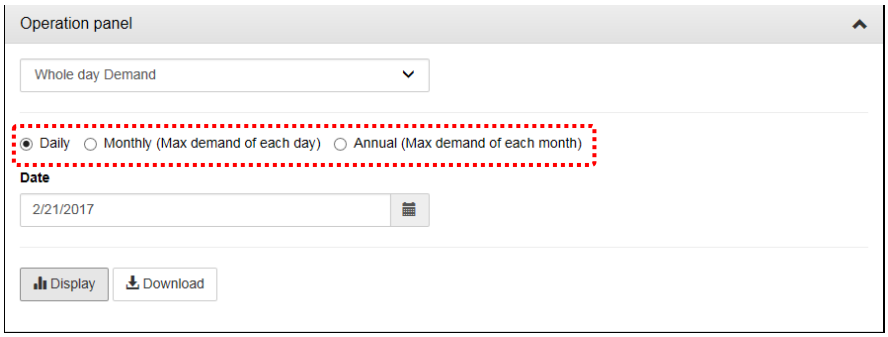


2 Select display time zone



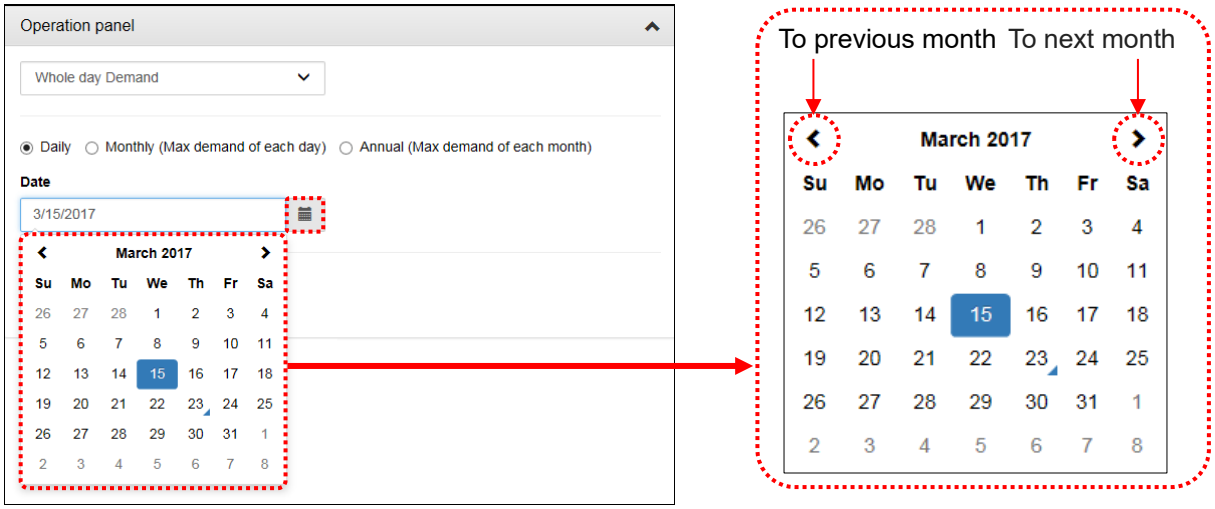
Display time zone
Select the time zone to display when you set the [Management by seasonal time zone] setting in the setting software.

3 Select the display interval



4 Select display date

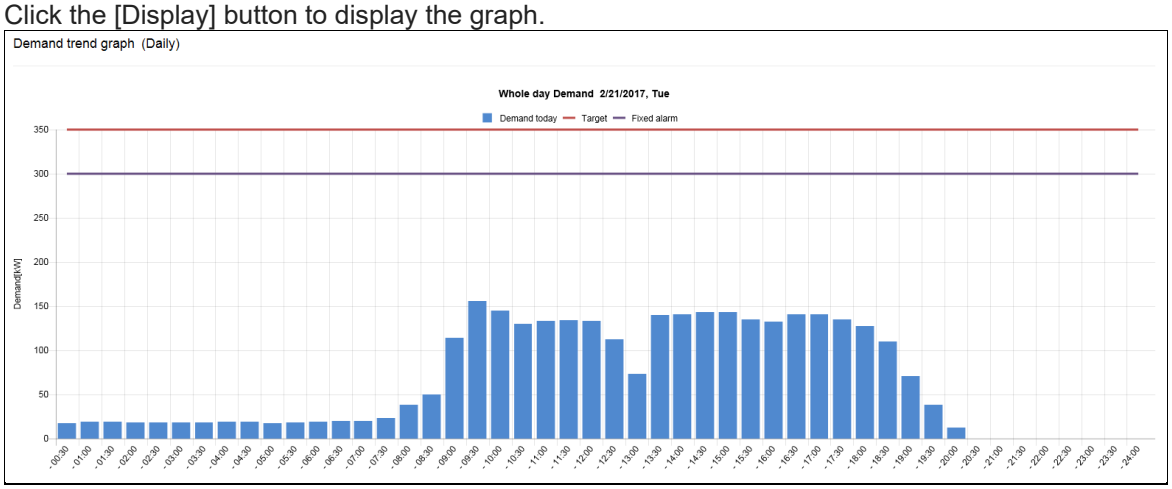
Click the button  to display the calendar.
Select a date from the calendar.



* When display interval is annual or monthly, select until the month.
When display interval is daily, select until the day.

5 Click the [View] button

Click the [Display] button to display the graph.

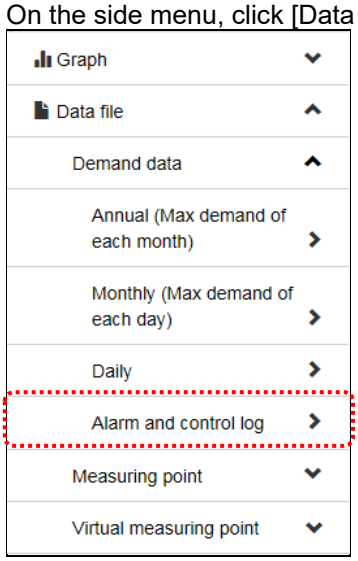


7.3 Confirming Demand Alarm/Control History

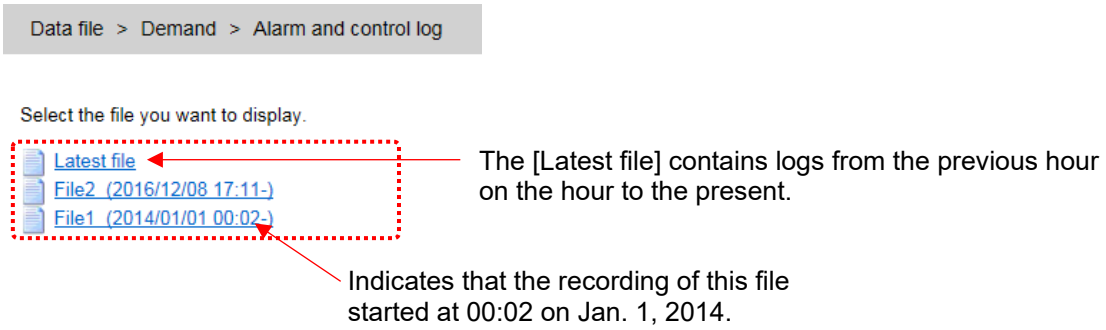
For device with demand control function only

1 Display the screen to download the demand alarm and control log.

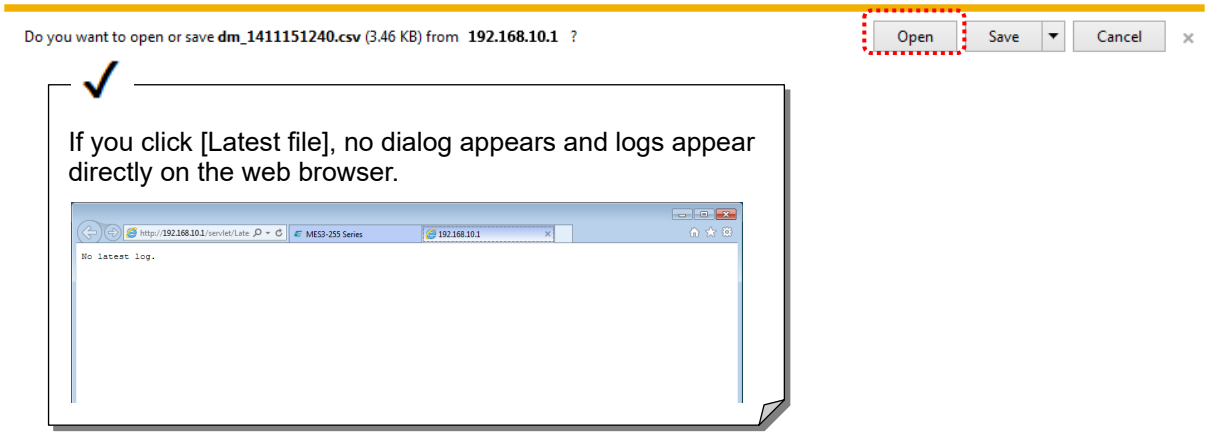
On the side menu, click [Data file] -> [Demand Data] -> [Demand alarm and control log].



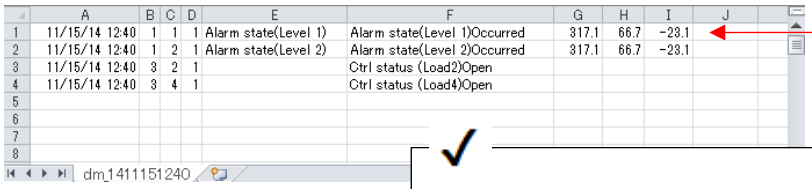
2 Click a file to download.



3 In the dialog, click [Open]



4 Demand alarm and control logs appear.



	A	B	C	D	E	F	G	H	I	J
1	11/15/14 12:40	1	1	1	Alarm state(Level 1)	Alarm state(Level 1)Occurred	317.1	66.7	-23.1	
2	11/15/14 12:40	1	2	1	Alarm state(Level 2)	Alarm state(Level 2)Occurred	317.1	66.7	-23.1	
3	11/15/14 12:40	3	2	1		Ctrl status (Load2)Open				
4	11/15/14 12:40	3	4	1		Ctrl status (Load4)Open				
5										
6										
7										
8										

dm1411151240

If the row width is narrow, increase the width.

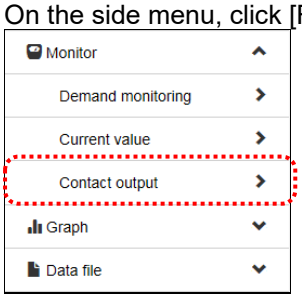
✓ Note that behavior after you click the file may vary depending on the version or setting of the web browser.

8. Confirm and Control Contact Output State

8.1 Confirm Contact Output State

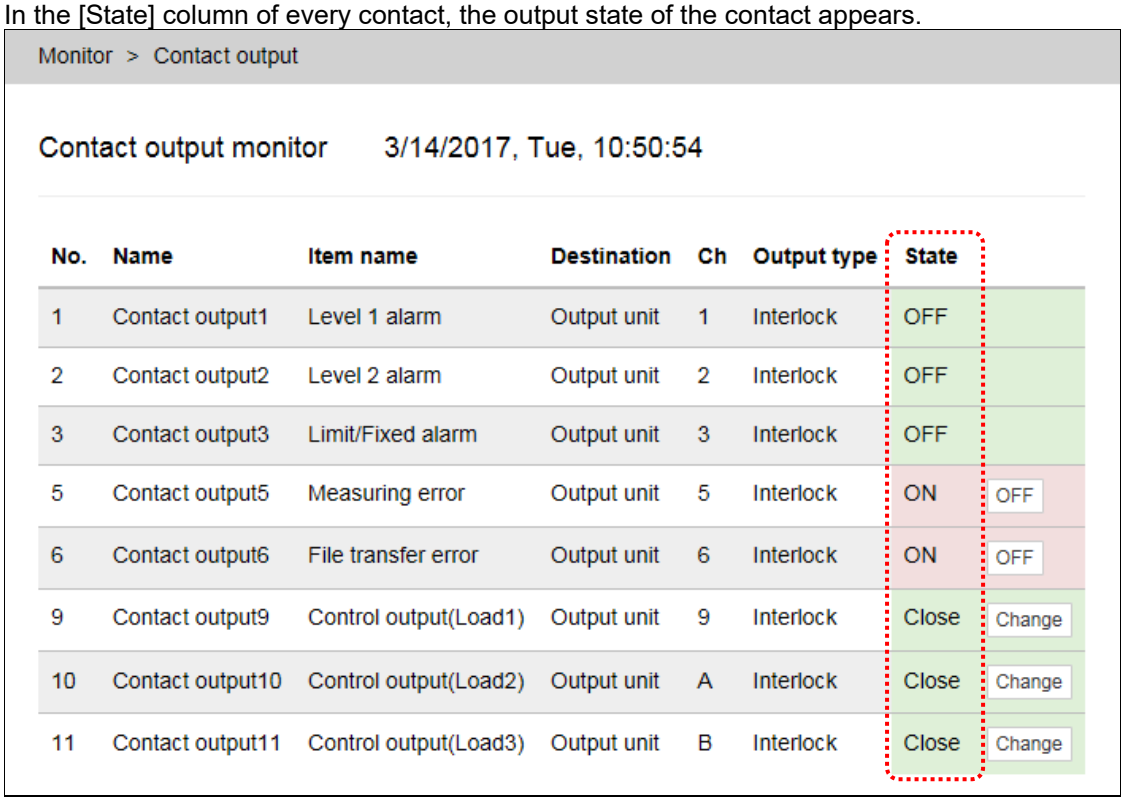
1 Display the Contact output Monitor screen

On the side menu, click [Real-time Monitor] -> [Contact output Monitor].



2 The contact output state appears.

In the [State] column of every contact, the output state of the contact appears.



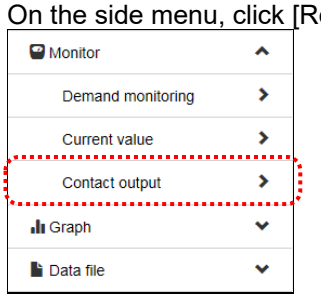
Contact state
For contacts for outputting alarms, [ON] or [OFF] appears.
For contacts for controlling demand loads, [Open] or [Close] appears.

* More details to confirm the settings about contact output, please perform in contact output setting list.

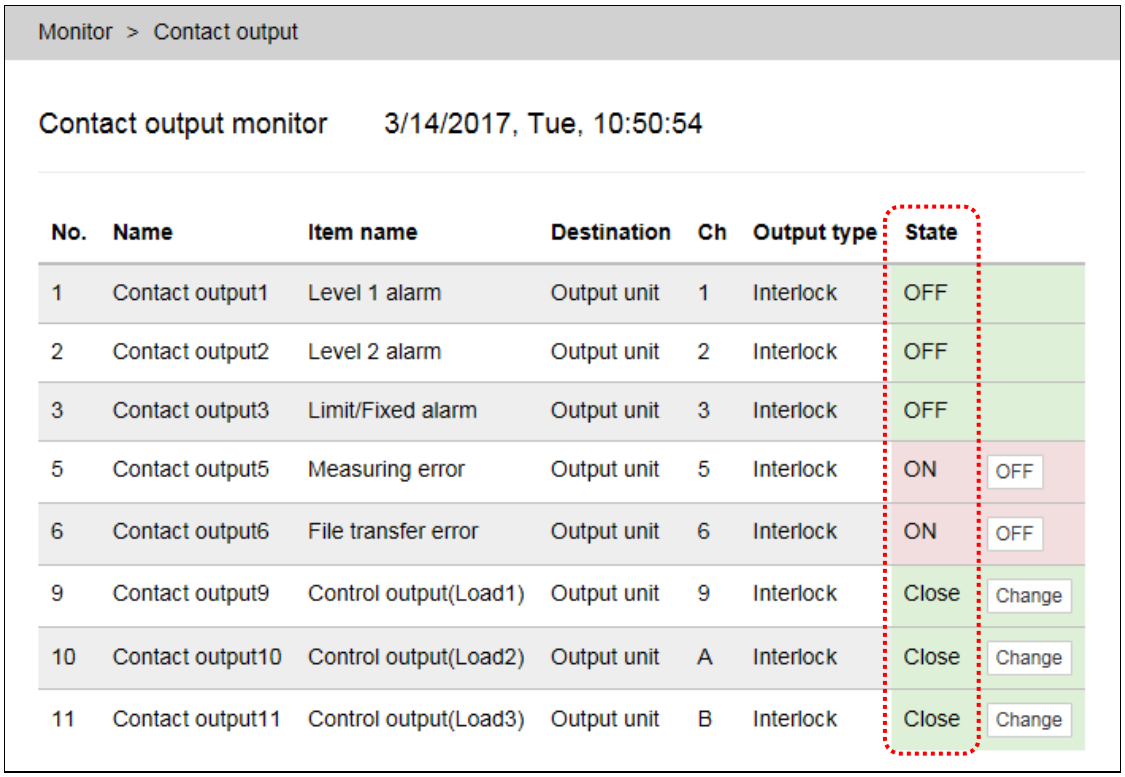
8.2 Turning OFF the Contact for Alarm Output

1 Display the Contact Output Monitor screen

On the side menu, click [Real-time Monitor] -> [Contact output Monitor].

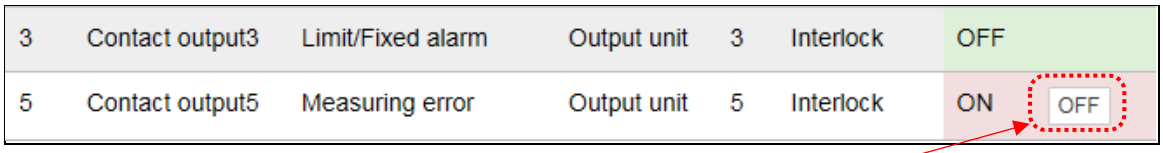


2 The contact output state appears.



No.	Name	Item name	Destination	Ch	Output type	State	
1	Contact output1	Level 1 alarm	Output unit	1	Interlock	OFF	
2	Contact output2	Level 2 alarm	Output unit	2	Interlock	OFF	
3	Contact output3	Limit/Fixed alarm	Output unit	3	Interlock	OFF	
5	Contact output5	Measuring error	Output unit	5	Interlock	ON	OFF
6	Contact output6	File transfer error	Output unit	6	Interlock	ON	OFF
9	Contact output9	Control output(Load1)	Output unit	9	Interlock	Close	Change
10	Contact output10	Control output(Load2)	Output unit	A	Interlock	Close	Change
11	Contact output11	Control output(Load3)	Output unit	B	Interlock	Close	Change

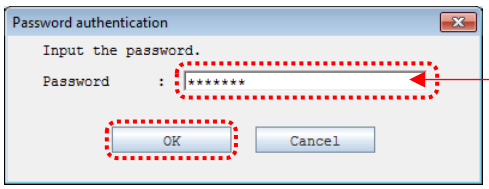
3 Click the [OFF] button



3	Contact output3	Limit/Fixed alarm	Output unit	3	Interlock	OFF	
5	Contact output5	Measuring error	Output unit	5	Interlock	ON	OFF

Click the [OFF] button of a contact to turn off

4 Enter the password and click the [OK] button

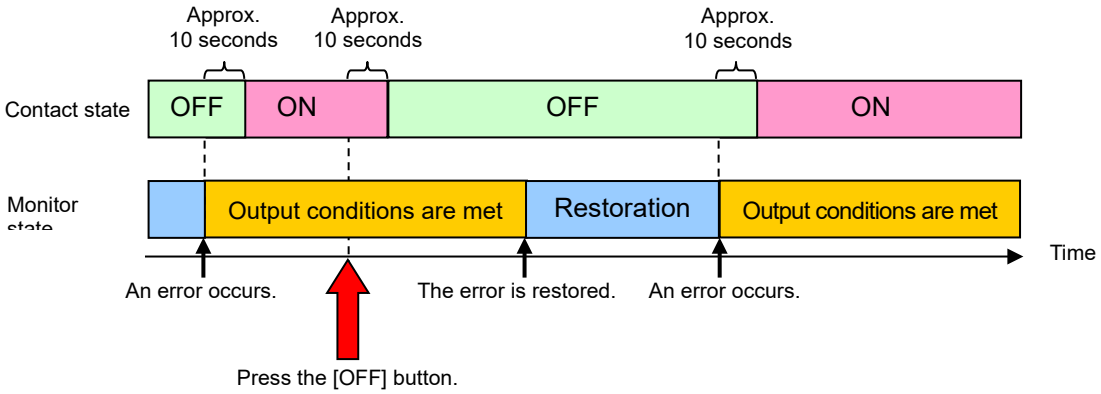


Enter the maintenance password.
*The factory default password: ecopass

Make sure that the state changes to [OFF]

3	Contact output3	Limit/Fixed alarm	Output unit	3	Interlock	OFF
5	Contact output5	Measuring error	Output unit	5	Interlock	OFF

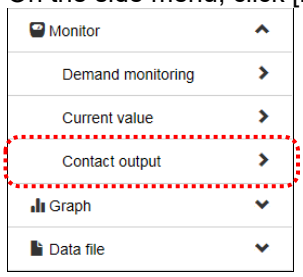
- **The contact state does not change immediately. Wait about 10 seconds.**
- **If you manually turn it OFF, the contact will not be turned ON even if the output conditions are met continuously.**
  The contact will be turned ON after it is restored once.



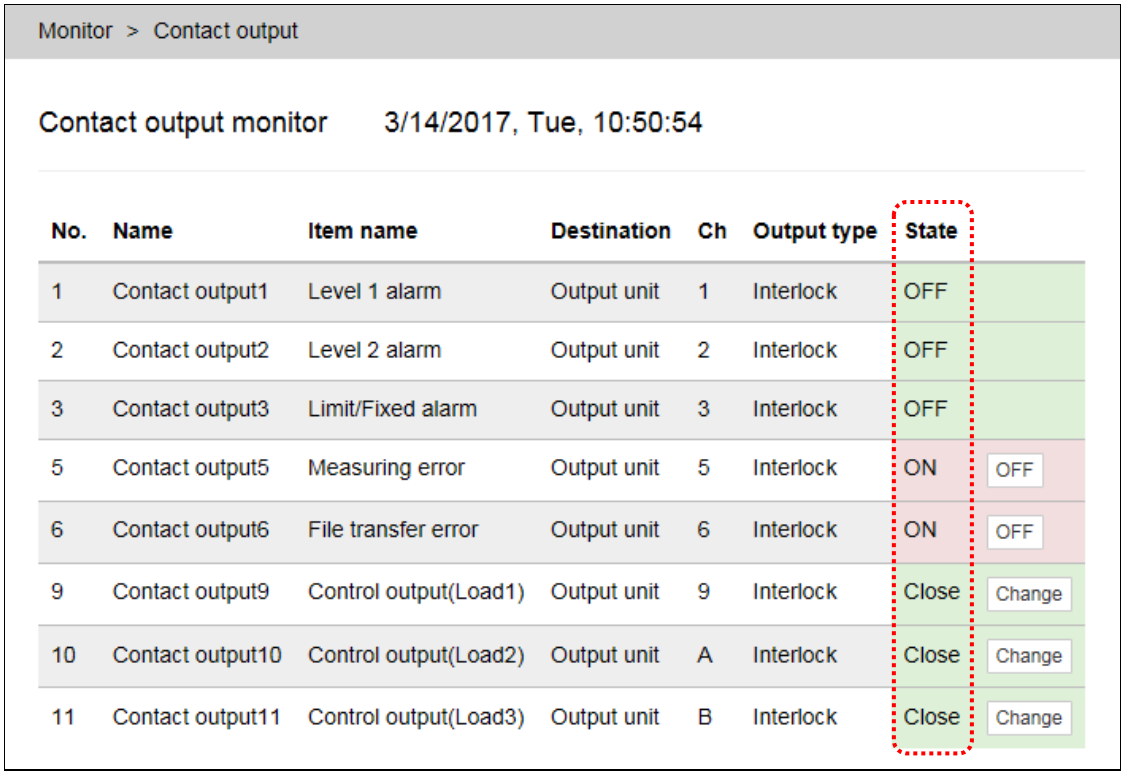
8.3 Control the Contact for Demand Load Control

1 Display the Contact output Monitor screen

On the side menu, click [Real-time Monitor] -> [Contact output Monitor].

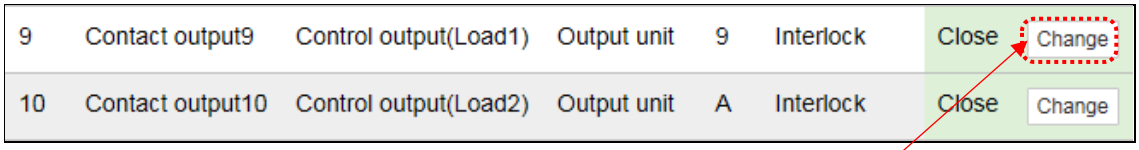


2 The contact output state appears.



No.	Name	Item name	Destination	Ch	Output type	State	
1	Contact output1	Level 1 alarm	Output unit	1	Interlock	OFF	
2	Contact output2	Level 2 alarm	Output unit	2	Interlock	OFF	
3	Contact output3	Limit/Fixed alarm	Output unit	3	Interlock	OFF	
5	Contact output5	Measuring error	Output unit	5	Interlock	ON	OFF
6	Contact output6	File transfer error	Output unit	6	Interlock	ON	OFF
9	Contact output9	Control output(Load1)	Output unit	9	Interlock	Close	Change
10	Contact output10	Control output(Load2)	Output unit	A	Interlock	Close	Change
11	Contact output11	Control output(Load3)	Output unit	B	Interlock	Close	Change

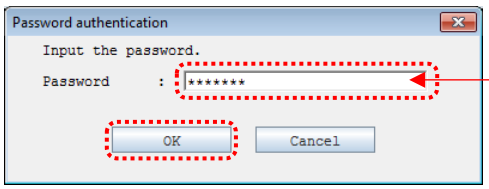
3 Click the [Change] button



9	Contact output9	Control output(Load1)	Output unit	9	Interlock	Close	Change
10	Contact output10	Control output(Load2)	Output unit	A	Interlock	Close	Change

Click the [CNG] button of a contact to which you want to change the state.

4 Enter the password and click the [OK] button



Enter the password for maintenance.
*The factory default password: ecopass

5 Make sure that the state changes.

9	Contact output9	Control output(Load1)	Output unit	9	Interlock	Open	Change
10	Contact output10	Control output(Load2)	Output unit	A	Interlock	Close	Change

✓

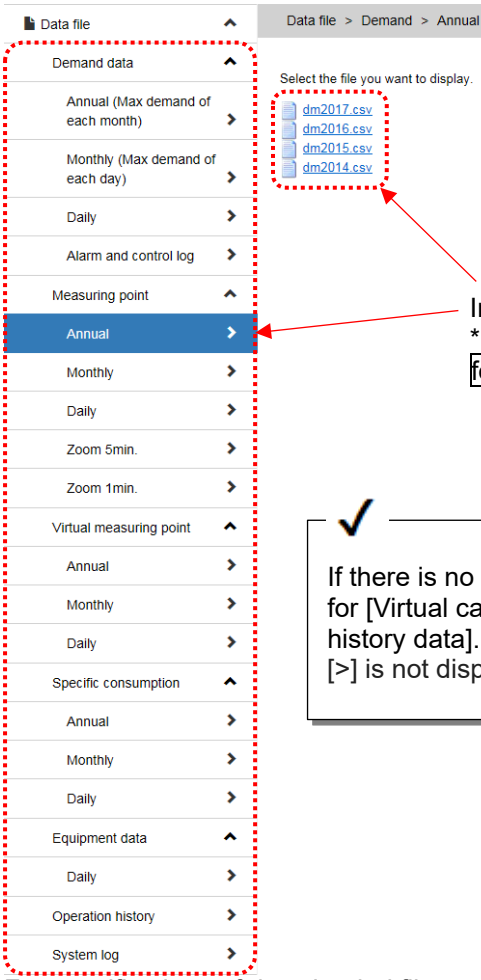
The contact state does not change immediately. Wait about 10 seconds.

9. Download Measuring Data

9.1 Download Measuring Data

1 Display the Download screen and select a file

On the side menu, from [Data file], select data to download.
Click a file name to start download.

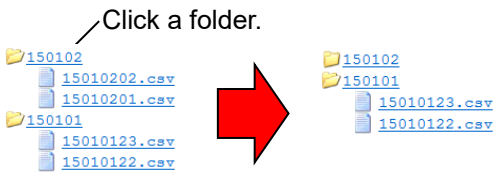


In [Data file], click data to download. Then click a file name.
* [Demand Data] appears
for device with demand control function only.

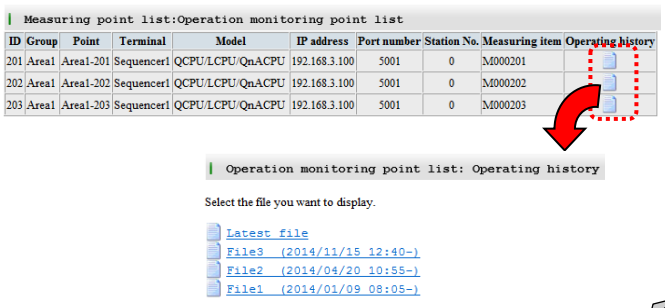
If there is no measuring point, then no file and menu link is appeared in black for [Virtual calc. point Data], [Sp.Cons. data], [Equipment data], [Operation history data].
[>] is not displayed for the link of the menu without the file.

For specifications of downloaded files, see "13.1 Specification of Data ."

For zoom 1min data
In addition to files, folders also appear.
To collapse a folder, click it.



For operation history data
A list of operation monitoring points appears.
Click button at the right of the table display files.

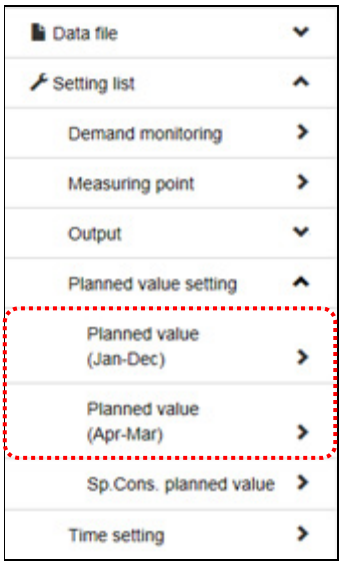


10. Set Plan Value

10.1 Set Plan Value (for Year/Fiscal Year)

1 Display the Plan screen

On the side menu, click [Setting of Measuring point list] -> [Setting of Planned value] -> [Energy planned value (Jan.-Dec.)] or [Energy planned value (Apr.-Mar.)].

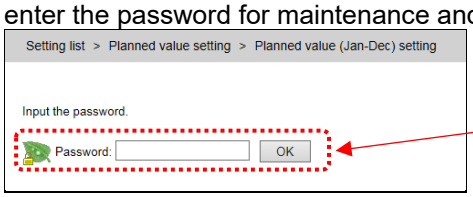


Click either of these two

Year (Jan.-Dec.) and fiscal year (Apr.-Mar.)
Planned values are the same regardless of which span is used because the values are set by month.
E.g.) If the planned value of April is set to "100," "100" is valid for both planned values of April for the vear and the fiscal vear.

2 Enter the password

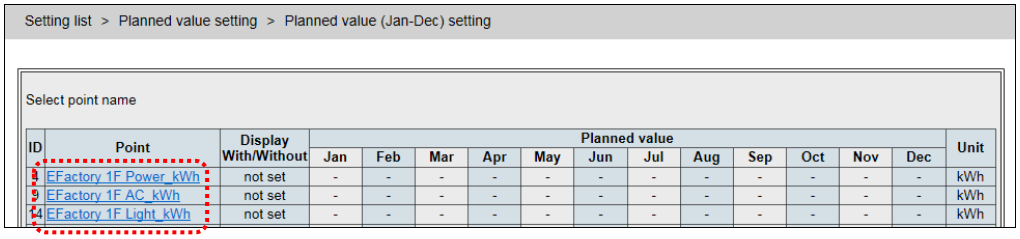
On the Login authentication screen,
enter the password for maintenance and click the [OK] button.



Enter the password for maintenance.
*The factory default password: ecopass

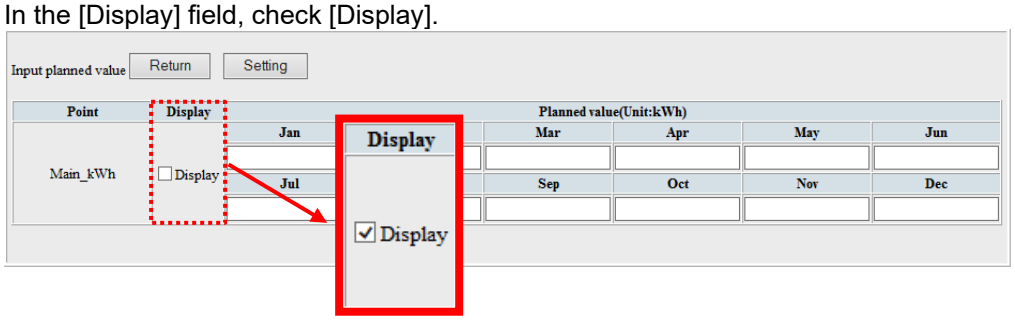
3 Select a measuring point to which you want to set planned values

On the Planned Value List screen, click the name of a measuring point to which you want to set planned values.



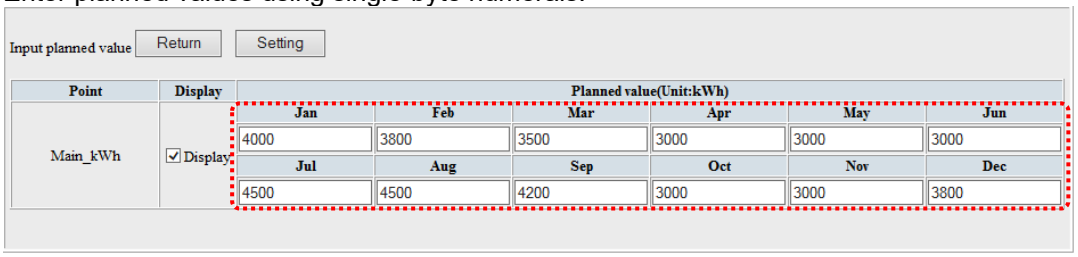
4 Check [Display]

In the [Display] field, check [Display].



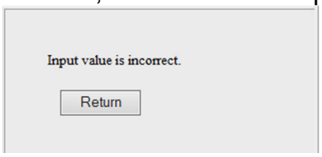
5 Enter planned values

Enter planned values using single-byte numerals.



Input range of planned values

- Up to 11 numerals including a decimal point can be entered.
- If you enter a double-byte character or a character other than a numeral, the planned value will be 0 (zero).
- If you enter a negative value and click the [Setting] button, an error screen appears.



- The number of decimal places is determined by the setting of a measuring point.
  If the number of entered digits is small, 0s (zeros) are added. If large, odd part is truncated.

E.g.) When the number of decimal places is three

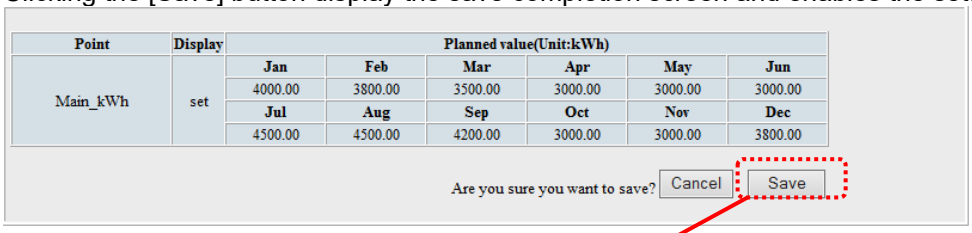
Entered value	Planned value to be set
12.34	12.340
12.3456	12.345

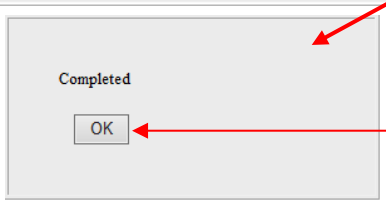
6 Click the [Setting] button

Clicking the [Setting] button display the save confirmation screen.

7 Click the [Save] button

Clicking the [Save] button display the save completion screen and enables the setting.



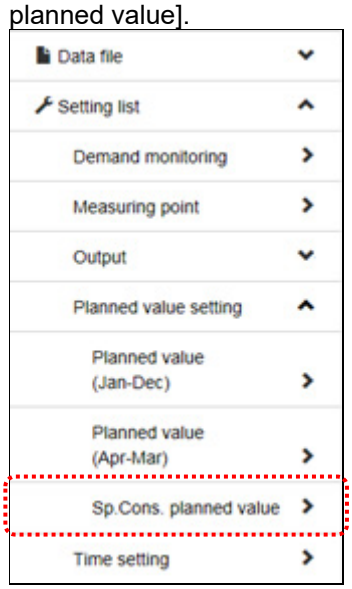


Click the [OK] button to return to the planned value list screen.

10.2 Set Specific Consumption Plan Value

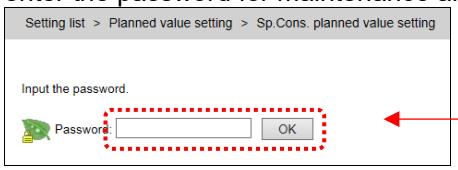
1 Display the Specific Consumption Planned Value screen

On the side menu, click [Setting of Measuring point List] -> [Setting of Planned value] -> [Sp.Cons. planned value].



2 Enter the password

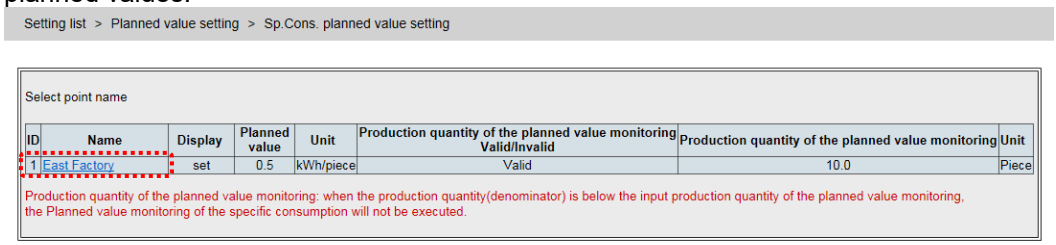
On the Login authentication screen,
enter the password for maintenance and click the [OK] button.



Enter the password for maintenance.
*The factory default password: ecopass

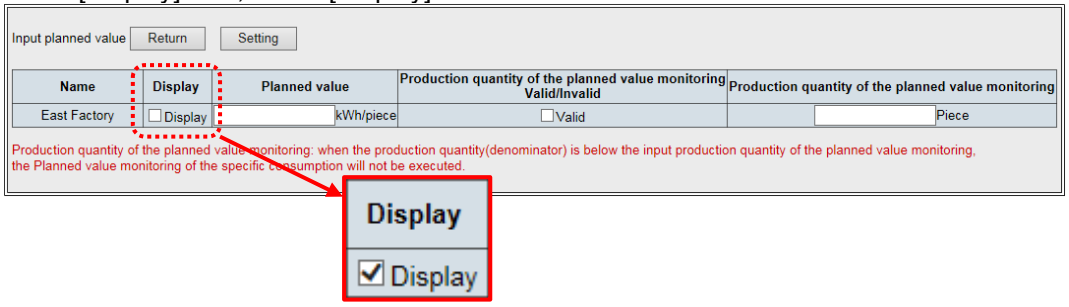
3 Select a specific consumption point to which you want to set planned values

On the planned value list screen, click the name of a specific consumption point to which you want to set planned values.



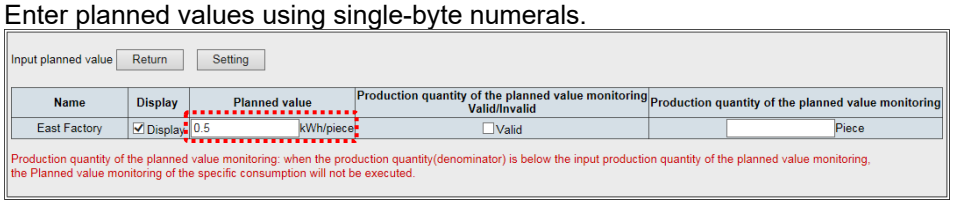
4 Check [Display]

In the [Display] field, check [Display].



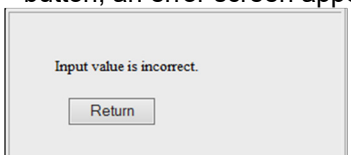
5 Enter planned values

Enter planned values using single-byte numerals.



Input range of planned values

- Up to 11 numerals including a decimal point can be entered.
- If you enter a double-byte character or a character other than a numeral, the planned value will be 0 (zero).
- If you enter a negative value and click the [Setting] button, an error screen appears.



- The number of decimal places is determined by the setting of a specific consumption point.
  If the number of entered digits is small, 0s (zeros) are added. If large, odd part is truncated.

E.g.) When the number of decimal places is three

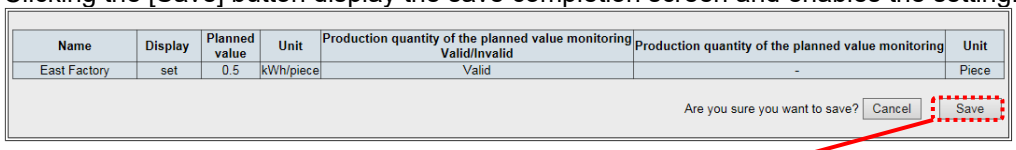
Entered value	Planned value to be set
12.34	12.340
12.3456	12.345

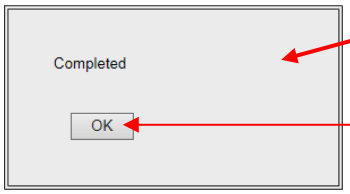
6 Click the [Setting] button

Clicking the [Setting] button display the save confirmation screen.

7 Click the [Save] button

Clicking the [Save] button display the save completion screen and enables the setting.





Click the [OK] button to return to the planned value list screen.

10.3 Stop Target Value Monitoring until Production Exceeds the Threshold Value

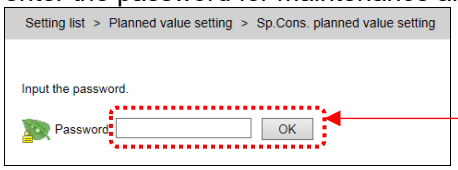
Since specific consumption becomes large during small production time zone, an unnecessary warning may arise.
You can mask warnings until the production volume exceeds the set value by specifying the production quantity of the planned value monitoring.

1 Display the Specific Consumption Planned Value Setting screen

On the side menu, click [Setting of Measuring point list] -> [Setting of Planned value] -> [Sp.Cons. planned value].

2 Enter the password

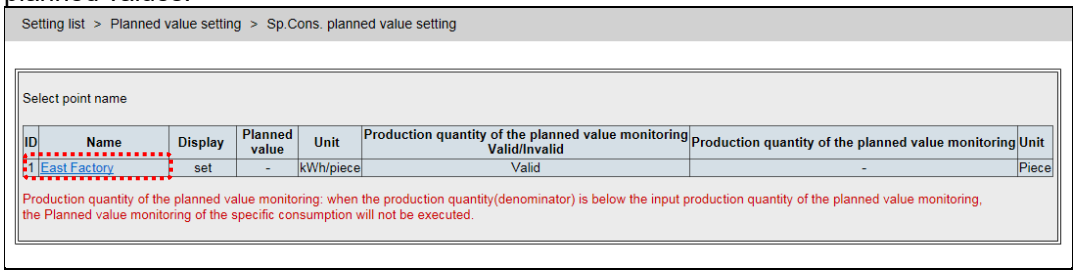
On the Login authentication screen,
enter the password for maintenance and click the [OK] button.



Enter the password for maintenance.
*The factory default password: ecopass

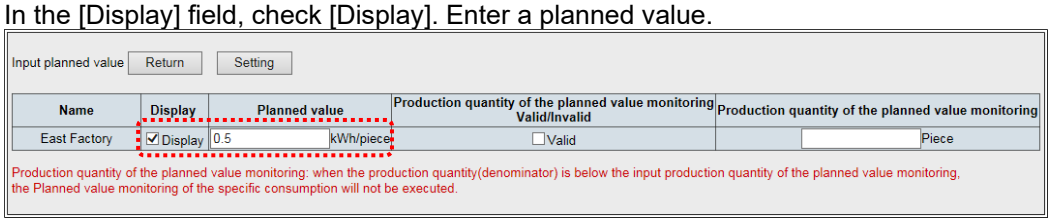
3 Select a specific consumption point to which you want to set planned values

On the planned value list screen, click the name of a specific consumption point to which you want to set planned values.



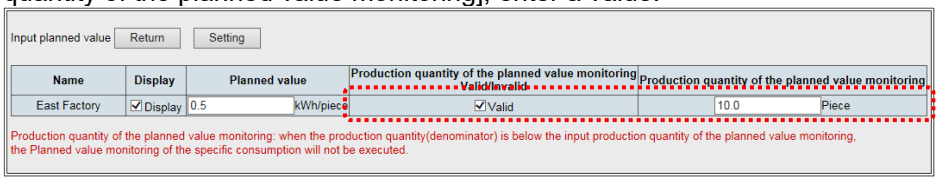
4 Enter a specific consumption planned value

In the [Display] field, check [Display]. Enter a planned value.



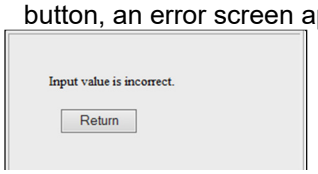
5 Enter a production quantity of the planned value monitoring

In [Production quantity of the planned value monitoring Valid/Invalid], check [Valid]. In [Production quantity of the planned value monitoring], enter a value.



Input range of a production quantity of the planned value monitoring

- Up to 11 numerals including a decimal point can be entered.
- If you enter a double-byte character or a character other than a numeral, the production quantity will be 0 (zero).
- If you enter a negative value and click the [Setting] button, an error screen appears.



- The number of decimal places is determined by the measuring point setting of the production quantity. If the number of entered digits is small, 0s (zeros) are added. If large, odd part is truncated.

E.g.) When the number of decimal places is three

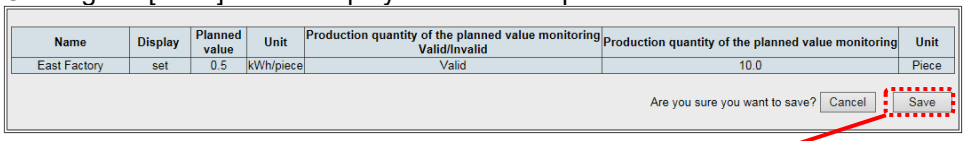
Entered value	Planned value to be set
12.34	12.340
12.3456	12.345

6 Click the [Setting] button

Clicking the [Setting] button display the save confirmation screen.

7 Click the [Save] button

Clicking the [Save] button display the save completion screen and enables the setting.



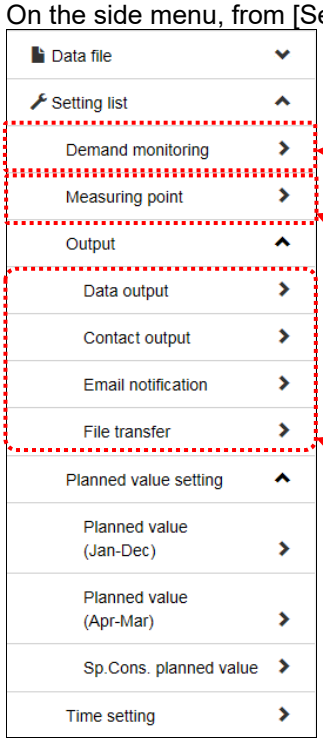
Click the [OK] button to return to the planned value list screen.

11. Confirm the Settings

11.1 Confirm the Settings

1 Display the Target Value List screen

On the side menu, from [Setting of Measuring point list], select the setting content you want to confirm.

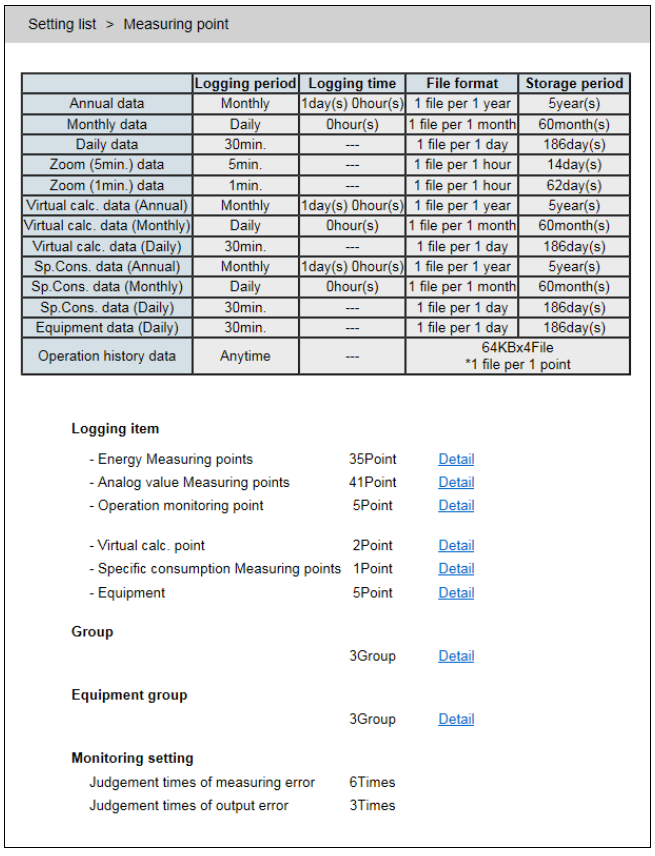


Confirm the settings related to the demand control function.
For device with demand control function only.

Confirm the settings of measuring points and groups.

Confirm various settings.

2 The contents of the setting appear.



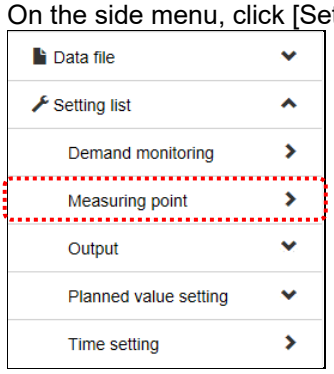
	Logging period	Logging time	File format	Storage period
Annual data	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Monthly data	Daily	0hour(s)	1 file per 1 month	60month(s)
Daily data	30min.	---	1 file per 1 day	186day(s)
Zoom (5min.) data	5min.	---	1 file per 1 hour	14day(s)
Zoom (1min.) data	1min.	---	1 file per 1 hour	62day(s)
Virtual calc. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Virtual calc. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Virtual calc. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Sp.Cons. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Sp.Cons. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Sp.Cons. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Equipment data (Daily)	30min.	---	1 file per 1 day	186day(s)
Operation history data	Anytime	---	64KBx4File *1 file per 1 point	

An example of the Measuring point list screen.

11.2 Confirm the Settings of Measuring Points and Groups

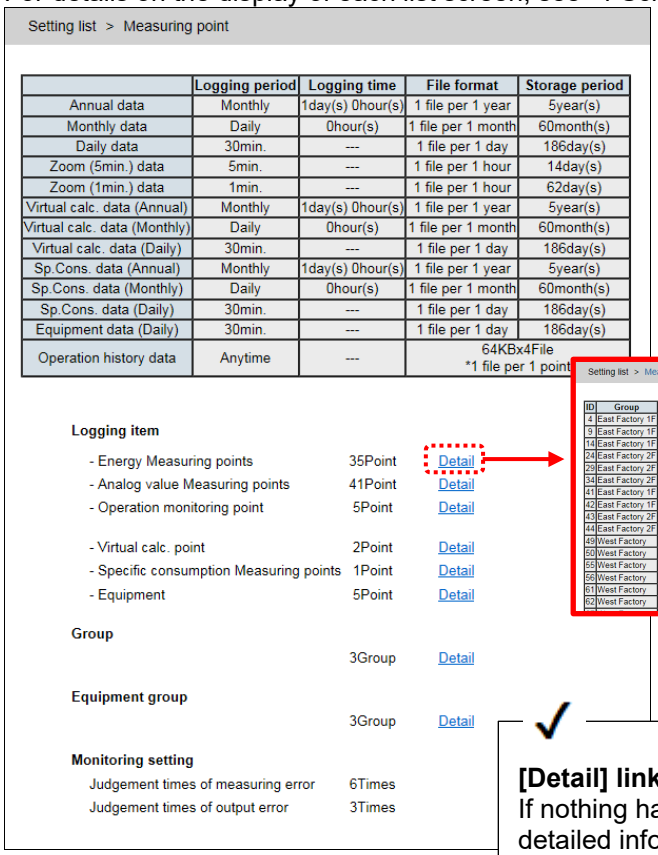
1 Display the Measuring Point List screen

On the side menu, click [Setting of Measuring point list] -> [Measuring point list].

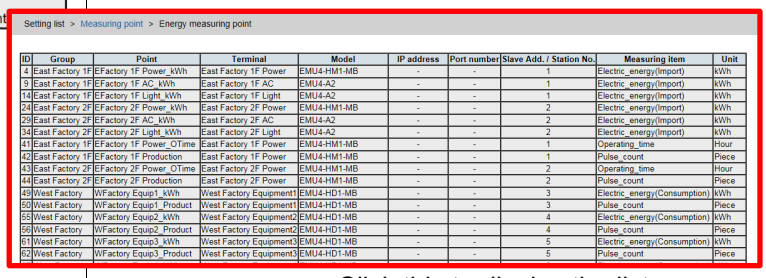


2 Select the type of a measuring point and group

Select the type of a measuring point to confirm. Clicking [Detail] display the list screen.
For details on the display of each list screen, see "4 Screen Descriptions."



	Logging period	Logging time	File format	Storage period
Annual data	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Monthly data	Daily	0hour(s)	1 file per 1 month	60month(s)
Daily data	30min.	---	1 file per 1 day	186day(s)
Zoom (5min.) data	5min.	---	1 file per 1 hour	14day(s)
Zoom (1min.) data	1min.	---	1 file per 1 hour	62day(s)
Virtual calc. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Virtual calc. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Virtual calc. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Sp.Cons. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Sp.Cons. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Sp.Cons. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Equipment data (Daily)	30min.	---	1 file per 1 day	186day(s)
Operation history data	Anytime	---	64KBx4File *1 file per 1 point	



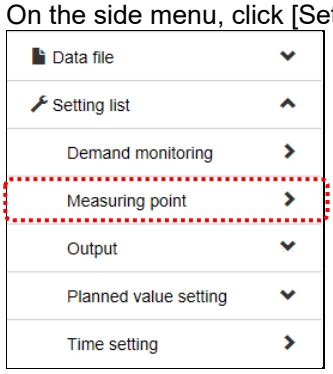
Click this to display the list screen.

[Detail] links
If nothing has been set, [Detail] appears in black and no detailed information appears if clicked.

11.3 Confirm setting contents of upper and lower limit monitoring

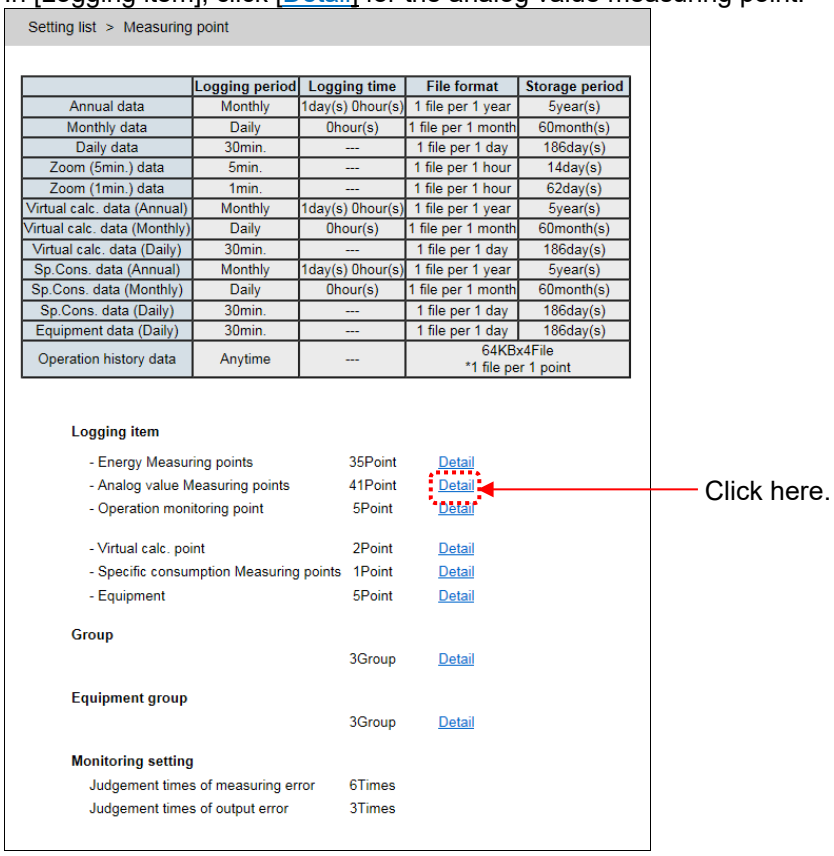
1 Display the Measuring Point List screen

On the side menu, click [Setting of Measuring point list] -> [Measuring point list].



2 Click [Detail] for the analog value measuring point

In [Logging item], click [Detail] for the analog value measuring point.



	Logging period	Logging time	File format	Storage period
Annual data	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Monthly data	Daily	0hour(s)	1 file per 1 month	60month(s)
Daily data	30min.	---	1 file per 1 day	186day(s)
Zoom (5min.) data	5min.	---	1 file per 1 hour	14day(s)
Zoom (1min.) data	1min.	---	1 file per 1 hour	62day(s)
Virtual calc. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Virtual calc. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Virtual calc. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Sp.Cons. data (Annual)	Monthly	1day(s) 0hour(s)	1 file per 1 year	5year(s)
Sp.Cons. data (Monthly)	Daily	0hour(s)	1 file per 1 month	60month(s)
Sp.Cons. data (Daily)	30min.	---	1 file per 1 day	186day(s)
Equipment data (Daily)	30min.	---	1 file per 1 day	186day(s)
Operation history data	Anytime	---	64KBx4File *1 file per 1 point	

3 Confirm the measuring points under the upper and lower limit monitoring

The Analog value Measuring point list screen lists the measuring points under the monitoring.
*5 If the monitoring is not registered, the list does not appear.

[Display example]

Setting list > Measuring point > Analog value measuring point

ID	Group	Point	Terminal	Model	IP address	Port number	Slave Add. / Station No.	Measuring item	Unit
1	East Factory 1F	EFactory 1F Power_A	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Current_Average	A
2	East Factory 1F	EFactory 1F Power_V	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Voltage_Average_line_voltage	V
3	East Factory 1F	EFactory 1F Power_kW	East Factory 1F Power	EMU4-HM1-MB	-	-	1	Electric_power	kW
6	East Factory 1F	EFactory 1F AC_A	East Factory 1F AC	EMU4-A2	-	-	1	Current_Average	A
7	East Factory 1F	EFactory 1F AC_V	East Factory 1F AC	EMU4-A2	-	-	1	Voltage_Average_line_voltage	V
8	East Factory 1F	EFactory 1F AC_kW	East Factory 1F AC	EMU4-A2	-	-	1	Electric_power	kW
11	East Factory 1F	EFactory 1F Light_A	East Factory 1F Light	EMU4-A2	-	-	1	Current_Average	A
12	East Factory 1F	EFactory 1F Light_V	East Factory 1F Light	EMU4-A2	-	-	1	Voltage_Average_line_voltage	V
13	East Factory 1F	EFactory 1F Light_kW	East Factory 1F Light	EMU4-A2	-	-	1	Electric_power	kW
16	East Factory 1F	EFactory 1F North Temp	East Factory 1F Temp RH	EMU4-AX4	-	-	1	Ch1 analog value	C
17	East Factory 1F	EFactory 1F North RH	East Factory 1F Temp RH	EMU4-AX4	-	-	1	Ch2 analog value	%
18	East Factory 1F	EFactory 1F South Temp	East Factory 1F Temp RH	EMU4-AX4	-	-	1	Ch3 analog value	C
19	East Factory 1F	EFactory 1F South RH	East Factory 1F Temp RH	EMU4-AX4	-	-	1	Ch4 analog value	%
21	East Factory 2F	EFactory 2F Power_A	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Current_Average	A
22	East Factory 2F	EFactory 2F Power_V	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Voltage_Average_line_voltage	V
23	East Factory 2F	EFactory 2F Power_kW	East Factory 2F Power	EMU4-HM1-MB	-	-	2	Electric_power	kW
26	East Factory 2F	EFactory 2F AC_A	East Factory 2F AC	EMU4-A2	-	-	2	Current_Average	A
27	East Factory 2F	EFactory 2F AC_V	East Factory 2F AC	EMU4-A2	-	-	2	Voltage_Average_line_voltage	V
28	East Factory 2F	EFactory 2F AC_kW	East Factory 2F AC	EMU4-A2	-	-	2	Electric_power	kW
31	East Factory 2F	EFactory 2F Light_A	East Factory 2F Light	EMU4-A2	-	-	2	Current_Average	A
32	East Factory 2F	EFactory 2F Light_V	East Factory 2F Light	EMU4-A2	-	-	2	Voltage_Average_line_voltage	V
33	East Factory 2F	EFactory 2F Light_kW	East Factory 2F Light	EMU4-A2	-	-	2	Electric_power	kW
36	East Factory 2F	EFactory 2F North Temp	East Factory 2F Temp RH	EMU4-AX4	-	-	2	Ch1 analog value	C
37	East Factory 2F	EFactory 2F North RH	East Factory 2F Temp RH	EMU4-AX4	-	-	2	Ch2 analog value	%
38	East Factory 2F	EFactory 2F South Temp	East Factory 2F Temp RH	EMU4-AX4	-	-	2	Ch3 analog value	C
39	East Factory 2F	EFactory 2F South RH	East Factory 2F Temp RH	EMU4-AX4	-	-	2	Ch4 analog value	%
46	West Factory	WFactory Equip1_A	West Factory Equipment1	EMU4-HD1-MB	-	-	3	Current_Average	A
47	West Factory	WFactory Equip1_V	West Factory Equipment1	EMU4-HD1-MB	-	-	3	Voltage_Average_line_voltage	V
48	West Factory	WFactory Equip1_kW	West Factory Equipment1	EMU4-HD1-MB	-	-	3	Electric_power	kW
52	West Factory	WFactory Equip2_A	West Factory Equipment2	EMU4-HD1-MB	-	-	4	Current_Average	A
53	West Factory	WFactory Equip2_V	West Factory Equipment2	EMU4-HD1-MB	-	-	4	Voltage_Average_line_voltage	V
54	West Factory	WFactory Equip2_kW	West Factory Equipment2	EMU4-HD1-MB	-	-	4	Electric_power	kW
58	West Factory	WFactory Equip3_A	West Factory Equipment3	EMU4-HD1-MB	-	-	5	Current_Average	A
59	West Factory	WFactory Equip3_V	West Factory Equipment3	EMU4-HD1-MB	-	-	5	Voltage_Average_line_voltage	V
60	West Factory	WFactory Equip3_kW	West Factory Equipment3	EMU4-HD1-MB	-	-	5	Electric_power	kW
64	West Factory	WFactory Equip4_A	West Factory Equipment4	EMU4-HD1-MB	-	-	6	Current_Average	A
65	West Factory	WFactory Equip4_V	West Factory Equipment4	EMU4-HD1-MB	-	-	6	Voltage_Average_line_voltage	V
66	West Factory	WFactory Equip4_kW	West Factory Equipment4	EMU4-HD1-MB	-	-	6	Electric_power	kW
70	West Factory	WFactory Equip5_A	West Factory Equipment5	EMU4-HD1-MB	-	-	7	Current_Average	A
71	West Factory	WFactory Equip5_V	West Factory Equipment5	EMU4-HD1-MB	-	-	7	Voltage_Average_line_voltage	V
72	West Factory	WFactory Equip5_kW	West Factory Equipment5	EMU4-HD1-MB	-	-	7	Electric_power	kW

Monitoring of upper and lower limit

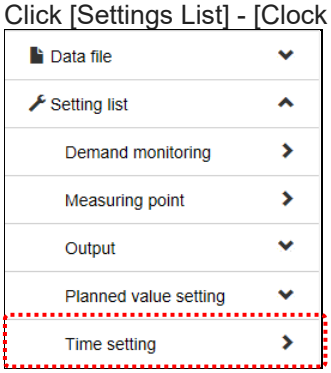
ID	Group	Point	Monitoring method	Lower limit value	Upper limit value	Unit
16	East Factory 1F	EFactory 1F North Temp	Upper limit	-	40	C
17	East Factory 1F	EFactory 1F North RH	Upper limit	-	70	%
18	East Factory 1F	EFactory 1F South Temp	Upper limit	-	40	C
19	East Factory 1F	EFactory 1F South RH	Upper limit	-	70	%
36	East Factory 2F	EFactory 2F North Temp	Upper limit	-	40	C
37	East Factory 2F	EFactory 2F North RH	Upper limit	-	70	%
38	East Factory 2F	EFactory 2F South Temp	Upper limit	-	40	C
39	East Factory 2F	EFactory 2F South RH	Upper limit	-	70	%

12. Change the Clock

12.1 Change the Clock of EcoWebServerIII

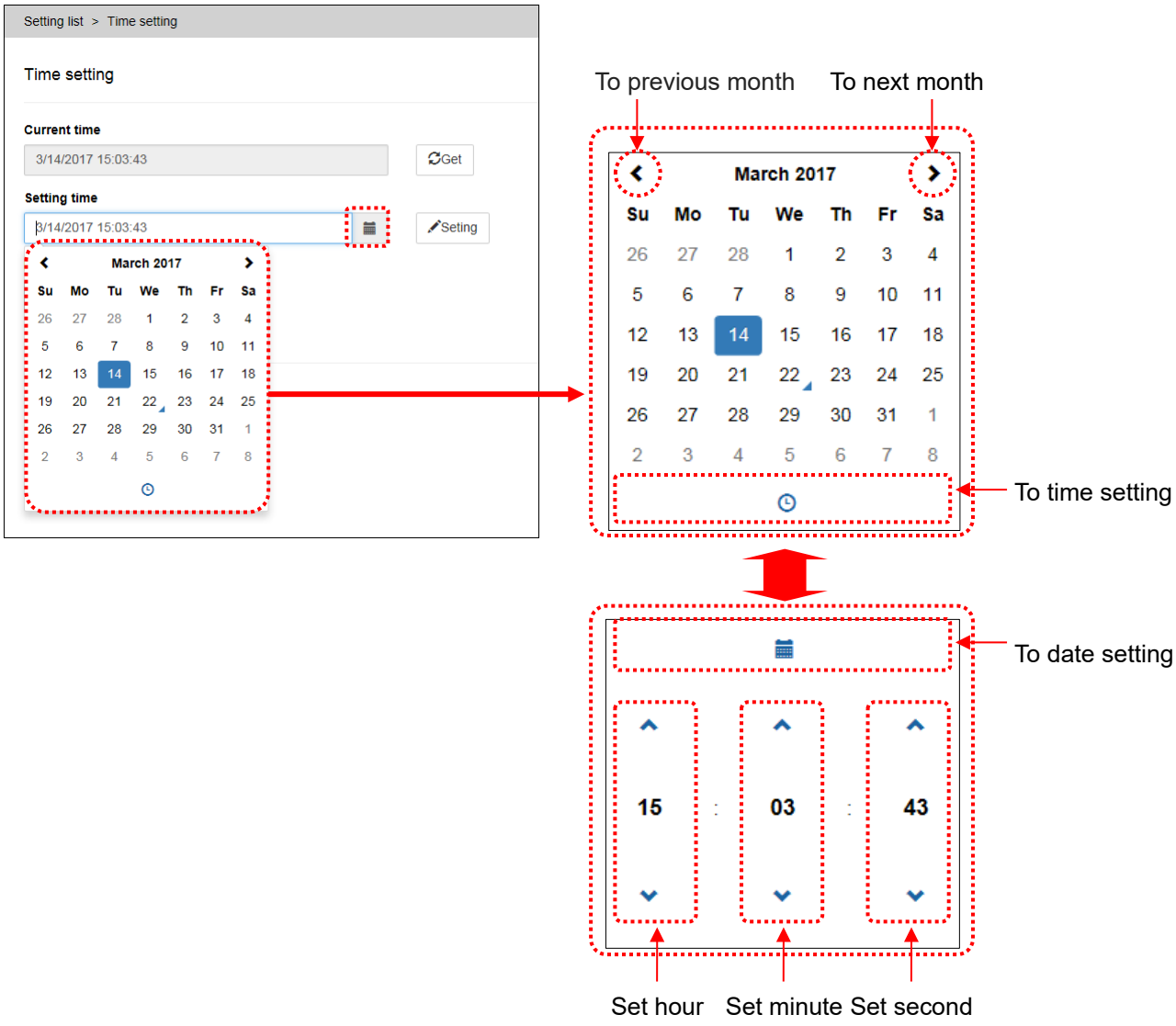
1 Display the Time Set screen

Click [Settings List] - [Clock Adjustment Setting] on the side menu.



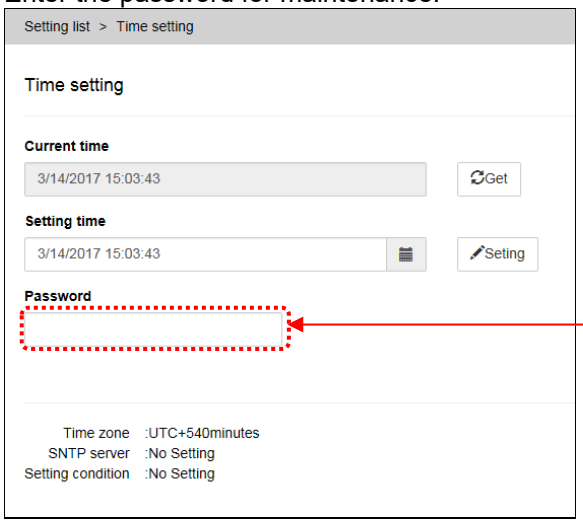
2 Set the date and time to set

Click the button to display the calendar.
Select the date and time from the calendar.



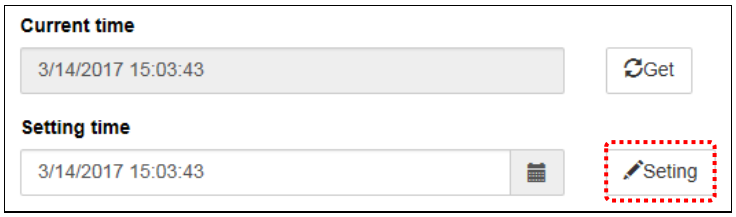
3 Enter the password

Enter the password for maintenance.



Enter the password for maintenance.
* Factory default password: ecopass

4 Click the setting button



Click [Set] button to make EcoWebServer III to be processing for undergoing.
Please note that operations can not be performed during processing.

13. Appendix

13.1 Specification of Data File

This section describes the specification of each data file.
Seventeen types of data files below are available.

No.	Data file	File storage period
1	Annual data file	5 years
2	Monthly data file	60 months
3	Daily data file	186 days
4	Zoom (5 min.) data file	14 days
5	Zoom (1 min.) data file	62 days
6	Virtual (annual) data file	5 years
7	Virtual (monthly) data file	60 months
8	Virtual (daily) data file	186 days
9	Specific consumption (annual) data file	5 years
10	Specific consumption (monthly) data file	60 months
11	Specific consumption (daily) data file	186 days
12	Equipment (daily) data file	186 days
13	Operation history data file	64 KB x 4 files (separate file for each)
14	Demand data (annual) data file*1	5 years
15	Demand data (monthly) data file*1	60 months
16	Demand data (daily) data file*1	186 days
17	Demand alarm/control history data file*1	128 KB x 62 files

*1 Demand (annual/monthly/daily) data file, demand alarm/control history data file is available device with demand control function only.

13.1.1 Annual data file

The file format of the annual data file is as shown in the table below.

Item		Description
File name		Year (4 digits) + '.csv'
File content		Logging (collection) data at the monthly specified time is recorded every year.
	1st line	Project name,,,,,Month,....., Month
	2nd line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data
	:	:
	nth line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data

Specific example of 2014.csv (Jan. 2014 to Jan. 2015)
Plant A,,,,,01,02,03,.....,11,12,01 1, No. 1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1552,1552,1552,.....,1590,1590,1590 2, No. 2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,135,136,136,.....,158,158,158 3, No. 2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.0,.....,0.0,0.0,0.0 : :

*1 Only measuring points registered are recorded.

*2 Logging data is recorded at the annual logging date every month.
When the annual logging date is 0 o'clock on the first, the data in March is as follows:
Energy: Integration value (designated value) logged at 0 o'clock on Mar. 1.
Analog value: Instantaneous value logged at 0 o'clock on Mar. 1
Operation monitoring measuring point (digital value): Value logged at 1 o'clock (1: ON, 0: OFF)

*3 For the data during power failure, the value before power failure is recorded for energy, and the blank for analog value.

*4 The integration value such as Energy before a measuring error is recorded for measuring error, and the blank is recorded for analog value and operation monitoring measuring point (digital value).

*5 The decimal point position of the data varies depending on measuring items and rating.

13.1.2 Monthly data file

The file format of the monthly data file is as shown in the table below.

Item		Description
File name		Year (last 2 digits) + Month (2 digits) + '.csv'
File content		Logging (collection) data at the daily specified time is recorded every month.
	1st line	Project name, Measuring point ID: Terminal: Model: Group: Point: Unit,.....
	2nd line	yyyy/mm/dd, Collection data of ID1, Collection data of ID2,....., Collection data of ID255
	:	:
	nth line	yyyy/mm/dd, Collection data of ID1, Collection data of ID2,....., Collection data of ID255

Specific example of 1401.csv (Jan. 1, 2014 to Feb. 1, 2014)

```
Plant A, 1: No.1 line: EMU3-DP1-B: No1 line: System 1:kWh, 2:No.2 line-1:EMU-C7P4-6(S): System 2 Energy: kWh,...
2014/01/01,1498,83,0.0,.....,45,0,0,.....,0
2014/01/02,1498,83,0.0,.....,45,0,0,.....,0
2014/01/03,1511,83,0.0,.....,46,0,0,.....,0
   :
   :
2014/01/31,1932,348,0.0,.....,301,0,0,.....,0
2014/02/01,2014,357,0.0,.....,323,0,0,.....,0
```

*1 All 255 points including measuring points not registered are recorded.
However, measuring points not registered show ID only for the 1st line and blanks from the 2nd line (collection data).

*2 Logging data is recorded at the monthly logging time every day.
When the monthly logging time is 0 o'clock, the data on Jan. 3 is as follows:
Energy: Integration value (designated value) logged at 0 o'clock on Jan. 3.
Analog value: Instantaneous value logged at 0 o'clock on Jan. 3
Operation monitoring measuring point (digital value): Value logged at 1 o'clock (1: ON, 0: OFF)

*3 For the data during power failure, the value before power failure is recorded for energy, and the blank for analog value.

*4 The energy before a measuring error is recorded for measuring error, and the blank is recorded for analog value and operation monitoring measuring point (digital value).

*5 If power failure occurs, data may not be available for each data (each line).
It is determined by the relationship of monthly logging time, power failure time and recovery time every day.

13.1.3 Daily data file

The file format of the daily data file is as shown in the table below.

Item		Description
File name		Year (last 2 digits) + Month (2 digits) + Day (2 digits) + '.csv'
File content		Logging (collection) data on the hour or every 30 or 15 min. is recorded for each day.
	1st line	Project name, Logging period,,,,Time,....., Time
	2nd line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data
	:	:
	nth line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data

140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for for 15 min.

```
Plant A, Time(15),,,,0:00,0:15,0:30,.....,23:30,23:45,0:00
1, No. 1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1552,1552,1552,.....,1590,1590,1590
2, No. 2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,135,135,136,.....,158,158,158
3, No. 2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.0,.....,0.0,0.0,0.0
  :
  :
```

140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for for 30 min.

```
Plant A, Time(30),,,,0:00,0:30,1:00,.....,23:00,23:30,0:00
1, No. 1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1552,1552,1552,.....,1590,1590,1590
2, No. 2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,135,135,136,.....,158,158,158
3, No. 2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.0,.....,0.0,0.0,0.0
  :
  :
```

140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 60 min.

```
Plant A, Time(60),,,,0:00,1:00,2:00,.....,22:00,23:00,0:00
1, No. 1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1552,1552,1552,.....,1590,1590,1590
2, No. 2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,135,136,136,.....,158,158,158
3, No. 2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.0,.....,0.0,0.0,0.0
  :
  :
```

*1 Only measuring points registered are recorded.

*2 When the logging period is 15 min, logging data is recorded on the hour and every 15, 30, and 45 min.
When the logging period is 30 min, logging data is recorded on the hour and every half hour.
When the logging period is 60 min, logging data is recorded on the hour.

*3 The data of 1:00 is as follows:
Energy: Integration value (designated value) logged at 1 o'clock.
Analog value: Instantaneous value logged at 1 o'clock.
Operation monitoring measuring point (digital value): Value logged at 1 o'clock (1: ON, 0: OFF)

*4 For the data during power failure, the value before power failure is recorded for energy, and the blank for analog value and Operation monitoring measuring point (digital value).

*5 The energy before a measuring error is recorded for measuring error, and the blank is recorded for analog value.

*6 The decimal point position of the data varies depending on measuring items and rating.

13.1.4 Zoom (5 min.) data file

The file format of the zoom (5 min.) data file is as shown in the table below.

Item		Description
File name		Year (last 2 digits) + Month (2 digits) + Day (2 digits) + Hour (2 digits) + '.csv'
File content		Logging (collection) data every 5 min. is recorded every hour.
	1st line	Project name, Logging period,,,,Time,....., Time
	2nd line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data
	:	:
	nth line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data

Specific example of 14011815.csv (15:00 to 16:00, Jan. 18, 2014)
Plant A, Time(05),,,,15:00,15:05,15:10,.....,15:50,15:55,16:00 1, No. 1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1568,1569,1570,.....,1575,1576,1577 2, No. 2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,145,145,146,.....,148,148,149 3, No.2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.9,.....,1.9,1.3,2.4 : :

*1 Only measuring points registered are recorded.

*2 Data which is logged every 5 min, on the hour, 5 min, 10 min ..., is recorded.
The data of 15:10 is as follows:
Energy: Integration value (designated value) logged at 15:10.
Analog value: Instantaneous value logged at 15:10.
Operation monitoring measuring point (digital value): Value logged at 1 o'clock (1: ON, 0: OFF)

*3 For the data during power failure, the value before power failure is recorded for energy, and the blank for analog value and operation monitoring measuring point (digital value).

*4 The energy before a measuring error is recorded for measuring error, and the blank is recorded for analog value.

*5 The decimal point position of the data varies depending on measuring items and rating.

13.1.5 Zoom (1 min.) data file

The file format of the zoom (1 min.) data file is as shown in the table below.

Item		Description
File name		Year (last 2 digits) + Month (2 digits) + Day (2 digits) + Hour (2 digits) + '.csv'
File content		Logging (collection) data every minute is recorded every hour.
	1st line	Project name, Logging period,,,,Time,....., Time
	2nd line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data
	:	:
	nth line	Measuring point ID, Terminal, Model, Group: Point, Unit, Collection data,....., Collection data

Specific example of 14011815.csv (15:00 to 16:00, Jan. 18, 2014)
Plant A, Time(01),,,,15:00,15:01,15:02,.....,15:58,15:59,16:00 1, No.1 line, EMU3-DP1-B, No. 1 line: System 1, kWh,1568,1569,1570,.....,1575,1576,1577 2, No.2 line-1, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kWh,145,145,146,.....,148,148,149 3, No.2 line-2, EMU-B7P4-6(S), No. 2 line: System 2 Energy, kW,0.0,0.0,0.9,.....,1.9,1.3,2.4 : :

*1 Only measuring points registered are recorded.

*2 Data which is logged every 1 min, on the hour, 1 min, 2 min ..., is recorded.
The data of 15:01 is as follows:
Energy: Integration value (designated value) logged at 15:01.
Analog value: Instantaneous value logged at 15:01.
Operation monitoring measuring point (digital value): Value logged at 1 o'clock (1: ON, 0: OFF)

*3 For the data during power failure, the value before power failure is recorded for energy, and the blank for analog value and operation monitoring measuring point (digital value).

*4 The energy before a measuring error is recorded for measuring error, and the blank is recorded for analog value.

*5 The decimal point position of the data varies depending on measuring items and rating.

13.1.6 Virtual (annual) data file

The file format of the virtual (annual) data file is as shown in the table below.

Item		Description
File name		'v' + Year (4 digits) + '.csv'
File content		Monthly virtual measuring point data (calculation data) is recorded for each year.
	1st line	Project name,,,,,Month,....., Month
	2nd line	Virtual measuring point ID,,, Name, Unit, Data,....., Data
	:	:
	nth line	Virtual measuring point ID,,, Name, Unit, Data,....., Data

Specific example of v2014.csv (Jan. 2014 to Jan. 2015)
Plant A,,,,,01,02,03,.....,11,12,01 1,,, System 1 total Energy ,kWh,1552,1552,1552,.....,1590,1590,1590 2,,, System 2 total Energy ,kWh,135,136,136,.....,158,158,158 3,,, System 3 total Energy ,kWh,123.5,124.2,128.6,.....,131.9,129.7,124.3 : :

*1 Only virtual measuring points registered are recorded.

*2 Calculation results of logging data is recorded at the annual logging date every month.
When the annual logging date is 0 o'clock on the first, the virtual measuring point data in March is as follows:
Virtual measuring point data of integration value: Calculation results of integration difference from 0 o'clock, Feb. 1 and 0 o'clock, Mar. 1.
Virtual measuring point data of instantaneous value: Calculation results of measuring value at 0 o'clock, Mar. 1.

*3 If there is one blank (no measurement or no registration) of the measuring point data to be calculated, the virtual measuring point data is blank.

*4 If division by 0 (denominator is 0) occurs in calculation, the virtual measuring point data is blank.

*5 The number of digits for the virtual measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.7 Virtual (monthly) data file

The file format of the virtual (monthly) data file is as shown in the table below.

Item		Description
File name		'v' + Year (last 2 digits) + Month (2 digits) + '.csv'
File content		Daily virtual measuring point data (calculation data) is recorded for each month.
	1st line	Project name,1: Name: Unit, 2: Name: Unit,...,128: Name: Unit
	2nd line	yyyy/mm/dd, Data of virtual measuring point ID1, Data of virtual measuring point ID2,....., Data of virtual measuring point ID128
	:	:
	nth line	yyyy/mm/dd, Data of virtual measuring point ID1, Data of virtual measuring point ID2,....., Data of virtual measuring point ID128

Specific example of v1401.csv (Jan. 1, 2014 to Feb. 1, 2014)

```
Plant A,1: System 1 total Energy: kWh,2: System 2 total Energy: kWh,.....,126,127,128
2014/01/01,47,52,33.3,.....,,,
2014/01/02,44,51,31.9,.....,,,
2014/01/03,48,55,34.6,.....,,,
  :
  :
2014/01/31,49,50,38.1,.....,,,
2014/02/01,45,49,37.6,.....,,,
```

*1 All 128 points including virtual measuring points not registered are recorded.
However, measuring points not registered show ID only for the 1st line and blanks from the 2nd line (data).

*2 Calculation results of logging data is recorded at the monthly logging date every day.
When the monthly logging time is 0 o'clock, the virtual measuring point data on Jan. 3 is as follows:
Virtual measuring point data of integration value: Calculation results of integration difference from 0 o'clock, Jan. 2 and 0 o'clock, Jan. 3.
Virtual measuring point data of instantaneous value: Calculation results of measuring value at 0 o'clock, Jan. 3.

*3 If there is one blank (no measurement or no registration) of the measuring point data to be calculated, the virtual measuring point data is blank.

*4 If division by 0 (denominator is 0) occurs in calculation, the virtual measuring point data is blank.

*5 The number of digits for the virtual measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.8 Virtual (daily) data file

The file format of the virtual (daily) data file is as shown in the table below.

Item		Description
File name		'v' + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + '.csv'
File content		Virtual Measuring point data on the hour or every 30 or 15 min. (calculation data) is recorded for each day.
	1st line	Project name, Logging period,,,,Time,....., Time
	2nd line	Virtual measuring point ID,,, Name, Unit, Data,....., Data
	:	:
	nth line	Virtual measuring point ID,,, Name, Unit, Data,....., Data

v140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 15 min.
Plant A, Time (15),,,,0:00,0:15,0:30,0:45,.....,23:30,23:45,0:00 1,,, System 1 total Energy, kWh,12,11,15,.....,13,13,11 2,,, System 2 total Energy, kWh, 20,19,22,.....,25,20,21 3,,, System 3 total Energy, kWh, 1.9,2.4,2.1,.....,2.8,2.3,1.8 : :

v140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 30 min.
Plant A, Time (30),,,,0:00,0:30,1:00,1:30,.....,23:00,23:30,0:00 1,,, System 1 total Energy, kWh,12,11,15,.....,13,13,11 2,,, System 2 total Energy, kWh, 20,19,22,.....,25,20,21 3,,, System 3 total Energy, kWh, 1.9,2.4,2.1,.....,2.8,2.3,1.8 : :

v140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 60 min.
Plant A, Time (60),,,,0:00,1:00,2:00,3:00,.....,22:00,23:00,0:00 1,,, System 1 total Energy, kWh,12,11,15,.....,13,13,11 2,,, System 2 total Energy, kWh, 20,19,22,.....,25,20,21 3,,, System 3 total Energy, kWh, 1.9,2.4,2.1,.....,2.8,2.3,1.8 : :

*1 Only virtual measuring points registered are recorded.

*2 When the logging period is 15 min, calculation results of logging data on the hour and every 15, 30, and 45 min. are recorded.
When the logging period is 30 min, calculation results of logging data on the hour and every half hour are recorded.
When the logging period is 60 min, calculation results of logging data on the hour are recorded.

*3 When the logging period is 60 min, the virtual measuring point data of 1.00 is as follows:
Virtual measuring point data of integration value: Calculation results of integration difference from 0:00 and 1:00.
Virtual measuring point data of instantaneous value: Calculation results of measuring value at 1:00.

*4 If there is one blank (no measurement or no registration) of the measuring point data to be calculated, the virtual measuring point data is blank.

*5 If division by 0 (denominator is 0) occurs in calculation, the virtual measuring point data is blank.

*6 The number of digits for the virtual measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.9 Specific consumption (annual) data file

The file format of the specific consumption (annual) data file is as shown in the table below.

Item		Description
File name		'b' + Year (4 digits) + '.csv'
File content		Monthly specific consumption measuring point data is recorded for each year.
	1st line	Project name,,,,,Month,....., Month
	2nd line	ID, 'Energy', Group: Point, Unit, Data,....., Data
	3rd line	ID, 'Production', Group: Point, Unit, Data,....., Data
	4th line	ID, , 'Specific consumption', Name, Unit, Data,....., Data
	5th line	ID,,'Energy', Group: Point, Unit, Data,....., Data
	6th line	ID, 'Production', Group: Point, Unit, Data,....., Data
	7th line	ID, , 'Specific consumption', Name, Unit, Data,....., Data
	:	:
	3n-1 line	ID,,'Energy', Group: Point, Unit, Data,....., Data
	3n line	ID, 'Production', Group: Point, Unit, Data,....., Data
	3n+1 line	ID, , 'Specific consumption', Name, Unit, Data,....., Data

n: Indicates the number of specific consumption measurement registrations.

Specific example of b2014.csv (Jan. 2014 to Jan. 2015)

```
Plant A,,,,,01,02,03,.....,11,12,01
1,, Energy, Line 1: Line 1 Energy, kWh,,4320,3960,5400,.....,5760,5040,3600
1,, Production, Line 1: Line 1 production, Piece,, 29160,26640,28800,.....,26280,27720,17640
1,, Specific consumption, Line 1 specific consumption, kWh/piece,, 0.148,0.149,0.188,.....,0.219,0.182,0.204
2,, Energy, Line 2: Line 2 Energy, kWh,,1080,1800,1800,.....,1440,1080,1440
2,, Production, Line 2: Line 2 production, Piece,, 3960,4680,4320,.....,4320,4320,3600
2,, Specific consumption, Line 2 specific consumption, kWh/piece,, 0.273,0.385,0.417,.....,0.333,0.250,0.400
  :
  :
```

*1 Only specific consumption points registered are recorded.

*2 Calculation results of logging data is recorded at the annual logging date every month.
When the annual logging date is 0 o'clock on the first, the data in March is as follows:
Energy, Production: Integration difference value of 0 o'clock, Feb. 1 and 0 o'clock, Mar. 1
Specific consumption: Energy ÷ Production

*3 If there is one blank (no measurement or no registration) of the measuring data for energy and production, the specific consumption measuring point data is blank.

*4 When the production (denominator) is 0, the specific consumption data is 99,999,999,999.

*5 When both energy and production are 0, the specific consumption measuring point data is 0.

*6 The number of digits for the specific consumption measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.10 Specific consumption (monthly) data file

The file format of the specific consumption (monthly) data file is as shown in the table below.

Item		Description
File name		'b' + Year (last 2 digits) + Month (2 digits) + '.csv'
File content		Daily specific consumption measuring point data is recorded for each month.
	1st line	Project name,,,,,Day,....., Day
	2nd line	ID, 'Energy', Group: Point, Unit, Data,....., Data
	3rd line	ID, 'Production', Group: Point, Unit, Data,....., Data
	4th line	ID, , 'Specific consumption', Name, Unit, Data,....., Data
	5th line	ID, 'Energy', Group: Point, Unit, Data,....., Data
	6th line	ID, 'Production', Group: Point, Unit, Data,....., Data
	7th line	ID, , 'Specific consumption', Name, Unit, Data,....., Data
	:	:
	3n-1 line	ID, 'Energy', Group: Point, Unit, Data,....., Data
	3n line	ID, 'Production', Group: Point, Unit, Data,....., Data
	3n+1 line	ID, , 'Specific consumption', Name, Unit, Data,....., Data

n: Indicates the number of registration for specific consumption measurement.

Specific example of b1401.csv (Jan. 1, 2014 to Feb. 1, 2014)

```
Plant A,,,,,01,02,03,.....,30,31,01
1,, Energy, Line 1: Line 1 Energy, kWh,,360,330,450,.....,480,420,300
1,, Production, Line 1: Line 1 production, Piece,, 2430,2220,2400,.....,2190,2310,1470
1,, Specific consumption, Line 1 specific consumption, kWh/piece,, 0.148,0.149,0.188,.....,0.219,0.182,0.204
2,, Energy, Line 2: Line 2 Energy, kWh,,90,150,150,.....,120,90,120
2,, Production, Line 2: Line 2 production, Piece,, 330,390,360,.....,360,360,300
2,, Specific consumption, Line 2 specific consumption, kWh/piece,, 0.273,0.385,0.417,.....,0.333,0.250,0.400
  :
  :
```

*1 Only specific consumption points registered are recorded.
*2 Calculation results of logging data is recorded at the monthly logging date every day.
When the monthly logging time is 0 o'clock, the data on Jan. 3 is as follows:
Energy, Production: Integration difference value of 0 o'clock, Jan. 2 and 0 o'clock, Jan. 3
Specific consumption: Energy ÷ Production
*3 If there is one blank (no measurement or no registration) of the measuring data for energy and production, the specific consumption measuring point data is blank.
*4 When the production (denominator) is 0, the specific consumption data is 99,999,999,999.
*5 When both energy and production are 0, the specific consumption measuring point data is 0.
*6 The number of digits for the specific consumption measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.11 Specific consumption (daily) data file

The file format of the specific consumption (daily) data file is as shown in the table below.

Item		Description
File name		'b' + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + '.csv'
File content		Specific consumption data on the hour or every 30 or 15 min. is recorded for each day.
	1st line	Project name, Logging period,,,,,Time,....., Time
	2nd line	ID,,'Energy', Group: Point, Unit, Data,....., Data
	3rd line	ID,, 'Production', Group: Point, Unit, Data,....., Data
	4th line	ID, , 'Specific consumption', Name, Unit,, Data,....., Data
	5th line	ID,,'Energy', Group: Point, Unit, Data,....., Data
	6th line	ID,, 'Production', Group: Point, Unit, Data,....., Data
	7th line	ID, ,'Specific consumption', Name, Unit,, Data,....., Data
	:	:
	3n-1 line	ID,,'Energy', Group: Point, Unit, Data,....., Data
	3n line	ID,, 'Production', Group: Point, Unit, Data,....., Data
	3n+1 line	ID, ,'Specific consumption', Name, Unit,, Data,....., Data

n: Indicates the number of registration for specific consumption measurement.

b140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 15 min.

```
Plant A, Time(15),,,,,0:15,0:30,0:45,.....,23:30,23:45,0:00
1,, Energy, Line 1: Line 1 Energy, kWh,,12,11,15,.....,16,14,10
1,, Production, Line 1: Line 1 production, Piece,, 81,74,80,.....,73,77,49
1,, Specific consumption, Line 1 specific consumption, kWh/piece,,
2,, Energy, Line 2: Line 2 Energy, kWh,,3,5,5,.....,4,3,4
2,, Production, Line 2: Line 2 production, Piece,, 11,13,12,.....,12,12,10
2,, Specific consumption, Line 2 specific consumption, kWh/piece,,
  :
  :
```

b140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 30 min.

```
Plant A, Time(30),,,,,0:30,1:00,1:30,.....,23:00,23:30,0:00
1,, Energy, Line 1: Line 1 Energy, kWh,,12,11,15,.....,16,14,10
1,, Production, Line 1: Line 1 production, Piece,, 81,74,80,.....,73,77,49
1,, Specific consumption, Line 1 specific consumption, kWh/piece,, 0.148,0.149,0.188,.....,0.219,0.182,0.204
2,, Energy, Line 2: Line 2 Energy, kWh,,3,5,5,.....,4,3,4
2,, Production, Line 2: Line 2 production, Piece,, 11,13,12,.....,12,12,10
2,, Specific consumption, Line 2 specific consumption, kWh/piece,, 0.273,0.385,0.417,.....,0.333,0.250,0.400
  :
  :
```

b140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 60 min.

```
Plant A, Time(60),,,,,1:00,2:00,3:00,.....,22:00,23:00,0:00
1,, Energy, Line 1: Line 1 Energy, kWh,,12,11,15,.....,16,14,10
1,, Production, Line 1: Line 1 production, Piece,, 81,74,80,.....,73,77,49
1,, Specific consumption, Line 1 specific consumption, kWh/piece,, 0.148,0.149,0.188,.....,0.219,0.182,0.204
2,, Energy, Line 2: Line 2 Energy, kWh,,3,5,5,.....,4,3,4
2,, Production, Line 2: Line 2 production, Piece,, 11,13,12,.....,12,12,10
2,, Specific consumption, Line 2 specific consumption, kWh/piece,, 0.273,0.385,0.417,.....,0.333,0.250,0.400
  :
  :
```

*1 Only specific consumption points registered are recorded.

*2 When the logging period is 15 min, calculation results of logging data on the hour and every 15, 30, and 45 min. are recorded.
When the logging period is 30 min, calculation results of logging data on the hour and every half hour are recorded.
When the logging period is 60 min, calculation results of logging data on the hour are recorded.

*3 When the logging period is 60 min, the data of 1.00 is as follows:
Energy, Production: Integration difference value of 0:00 and 1:00
Specific consumption: Energy ÷ Production

*4 If there is one blank (no measurement or no registration) of the measuring data for energy and production, the specific consumption measuring point data is blank.

*5 When the production (denominator) is 0, the specific consumption data is 99,999,999,999.

*6 When both energy and production are 0, the specific consumption measuring point data is 0.

*7 The number of digits for the specific consumption measuring point can be selected from integer, 1st decimal place, 2nd decimal place, 3rd decimal place, 4th decimal place and 5th decimal place.

13.1.12 Equipment (daily) data file

The file format of the equipment (daily) data file is as shown in the table below.

Item		Description
File name		'f' + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + '.csv'
File content		Equipment efficiency data on the hour or every 30 or 15 min. is recorded for each day.
	1st line	Project name, Logging period,,,,Time,....., Time
	2nd line	ID, Equipment name,'Availability',,Unit, Data,....., Data
	3rd line	ID, Equipment name,'Performance',,Unit, Data,....., Data
	4th line	ID, Equipment name,'Quality',,Unit, Data,....., Data
	5th line	ID, Equipment name,'Overall equipment efficiency',,Unit, Data,....., Data
	:	:
	4n-2 line	ID, Equipment name,'Availability',,Unit, Data,....., Data
	4n-1 line	ID, Equipment name,'Performance',,Unit, Data,....., Data
	4n line	ID, Equipment name,'Quality',,Unit, Data,....., Data
	4n+1 line	ID, Equipment name,'Overall equipment efficiency',,Unit, Data,....., Data

n: Indicates the number of equipment registrations.

f140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 15 min.

```
Plant A, Time(15),,,,0:15,0:30,0:45,.....,23:30,23:45,0:00
1, Equipment1, Availability,,%,5.1,4.9,10.3,.....,15.1,19.5,23.4
1, Equipment1, Performance,,%,100,98.98.2,.....,98.2,98.3,98.3
1, Equipment1, Quality,,%,62.5,62.5,83.3,.....,89.3,92.1,93.8
1, Equipment1, Overall equipment efficiency,,%,3.2,3.0,8.4,.....,13.3,17.6,21.5
2, Equipment2, Availability,,%,22.4,25.8,29.0,.....,31.9,34.5,37.0
2, Equipment2, Performance,,%,98.0,98.0,98.1,.....,98.1,98.1,98.2
2, Equipment2, Quality,,%,93.8,89.7,91.2,.....,92.3,93.2,93.9
2, Equipment2, Overall equipment efficiency,,%,20.5,22.7,25.9,.....,28.9,31.6,34.1
  :
```

f140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 30 min.

```
Plant A, Time(30),,,,0:00,0:30,1:00,.....,23:00,23:30,0:00
1, Equipment1, Availability,,%,5.1,4.9,10.3,.....,15.1,19.5,23.4
1, Equipment1, Performance,,%,100,98.98.2,.....,98.2,98.3,98.3
1, Equipment1, Quality,,%,62.5,62.5,83.3,.....,89.3,92.1,93.8
1, Equipment1, Overall equipment efficiency,,%,3.2,3.0,8.4,.....,13.3,17.6,21.5
2, Equipment2, Availability,,%,22.4,25.8,29.0,.....,31.9,34.5,37.0
2, Equipment2, Performance,,%,98.0,98.0,98.1,.....,98.1,98.1,98.2
2, Equipment2, Quality,,%,93.8,89.7,91.2,.....,92.3,93.2,93.9
2, Equipment2, Overall equipment efficiency,,%,20.5,22.7,25.9,.....,28.9,31.6,34.1
  :
```

f140118.csv (0:00, Jan. 18, 2014 to 0:00, Jan. 19, 2014), specific examples of logging period for 60 min.

```
Plant A,Time(60),,,,0:00,1:00,2:00,.....,22:00,23:00,0:00
1, Equipment1, Availability,,%,5.1,4.9,10.3,.....,15.1,19.5,23.4
1, Equipment1, Performance,,%,100,98.98.2,.....,98.2,98.3,98.3
1, Equipment1, Quality,,%,62.5,62.5,83.3,.....,89.3,92.1,93.8
1, Equipment1, Overall equipment efficiency,,%,3.2,3.0,8.4,.....,13.3,17.6,21.5
2, Equipment2, Availability,,%,22.4,25.8,29.0,.....,31.9,34.5,37.0
2, Equipment2, Performance,,%,98.0,98.0,98.1,.....,98.1,98.1,98.2
2, Equipment2, Quality,,%,93.8,89.7,91.2,.....,92.3,93.2,93.9
2, Equipment2, Overall equipment efficiency,,%,20.5,22.7,25.9,.....,28.9,31.6,34.1
  :
```

*1 Only equipment registered is recorded.

*2 When the logging period is 15 min, calculation results of logging data on the hour and every 15, 30, and 45 min. are recorded.
When the logging period is 30 min, calculation results of logging data on the hour and every half hour are recorded.
When the logging period is 60 min, calculation results of logging data on the hour are recorded.

*3 The calculation formula of each data is as follows:
Availability = ((Loading time - Downtime) ÷ Loading time)
Performance = (Standard cycle time × Product) ÷ (Loading time - Downtime)
Quality = Non-defective product ÷ Product
Overall equipment efficiency = Availability × Performance × Quality

*4 If there is one blank (no measurement or no registration) of the data used for calculation formula of each data, the calculation result is blank.
[Example] Non-defective product is not measured. → Quality is blank.

*5 When the denominator of the calculation formula is 0, the calculation result is 0.
[Example] Product is 0. → Quality is 0.

13.1.13 Operation history data file

The file format of the operation history data file is as shown in the table below.

Item		Description
File name		'd'+ Measuring point ID (3 digits) + '_' + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + Hour (2 digits) + '.log'
File content		ON/OFF change of operation monitoring point is recorded (64 KB × 4 files for each measuring point).
	1st line	Occurrence time ON or OFF
	2nd line	Occurrence time ON or OFF
	:	:
	nth line	Occurrence time ON or OFF

Specific example for d235_14011814.log (measuring point ID is 235 and the first record is between 14:00 and 15:00 on Jan. 18, 2014).
2014/1/18 14:02:10 ON 2014/1/18 14:04:40 OFF 2014/1/18 14:08:20 ON 2014/1/18 14:10:30 OFF : :

*1 In monitoring at intervals of 10 seconds, when change of OFF→ON and ON→OFF is detected, it is recorded. The time is different from actual ON/OFF timing of the equipment.

*2 ON/OFF is not detected for a measuring error.

13.1.14 Demand (annual) data file

The file format of the demand (annual) data file is as shown in the table below.

Item		Description
File name		'dm' + Year (4 digits) + '.csv'
File content		The demand data of the specified date of the month and the max. demand of a month are recorded for each year.
	1st line	Project name,,,,,Month,....., Month
	2nd line	Measuring point ID, Circuit name, ,Model, Point, Unit, Data,....., Data
	:	:
	36th line	Measuring point ID, Circuit name, ,Model, Point, Unit, Data,....., Data

The data of the following measuring point ID is output.

Measuring point ID	Content
1001	Integrating Energy (whole day)
1032 to 1041	Integrating Energy (time zone1 to 10)
1223	Max demand of a month (ctrl time limit) (whole day)
1224 to 1233	Max demand of a month (ctrl time limit) (time zone 1 to 10)
1241	Max demand of a month (whole day)
1242 to 1251	Max demand of a month (time zone 1 to 10)
1252	Max demand of a month (ctrl time limit) (applicable time zone)
1255	Max demand of a month (applicable time zone)

Specific example of dm2014.csv (Jan. 2014 to Jan. 2015)

```
Plant A,,,,,01,02,03,04,05,06,07,08,09,10,11,12,01
1001, Power receiving, , Whole day Energy, kWh, 822354.5,897108.0,963432.1,……,496312.5,547820.9,611355.1
1032, Power receiving, , Time zone 1 Energy, kWh,
822354.5,897108.0,963432.1,……,496312.5,547820.9,611355.1
1033, Power receiving, , Time zone 2 Energy, kWh, 0.0,0.0,0.0,……,0.0,0.0,0.0
:
1223, Power receiving, , Whole day max demand time limit,, 2014/01/18 14:00, ……, 2015/01/02 15:30
:
1241, Power receiving, , Whole day demand, kW, 176.5,198.3,……,168.5
:
1252, Power receiving, , Max demand time limit,, 2014/01/18 14:00,……,2015/01/02 15:30
1255, Power receiving, , Demand, kW, 176.5,198.3,……,168.5
```

*1 Log data confirmed and fixed at monthly annual logging time.
If the annual logging date and time is 0:00 a.m., the data for March will be as follows.
Integral power consumption: March 1, 0:00 logging the integrated value (indicated value)
Month maximum demand value: month maximum demand value confirmed between 0 o'clock on February 1 and 0 o'clock on March 1

13.1.15 Demand (monthly) data file

The file format of the demand (monthly) data file is as shown in the table below.

Item		Description
File name		'dm' + Year (last 2 digits) + Month (2 digits) + '.csv'
File content		The demand data of the specified time of the day and the max. demand value of a day are recorded for each month.
	1st line	Project name, Measuring point ID: Circuit name: : Point: Unit,..., Measuring point ID: Circuit name:: Point, Unit
	2nd line	yyyy/mm/dd, ID1001 data, ID1032 data,...,ID1255 data
	:	:
	nth line	yyyy/mm/dd, ID1001 data, ID1032 data,...,ID1255 data

The data of the following measuring point ID is output.

Measuring point ID	Content
1001	Integrating Energy (whole day)
1032 to 1041	Integrating Energy (time zone1 to 10)
1223	Max demand time limit of a day (whole day)
1224 to 1233	Max demand time limit of a day (time zone 1 to 10)
1241	Max demand of a day (whole day)
1242 to 1251	Max demand of a day (time zone 1 to 10)
1252	Max demand time limit of a day (applicable time zone)
1255	Max demand of a day (applicable time zone)

Specific example of dm1309.csv (Sep. 1, 2013 to Oct. 1, 2013)

```
Plant A,1001: Power receiving:: Whole day integrating Energy: kWh,...,1255: Power receiving:: Demand: kW
2013/09/01,1354,.....,2.1
2013/09/02,1498,.....,2.2
2013/09/03,1511,.....,3.5
  :
  :
2013/09/30,1932,.....,2.2
2013/10/01,2014,.....,2.6
```

*1 Logging data is recorded at the monthly logging time every day.
When the monthly logging time is 0 o'clock, the data on Jan. 3 is as follows:
Integrating Energy: Integration value (designated value) logged at 0 o'clock on Jan. 3.
Max demand of a day: fixed value length of time between at 0 o'clock on Jan. 2 and at 0 o'clock on Jan. 3.

13.1.16 Demand (daily) data file

The file format of the demand (daily) data file is as shown in the table below.

Item		Description
File name		'dm' + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + '.csv'
File content		Demand data for each demand time limit set is recorded for each day.
	1st line	Project name, Demand time limit,,,,Time,....., Time
	2nd line	1183, Target demand,,,, Data,....., Data
	3rd line	1186, Fixed alarm value,,,, Data,....., Data
	4th line	Measuring point ID, Circuit name,, Point, Unit, Data,....., Data
	:	:
	nth line	Measuring point ID, Circuit name, , Point, Unit, Data,....., Data

The measuring points which are output to 4th to nth lines vary depending on the demand time limit.
The following pages describe the measuring points output for demand time =15 min., 30 min. and 60 min. and the specific examples.

When the demand time limit is 15 min.

The data of the following measuring point ID is output to 4th to 30th lines.

Measuring point ID	Content
1001	Integrating Energy (whole day)
1032 to 1041	Integrating Energy (time zone 1 to 10)
1235	Demand (0-15)
1236	Demand (15-30)
1237	Demand (30-45)
1238	Demand (45-0)
1241	15 min. demand (whole day)
1242 to 1251	15 min. demand (time zone 1 to 10)
1255	15 min. demand (applicable time zone)

Specific example of dm140827.csv (Aug. 27, 2014) demand time =15 min.

```
Plant A, Time (15),,,,0:00, 0:15, 0:30, 0:45, 1:00, 1:15,....., 23:45, 0:00
1183, Target demand,,,,2500.0, 2500.0, 2500.0, 3500.0, 2500.0,....., 2500.0, 2500.0
1186, Fixed alarm value,,,,1000.0, 1000.0, 1000.0, 1000.0, 1000.0,....., 1000.0, 1000.0
1001, Power receiving, , Whole day Energy, kWh, 80968075, 80969102,....., 81059505, 81060617
1032, Power receiving, , Time zone 1 Energy, kWh, 80968075, 80969102,....., 81059505, 81060616
1033, Power receiving, , Time zone 2 Energy, kWh, 0, 0,....., 0, 0
1034, Power receiving, , Time zone 3 Energy, kWh, 0, 0,....., 0, 0
1035, Power receiving, , Time zone 4 Energy, kWh, 0, 0,....., 0, 0
1036, Power receiving, , Time zone 5 Energy, kWh, 0, 0,....., 0, 0
1037, Power receiving, , Time zone 6 Energy, kWh, 0, 0,....., 0, 0
1038, Power receiving, , Time zone 7 Energy, kWh, 0, 0,....., 0, 0
1039, Power receiving, , Time zone 8 Energy, kWh, 0, 0,....., 0, 0
1040, Power receiving, , Time zone 9 Energy, kWh, 0, 0,....., 0, 0
1041, Power receiving, , Time zone 10 Energy, kWh, 0, 0,....., 0, 0
1235, Power receiving, , Demand (0-15), kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3
1236, Power receiving, , Demand (15-30), kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3
1237, Power receiving, , Demand (30-45), kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3
1238, Power receiving, , Demand (45-0), kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3
1241, Power receiving, , Whole day demand, kW, 2158.0, 2054.4,....., 2327.9, 2223.3
1242, Power receiving, , Time zone 1 demand, kW, 2158.0, 2054.4,....., 2327.9, 2223.3
1243, Power receiving, , Time zone 2 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1244, Power receiving, , Time zone 3 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1245, Power receiving, , Time zone 4 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1246, Power receiving, , Time zone 5 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1247, Power receiving, , Time zone 6 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1248, Power receiving, , Time zone 7 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1249, Power receiving, , Time zone 8 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1250, Power receiving, , Time zone 9 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1251, Power receiving, , Time zone 10 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1255, Power receiving, , Demand, kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3
```

When the demand time limit is 30 min.

The data of the following measuring point ID is output to 4th to 28th lines.

Measuring point ID	Content
1001	Integrating Energy (whole day)
1032 to 1041	Integrating Energy (time zone1 to 10)
1241	30 min. demand (whole day)
1242 to 1251	30 min. demand (time zone 1 to 10)
1253	xx:00 is 30 min demand (first half value of applicable time zone), xx:30 is blank.
1254	xx:00 is 30 min demand (last half value of applicable time zone), xx:30 is blank.
1255	30 min. demand (applicable time zone)

Specific example of dm140827.csv (Aug. 27, 2014) demand time = 30 min.

```
Plant A, Time (30),,,,0:00, 0:30, 1:00, 1:30,....., 23:30, 0:00
1183, Target demand,,,,2500.0, 2500.0, 2500.0, 3500.0,....., 2500.0, 2500.0
1186, Fixed alarm value,,,,1500.0, 1500.0, 1500.0, 1500.0,....., 1500.0, 1500.0
1001, Power receiving, , Whole day Energy, kWh, 80968075, 80969102,....., 81059505, 81060617
1032, Power receiving, , Time zone 1 Energy, kWh, 80968075, 80969102,....., 81059505, 81060616
1033, Power receiving, ,Time zone 2 Energy, kWh, 0, 0,....., 0, 0
1034, Power receiving, ,Time zone 3 Energy, kWh, 0, 0,....., 0, 0
1035, Power receiving, , Time zone 4 Energy, kWh, 0, 0,....., 0, 0
1036, Power receiving, , Time zone 5 Energy, kWh, 0, 0,....., 0, 0
1037, Power receiving, , Time zone 6 Energy, kWh, 0, 0,....., 0, 0
1038, Power receiving, , Time zone 7 Energy, kWh, 0, 0,....., 0, 0
1039, Power receiving, , Time zone 8 Energy, kWh, 0, 0,....., 0, 0
1040, Power receiving, ,Time zone 9 Energy, kWh, 0, 0,....., 0, 0
1041, Power receiving, , Time zone 10 Energy, kWh, 0, 0,....., 0, 0
1241, Power receiving, , Whole day demand, kW, 2158.0, 2054.4,....., 2327.9, 2223.3
1242, Power receiving, , Time zone 1 Energy, kW, 2158.0, 2054.4,....., 2327.9, 2223.3
1243, Power receiving, , Time zone 2 Energy, kW, 0.0, 0.0,....., 0.0, 0.0
1244, Power receiving, , Time zone 3 Energy, kW, 0.0, 0.0,....., 0.0, 0.0
1245, Power receiving, , Time zone 4 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1246, Power receiving, , Time zone 5 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1247, Power receiving, , Time zone 6 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1248, Power receiving, , Time zone 7 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1249, Power receiving, , Time zone 8 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1250, Power receiving, , Time zone 9 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1251, Power receiving, , Time zone 10 demand, kW, 0.0, 0.0,....., 0.0, 0.0
1253, Power receiving, , Demand (first half), kW, 2153.5,,2054.4,…….,2394.8,,2327.9
1254, Power receiving, , Demand (last half), kW, 2158.0,,2071.6,…….,2397.1,,2223.3
1255, Power receiving, , Demand, kW,2158.0,2054.4,2071.6,…….,2397.1,2327.9,2223.3
```

When the demand time limit is 60 min.

The data of the following measuring point ID is output to 4th to 26th lines.

Measuring point ID	Content
1001	Integrating Energy (whole day)
1032 to 1041	Integrating Energy (time zone1 to 10)
1241	60 min. demand (whole day)
1242 to 1251	60 min. demand (time zone 1 to 10)
1255	30 min. demand (applicable time zone)

Specific example of dm140827.csv (Aug. 27, 2014) demand time = 60 min.
Plant A, Time (60),,,,0:00, 1:00, 2:00, 3:00,....., 23:00, 0:00 1183, Target demand,,,,2500.0, 2500.0, 2500.0, 3500.0,....., 2500.0, 2500.0 1186, Fixed alarm value,,,,1500.0, 1500.0, 1500.0, 1500.0,....., 1500.0, 1500.0 1001, Power receiving, , Whole day Energy, kWh, 80968075, 80969102,....., 81059505, 81060617 1032, Power receiving, , Time zone 1 Energy, kWh, 80968075, 80969102,....., 81059505, 81060616 1033, Power receiving, , Time zone 2 Energy , kWh, 0, 0,....., 0, 0 1034, Power receiving, , Time zone 3 Energy, kWh, 0, 0,....., 0, 0 1035, Power receiving, , Time zone 4 Energy, kWh, 0, 0,....., 0, 0 1036, Power receiving, , Time zone 5 Energy, kWh, 0, 0,....., 0, 0 1037, Power receiving, , Time zone 6 Energy, kWh, 0, 0,....., 0, 0 1038, Power receiving, , Time zone 7 Energy, kWh, 0, 0,....., 0, 0 1039, Power receiving, , Time zone 8 Energy, kWh, 0, 0,....., 0, 0 1040, Power receiving, , Time zone 9 Energy, kWh, 0, 0,....., 0, 0 1041, Power receiving, , Time zone 10 Energy, kWh, 0, 0,....., 0, 0 1241, Power receiving, , Whole day demand, kW, 2158.0, 2054.4,....., 2327.9, 2223.3 1242, Power receiving, , Time zone 1 Energy, kW, 2158.0, 2054.4,....., 2327.9, 2223.3 1243, Power receiving, , Time zone 2 Energy, kW, 0.0, 0.0,....., 0.0, 0.0 1244, Power receiving, , Time zone 3 Energy, kW, 0.0, 0.0,....., 0.0, 0.0 1245, Power receiving, , Time zone 4 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1246, Power receiving, , Time zone 5 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1247, Power receiving, , Time zone 6 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1248, Power receiving, , Time zone 7 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1249, Power receiving, , Time zone 8 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1250, Power receiving, , Time zone 9 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1251, Power receiving, , Time zone 10 demand, kW, 0.0, 0.0,....., 0.0, 0.0 1255, Power receiving, , Demand, kW, 2158.0, 2054.4, 2071.6,....., 2397.1, 2327.9, 2223.3

13.1.17 Demand alarm/control history data file

The file format of the demand alarm/control history data file is as shown in the table below.

Item	Description
File name	"dm_" + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + Hour (2 digits) + Minute (2 digits)+ ".csv"
File content	Change of demand alarm and demand load control state every 10 seconds is recorded. (128 KB × 62 files)

File content of demand alarm (first, second, limit/stationary)

Occurrence time, Alarm type, Circuit symbol, State symbol, Measure point name, Measuring point item name + State name, Predict demand, Present demand, Control power

Alarm type: 1 (first, second, limit/stationary)
Circuit symbol: 1 (first), 2 (second), 3 (limit/stationary)
State symbol: 0 (change of 1->0), 1 (change of 0->1)
State name: Restoration, Occurrence

Specific example of demand alarm (first, second, limit/stationary)
2014/05/13 20:43:20, 1, 1, 1, Alarm state (first), Occurrence of alarm state (first), 7152.2, 2353.9, -3.3 2014/05/13 20:45:20, 1, 2, 1, Alarm state (second), Occurrence of alarm state (second), 7499.4, 1542.7, -439.8 2014/05/13 21:00:00, 1, 1, 0, Alarm state (first), Restoration of alarm state (first), 7143.5, 2472.0, 10.0 2014/05/13 21:01:40, 1, 3, 0, Alarm state (limit/stationary), Restoration of alarm state (limit/stationary), 7166.0, 7124.1, -2880.0

File content of demand alarm (system error (demand), frequency synchronism error, outside time limit synchronism error and battery error)

Occurrence time, Alarm type, Circuit symbol, State symbol, Measure Point Name, Measuring point item name + State name

Alarm type: 2 (system error (demand), frequency synchronism error, outside time limit synchronism error and battery error)
Circuit symbol: 4 (system error (demand)), 5 (frequency synchronism error), 6 (outside time limit synchronism error), 7 (battery error)
State symbol: 0 (change of 1->0), 1 (change of 0->1)
State name: Restoration, Occurrence

Specific example of demand alarm (demand control unit error, frequency synchronism error, outside time limit synchronism error and battery error)
2014/05/13 20:45:20, 2, 4, 1, Alarm state (demand control unit error), Occurrence of alarm state (demand control unit error) 2014/05/13 20:43:20, 2, 5, 1, Alarm state (frequency synchronism error), Occurrence of alarm state (frequency synchronism error) 2014/05/13 21:00:00, 2, 6, 0, Alarm state (outside time limit synchronism error), Restoration of alarm state (outside time limit synchronism error) 2014/05/13 21:00:50, 2, 7, 0, Alarm state (battery error), Restoration of alarm state (battery error)

File content of demand load control state change

Occurrence time, Alarm type, Control No., State symbol, Measure point name, Measuring point item name + State name

Alarm type: 3 (control status)
Control No.: 1 to 12
State symbol: 0 (change of 1->0), 1 (change of 0->1)
State name: Off, On

Specific example of demand load control state change
2014/05/13 20:43:20, 3, 1, 1, Control 1, Control state (control 1) On 2014/05/13 20:43:20, 3, 2, 1, Control 2, Control state (control 2) On 2014/05/13 20:43:20, 3, 12, 1, Control 12, Control state (control 12) On 2014/05/13 20:45:20, 3, 1, 0, Control 1, Control state (control 1) Off 2014/05/13 21:00:00, 3, 12, 0, Control 12, Control state (control 12) Off

*1 In monitoring at intervals of 10 seconds, when change of load control state is detected, it is recorded. The time is different from actual status change timing of the equipment.

13.2 Record of System Log

13.2.1 System log file

The file format of the system log file is as shown in the table below.

Item		Description
File name		"s" + Year (last 2 digits) + Month (2 digits) + Day (2 digits) + Hour (2 digits) + Minute (2 digits)+ ".log"
File content		Occurrence and restoration of various errors are recorded. (256 KB × 8 files)
	1st line	Occurrence/restoration time error details
	2nd line	Occurrence/restoration time error details
	:	:
	nth line	Occurrence/restoration time error details

13.2.2 System log type (notification log)

It is recorded when an action including booting of EcoWebServerIII, success of automatic time adjustment, etc. is performed.

No.	Notification log type
1	Boot
2	Time change
3	Setting project modify
4	Success of automatic time adjustment
5	Clear data
6	Clear system log
7	Clear data and system log
8	Success in file restoration

1 Boot

It is recorded when EcoWebServerIII is booted.

[Specific example]

2014/05/03 17:04:20 Boot (previous last logging date 2014/05/03 09:15)
[1] [2]

[1] Boot date [2] Previous final logging date

2 Time change

It is recorded when time is set on the time set detail screen.

[Specific example]

2014/05/13 20:43:21 Time change 2014/06/01 19:20:30
[1] [2]

[1] Execution date [2] Time after setting

3 Setting project modify

It is recorded when the project is written from the software.

[Specific example]

2014/05/13 20:43:21 Setting project modify [Project1] (Set software)
[1] [2]

[1] Execution date [2] Project name

4 Success of automatic time adjustment

It is recorded when automatic time adjustment is successful.

[Specific example]

2014/05/13 10:12:43 Automatic time adjustment (time after setting 2014/04/09 00:05:28)
[1] [2]

[1] Execution date [2] Date after setting

5 Clear data

It is recorded when clear data from the software is performed.

[Specific example]

```
2014/05/13 20:43:21 Clear data
           [1]
```

[1] Execution date

6 Clear system log

It is recorded when clear system log from the software is performed.

[Specific example]

```
2014/05/13 20:43:21 Clear system log
           [1]
```

[1] Execution date

7 Clear data and system log

It is recorded when clear data and system log from the software is performed.

[Specific example]

```
2014/05/13 20:43:21 Clear data and system log
           [1]
```

[1] Execution date

8 Success in file restoration

It is recorded when file restoration after recovery of power failure is successful.

[Specific example]

```
2014/05/13 16:00:28 File restoration (/LogFiles/DayBak/ -> /LogFiles/DayLog/)
           [1]                                [2]                  [3]
```

[1] Boot date [2] Restoration source folder name [3] Restoration destination folder name

13.2.3 System log type (error occurrence/restoration log)

Occurrence and restoration of various errors such as occurrence/restoration of measuring errors are recorded.

No.	Error occurrence/restoration log type
1	Measuring error occurrence/restoration
2	File transfer error occurred
3	Automatic time adjustment error occurrence
4	Email sending error occurrence
5	Data output error occurrence/restoration
6	Battery error occurrence
7	Upper limit alarm occurrence/restoration
8	Lower limit alarm occurrence/restoration
9	Specific consumption planned value alarm occurrence/restoration
10	Energy planned value alarm occurrence/restoration
11	Alarm monitoring notification occurrence/restoration
12	File write error/file clear error
13	Folder creation error/folder deletion error
14	File restore error

1 Measuring error occurrence/restoration

It is recorded for occurrence or restoration of measuring error.

[Specific example of measuring error occurrence]

2014/05/06 13:12:41 Measuring error occurrence Measuring point ID =1(4357),2(4357),121(4357),122(4357)
[1] [2]

[1] Occurrence date [2] Measuring point ID not measured (error code in parenthesis)

[Main error code (CC-Link communicating item)]

Error code	Error details
45828 (B304h) 45831 (B307h) 45837 (B30Dh)	Measuring terminal of the applicable CC-Link station No. is not connected. Check if the power of the measuring terminal is ON or if the communication line is not broken.

[Main error code (Sequencer , GOT, MODBUS terminal (Ethernet connection))]

Error code	Error details
4737 (1281h)	Connection timeout error with the GOT, sequencer or MODBUS terminal. Check if the applicable sequencer, GOT or MODBUS terminal is connected, if the power is ON, or if the line of Ethernet is connected.

[Specific example of measuring error recovery]

2014/05/06 14:25:31 Measure error restoration Measuring point ID=121,122
[1] [2]

[1] Occurrence date [2] Measuring point ID which can be measured

2 File transfer error occurrence

It is recorded for failure of file transfer to the FTP server.

[Specific example]

2014/05/13 16:00:52 File transfer error occurrence (-2) 14051316.csv
[1] [2] [3]

[1] Occurrence date [2] Error code [3] File name which cannot be transferred

[Main error code]

Error code	Error details
-121	Connection to the FTP server is disabled. Check if the IP address of the FTP server set in the software is correct of if the FTP server is booted.
-122	Login to the FTP server is disabled. Check if the log-in ID and the password of the FTP server are correct.
-370	Transfer destination folder is not available. Check if the transfer destination folder set in the software is present in the FTP server.

3 Automatic time adjustment error occurrence

It is recorded for failure of automatic time adjustment.

[Specific example]

2014/05/13 10:12:43 Automatic time adjustment error occurrence (-5)
[1] [2]

[1] Occurrence date [2] Error code

[Main error code]

Error code	Error details
-5	Time cannot be obtained from the SNTP server. Check if the IP address of the SNTP server set in the software is correct of if the SNTP server is booted.

4 Email sending error occurrence

It is recorded for error of sending e-mail.

[Specific example]

2014/06/01 19:43:21 Mail sending error (12) Sending address =someone@somenet.com Subject=DM_Alarm_1st
[1] [2] [3] [4]

[1] Occurrence date [2] Error code [3] Sending mail address [4] Subject

[Main error code]

Error code	Error details
12	Connection to the SMTP server is disabled. Check if the IP address of the SMTP server set in the setting software is correct of if the SMTP server is booted. When the authentication method = SMTP-Auth, check if the information of the authentication setting (user name, password) is correct.
32	Connection to the POP server is disabled at the setting of the authentication method = POP before SMTP. Check if the POP server, POP port number, user name and the password set in the setting software are correct. In addition, check if the POP server is booted.

5 Data output error occurrence/restoration

It is recorded for occurrence or restoration of data output to the PLC.

[Specific example of data output error]

2014/05/06 13:15:41Data output error occurrence Data output group No.=1(-4),2(4739),3(-4)
[1] [2]

[1] Occurrence date [2] Target data output group No. (error code in parenthesis)

[Main error code]

Error code	Error details
-4	Timeout error. Check the connection of the data output destination to the PLC.

[Specific example of data output error restoration]

2014/05/06 13:15:41Data output error restoration Data output group No.=1,2,3
[1] [2]

[1] Restoration date [2] Target data output group No.

6 Battery error occurrence

It is recorded for battery error.

[Specific example]

2014/05/13 20:43:21 Battery error occurrence
[1]

[1] Occurrence date

7 Upper limit alarm occurrence/restoration

It is recorded when the measuring value is larger than the upper limit value or when it is back within the upper limit value.

[Specific example of upper limit alarm]

2014/05/06 13:22:41 Upper limit alarm occurrence Measuring point ID = 5 (Line 1: Power) Measuring value
[1] [2]
=12.4 kW Upper limit value =12.0 kW
[3] [4]

[1] Occurrence date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Measuring value [4] Upper limit value

[Specific example of upper limit alarm restoration]

2014/05/06 14:25:31 Upper limit alarm restoration Measuring point ID = 5 (Line 1: Power) Measuring value
[1] [2]
=11.9 kW Upper limit value =12.0 kW
[3] [4]

[1] Restoration date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Measuring value [4] Upper limit value

8 Lower limit alarm occurrence/restoration

It is recorded when the measuring value is smaller than the lower limit value or when it is back within the lower limit value.

[Specific example of lower limit alarm]

2014/05/06 13:22:41 Lower limit alarm occurrence Measuring point ID = 255 (Line B: Temperature) Measuring value
[1] [2]
=79.9°C Lower limit value =80.0°C
[3] [4]

[1] Occurrence date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Measuring value [4] Lower limit value

[Specific example of lower limit alarm restoration]

2014/05/06 14:25:31 Lower limit alarm restoration Measuring point ID = 255 (Line B: Temperature) Measuring value
[1] [2]
=80.0°C Lower limit value =80.0°C
[3] [4]

[1] Restoration date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Measuring value [4] Lower limit value

9 Specific consumption planned value alarm occurrence/restoration

It is recorded when the specific consumption is larger than the planned value or when it is back within the planned value.

[Specific example of specific consumption planned value alarm occurrence]

2014/03/08 19:00:05 Specific consumption planned value alarm occurrence Measuring point ID
[1]
=1 (Line A specific consumption) Specific consumption =2.9 kWh/piece Planned value =2.0 kWh/piece
[2] [3] [4]

[1] Occurrence date [2] Target specific consumption measuring point ID (specific consumption measuring point name in parenthesis) [3] Specific consumption data [4] Planned value

[Specific example of specific consumption planned value alarm restoration]

2014/03/08 20:00:05 Specific consumption planned value alarm restoration Measuring point ID
[1]
=1 (Line A specific consumption) Specific consumption =1.2 kWh/piece Planned value =2.0 kWh/piece
[2] [3] [4]

[1] Restoration date [2] Target specific consumption measuring point ID (specific consumption measuring point name in parenthesis) [3] Specific consumption data [4] Planned value

10 Energy planned value alarm occurrence/restoration

It is recorded when monthly accumulated value of energy (Energy/pulse) is larger the daily accumulated value of the monthly planned value or when it is back within the daily accumulated value of the monthly planned value.

[Specific example of energy planned value alarm occurrence]

2014/04/02 00:00:01 Energy planned value alarm occurrence Measuring point ID = 5 (Line A:1-1 Energy)
[1] [2]
Measuring value =11 kWh Planned value =10 kWh (300 kWh)
[3] [4] [5]

[1] Occurrence date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Monthly accumulated value [4] Daily accumulated value of monthly accumulated value
[5] Monthly planned value

[Specific example of energy planned value alarm restoration]

2014/04/03 00:00:01 Energy planned value alarm restoration Measuring point ID = 5 (Line A:1-1 Energy)
[1] [2]
Measuring value =19 kWh Planned value =20 kWh (300 kWh)
[3] [4] [5]

[1] Restoration date [2] Target measuring point ID (group name and measuring point name in parenthesis)
[3] Monthly accumulated value [4] Daily accumulated value of monthly accumulated value
[5] Monthly planned value

11 Alarm monitoring report occurrence/recovery

It is recorded for occurrence (contact ON) or restoration (contact OFF) of alarm monitoring notification. (Demand alarm and contact ON/OFF of demand control are not recorded in the system log file. Check the [Demand alarm/control history data file].)

[Specific example of alarm monitoring notification occurrence]

2014/05/06 13:12:41 Alarm monitoring notification occurrence Contact output No.=1,2,4,16
[1] [2]

[1] Occurrence date [2] Contact output No. with contact ON

[Specific example of alarm monitoring notification recovery]

2014/05/06 14:25:31 Alarm monitoring notification occurrence Contact output No.=1,4
[1] [2]

[1] Restoration date [2] Contact output No. with contact OFF

12 File write error/file clear error

It is recorded for file write error or file clear error.
If this error occurs frequently, memory card may be abnormal.
Ask the contact described on the last page.

[Specific example of file write error]

2014/05/13 16:00:28 File write error occurrence /ZoomLog/140513/14051316.csv
[1] [2]

[1] Occurrence date [2] File name not written

[Specific example of file clear error]

2014/05/13 16:00:28 File clear error occurrence /ZoomLog/140429/14042916.csv
[1] [2]

[1] Occurrence date [2] File name not cleared

13 Folder creation error/folder deletion error

It is recorded for file write error or folder clear error.
If this error occurs frequently, memory card may be abnormal.
Ask the contact described on the last page.

[Specific example of folder creation error]

2014/05/13 16:00:28 Folder creation error occurrence /ZoomLog/140513/
[1] [2]

[1] Occurrence date [2] File name not created

[Specific example of folder clear error]

2014/05/13 16:00:28 Folder clear error occurrence /ZoomLog/140312/
[1] [2]

[1] Occurrence date [2] File name not cleared

14 File restore error

It is recorded for failure of file restoration after recovery of power failure.

[Specific example]

2014/05/13 16:00:28 File restore error (/LogFiles/DayLog/)
[1] [2]

[1] Occurrence date [2] File name failed for restoration

13.2.4 System log type (log related to demand control)

Log related to demand control is described below.
Log in this section is device with demand control function only.

No.	Log type related to demand control
1	Time set
2	Time set error occurrence
3	Energy saving change
4	Emergency stop order
5	Outside time limit synchronism error occurrence/restoration
6	Frequency synchronism error occurrence/restoration
7	Battery error occurrence of demand control unit
8	Demand control error occurrence
9	Demand data output error occurrence/restoration
10	Outside machine report xml creation error occurrence
11	Outside machine communication error occurrence
12	Demand control setting modify
13	System error occurrence of demand control unit

1 Time set

Change of the EcoWebServerIII clock to the demand control unit clock is recorded.

*1 When the difference between the EcoWebServerIII clock and the demand control unit clock is 10 seconds or more, automatic change of the EcoWebServerIII clock to the demand control unit clock is recorded.

*2 When the difference between the EcoWebServerIII clock and the demand control unit clock is 5 seconds or more and less than 10 seconds, the EcoWebServerIII clock is changed to the demand control unit clock, but the log is not recorded.

[Specific example]

2014/06/11 19:43:21 Time set 2014/06/01 20:00:00
[1] [2]

[1] Execution date [2] Time after setting

2 Time set error occurrence

When the EcoWebServerIII clock is changed to the demand control unit clock, failure in change of the clock is recorded.

[Specific example]

2014/06/01 19:43:21 Time set error 2014/06/01 20:00:00
[1] [2]

[1] Execution date [2] Time attempted for setting

3 Energy saving change

It is recorded when energy saving level is changed.
*3 Only when the settings are energy saving level monitoring and system log output.

[Specific example]

```
2014/05/13 20:43:21 Prediction of energy saving level change 1->2 Present demand =1234.5
      [1]           [2]                                      [3]                 [4]
        Predict demand =4567.8 Adjust power =34.5 Allow power =1356.2 Limit power =5000.0 Remain time =1190
                        [5]              [6]              [7]              [8]                  [9]
```

[1] Occurrence date [2] Monitoring type (predict or adjust) [3] Level change details (Previous -> Current)
[4] Present demand [5] Predict demand [6] Adjust power [7] Allow power [8] Limit power
[9] Remain time of time limit (sec)

4 Emergency stop order

It is recorded when command/release of emergency stop order is given.
*4 Only when the settings are emergency stop monitoring and system log output.

[Specific example]

```
2014/05/13 20:43:21 Emergency stop order Stationary On Present demand =1234.5
      [1]                                [2]        [3]                 [4]
        Predict demand =4567.8 Adjust power =34.5 Allow power =1356.2 Limit power =5000.0 Remain time =1190
                        [5]              [6]              [7]              [8]                  [9]
```

[1] Occurrence date [2] Alarm type (limit or stationary) [3] Command state (On or Off) [4] Present demand
[5] Predict demand [6] Adjust power [7] Allow power [8] Limit power [9] Remain time of time limit (sec)

5 Outside time limit synchronism error occurrence/restoration

It is recorded for occurrence or restoration of outside time limit synchronism error of the demand control unit.

[Specific example of outside time limit synchronism error occurrence]

```
2014/05/13 20:43:21 Outside time limit synchronism error (demand) occurrence
      [1]
```

[1] Occurrence date

[Specific example of outside time limit synchronism error restoration]

```
2014/05/15 10:13:20 Outside time limit synchronism error (demand) restoration
      [1]
```

[1] Restoration date

6 Frequency synchronism error occurrence/restoration

It is recorded for occurrence or restoration of power frequency synchronism error of the demand control unit.

[Specific example of frequency synchronism error occurrence]

```
2014/05/13 20:43:21 Frequency synchronism error (demand) occurrence
      [1]
```

[1] Occurrence date

[Specific example of frequency synchronism error restoration]

```
2014/05/13 20:43:21 Frequency synchronism error (demand) restoration
      [1]
```

[1] Restoration date

7 Battery error occurrence of demand control unit

It is recorded when low battery voltage for power failure of the demand control unit is detected.

[Specific example]

2014/05/13 20:43:21 Battery error (demand) occurrence
[1]

[1] Occurrence date

8 Demand control error occurrence

It is recorded for failure in change of demand control (control No.1 to 12).

[Specific example]

2014/06/01 19:43:21 Demand control error Control No =12 Control = On
[1] [2] [3]

[1] Occurrence date [2] Control No. [3] Control details (Off or On)

9 Demand data output error occurrence/restoration

It is recorded for occurrence or restoration of demand data output error to the PLC or GOT.

[Specific example of demand data output error occurrence]

2014/05/13 20:43:21 Demand data output error occurrence
[1]

[1] Occurrence date

[Specific example of demand data output error restoration]

2014/05/15 10:13:20 Demand data output error restoration
[1]

[1] Recovery date

10 Outside machine report xml creation error occurrence

It is recorded when xml file creation of emergency stop order fails.
*5 It is recorded only when the settings are outside sending.

[Specific example]

2014/05/13 20:43:21 xml report error xml creation failure/PreFiles/XmlFrames/XmlFrame01.xml
[1] [2]

[1] Occurrence date [2] xml file name not cleared

11 Outside machine communication error occurrence

It is recorded for communication error with outside machine.
*6 It is recorded only when the settings are outside sending.

[Specific example]

2014/05/15 10:13:20 xml report error Destination abnormal respond (-5) Energy saving change Access point No =2
[1] [2] [3] [4]

[1] Occurrence date [2] Error code [3] xml type (energy saving change or emergency stop order)
[4] Outside machine No.

12 Demand control setting modify

It is recorded when the demand control settings from the high rank system is changed.

[Specific example]

2014/05/13 20:43:21 Demand control setting modify (high rank system)
[1]

[1] Occurrence date

13 System error occurrence of demand control unit

It is recorded for occurrence or restoration of the demand control unit error.
*7 Low battery voltage for power failure of the demand control unit or outside time limit synchronism error can result in a system error.

[Specific example]

2014/05/13 20:43:21 System error (demand) occurrence
[1]

[1] Occurrence date

13.3 Specification of Graph Display Data

The data specification which can be downloaded on each graph display screen is explained.
16 data types below are available.

No.	Screen	Display interval
1	Measuring point comparison	Annual (Jan - Dec), Annual (Apr-Mar)
2		Monthly
3		Daily
4		Zoom 5min, Zoom 1min
5	Date comparison	Annual (Jan - Dec), Annual (Apr-Mar)
6		Monthly
7		Daily
8		Zoom 5min, Zoom 1min
9	Specific consumption	Annual (Jan - Dec), Annual (Apr-Mar)
10		Monthly
11		Weekly
12		Daily
13	Equipment	Daily
14	Demand trend *1	Annual(Maximum month)
15		Monthly(Maximum day)
16		Daily

*1 The demand trend graph is device with demand control function only.

13.3.1 Measuring point comparison graph: Annual

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name, Jan., Feb.,....., Nov., Dec. (Display interval = Annual (Jan. - Dec.)) Project name, Apr., May,....., Feb., Mar. (Display interval = Annual (Apr. - Mar.))
	From 2nd line	[Energy] Year 'Monthly amount' Group: Measure point name, Data,....., Data [Analog value] Year 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when [Annual (Jan. - Dec.)] is selected for display interval
Building A, Jan., Feb., Mar., ..., Oct., Nov., Dec. 2014 Monthly amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014 Monthly amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014 Monthly amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

Specific example when [Annual (Apr. - Mar.)] is selected for display interval
Building A , Apr., May, Jun., ..., Jan., Feb., Mar. FY2014 Monthly amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 FY2014 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 FY2014 Monthly amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,.....,1, 0, 0 FY2014 Monthly amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

13.3.2 Measuring point comparison graph: Monthly

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,1st, 2nd,....., end of month
	From 2nd line	[Energy] Year/month 'Daily amount' Group: Measure point name, Data,....., Data [Analog value] Year/month 'Measuring value' Group: Measure point name, Data,....., Data

Specific example
Building A, 1st, 2nd, 3rd,....., 29th, 30th, 31st 2014/08 Daily amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08 Daily amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08 Daily amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

13.3.3 Measuring point comparison graph: Daily

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,Time,....., Time
	From 2nd line	[Energy] Display date 'Hourly amount' Group: Measure point name, Data,....., Data (Logging period = 60 min.) Display date '30 min. amount' Group: Measure point name, Data,....., Data (Logging period = 30 min.) Display date '15 min. amount' Group: Measure point name, Data,....., Data (logging period = 15 min.) [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when logging period is 60 min.
Building A,1:00, 2:00, 3:00,....., 22:00, 23:00, 24:00 2014/08/11 (Mon) Hourly amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Mon) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Mon) Hourly amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Mon) Hourly amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

Specific example when logging period is 30 min.
Building A, 0:30, 1:00, 1:30,....., 23:00, 23:30, 24:00 2014/08/11 (Mon) 30 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Mon) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Mon) 30 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Mon) 30 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

Specific example when logging period is 15 min.
Building A, 0:15, 0:30, 0:45,....., 23:30, 23:45, 24:00 2014/08/11 (Mon) 15 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Mon) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Mon) 15 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Mon) 15 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

13.3.4 Measuring point comparison graph: Zoom

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,Time,....., Time
	From 2nd line	[Energy] Display date '5 min. amount' Group: Measure point name, Data,....., Data (Display interval= Zoom 5min) Display date '1 min. amount' Group: Measure point name, Data,....., Data (Display interval= Zoom 1min) [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when [Zoom (5 min.)] is selected for display interval
Building A, 7:05, 7:10, 7:15,....., 8:00,....., 8:50, 8:55, 9:00 2014/08/11 (Mon) 5 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 8,....., 10, 4, 2 2014/08/11 (Mon) Measuring value Others: Ambient temperature, 21, 22, 23,....., 21,....., 24, 22, 21 2014/08/11 (Mon) 5 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 5,....., 1, 0, 0 2014/08/11 (Mon) 5 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 5,....., 9, 4, 2

Specific example when [Zoom (1 min.)] is selected for display interval
Building A, 7:01, 7:02, 7:03,....., 7:58, 7:59, 8:00 2014/08/11 (Mon) 1 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Mon) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Mon) 1 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Mon) 1 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2

13.3.5 Date comparison graph: Annual

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name, Jan., Feb., Mar., ..., Oct., Nov., Dec. (Display interval = Annual (Jan. - Dec.)) Project name, Apr., May, Jun., ..., Jan., Feb., Mar. (Display interval = Annual (Apr. - Mar.))
	From 2nd line	[Energy] Display date 'Monthly amount' Group: Measure point name, Data,....., Data Display date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data [Planned value] 'Planned value' Group: Measure point name, Planned value,....., Planned value 'Planned value accumulation' Group: Measure point name, Planned value,....., Planned value

Specific example when [Annual (Year (Jan. - Dec.)] is selected for display interval
Building A , Jan., Feb., Mar., ..., Oct., Nov., Dec. 2014 Monthly amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014 Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014 Monthly amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014 Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014 Monthly amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014 Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136 Planned value Building A: Building A 1F air conditioning Energy, 1200, 1700, 1800,....., 1500, 1500, 1500 Planned value accumulation Building A: Building A 1F air conditioning Energy, 1200, 2900, 4700,....., 22000, 23500, 25000

Specific example when [Annual (Year (Apr. - Mar.)] is selected for display interval
Building A , Apr., May, Jun., ..., Jan., Feb., Mar. FY2014 Monthly amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 FY2014 Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 FY2014 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 FY2014 Monthly amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 FY2014 Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 FY2014 Monthly amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 FY2014 Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136 Planned value Building A: Building A 1F air conditioning Energy, 1200, 1700, 1800,....., 1500, 1500, 1500 Planned value accumulation Building A: Building A 1F air conditioning Energy, 1200, 2900, 4700,....., 22000, 23500, 25000

13.3.6 Date comparison graph: Monthly

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,1st, 2nd,....., 30th, 31st
	From 2nd line	[Energy] Display date 'Daily amount' Group: Measure point name, Data,....., Data Display date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data [Planned value] 'Planned value' Group: Measure point name, Planned value

Specific example
Building A, 1st, 2nd, 3rd,....., 29th, 30th, 31st 2014/08 Daily amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08 Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014/08 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08 Daily amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08 Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014/08 Daily amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014/08 Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136 Planned value Building A: Building A 1F air conditioning Energy, 1500

13.3.7 Date comparison graph: Daily

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,Time,....., Time
	From 2nd line	[Energy] Display date 'Hourly amount' Group: Measure point name, Data,....., Data (Logging period = 60 min.) Display date '30 min. amount' Group: Measure point name, Data,....., Data (Logging period = 30 min.) Display date '15 min. amount' Group: Measure point name, Data,....., Data (logging period = 15 min.) Display date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when logging period is 60 min.
Building A, 1st, 2nd, 3rd,....., 29th, 30th, 31st 2014/08 Daily amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08 Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014/08 Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08 Daily amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08 Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014/08 Daily amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014/08 Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136 Planned value Building A: Building A 1F air conditioning Energy, 1500

Specific example when logging period is 30 min.
Building A, 0:30, 1:00, 1:30,....., 23:00, 23:30, 24:00 2014/08/11 (Thu) 30 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Thu) Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014/08/11 (Thu) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Thu) 30 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Thu) Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014/08/11 (Thu) 30 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014/08/11 (Thu) Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136

Specific example when logging period is 15 min.
Building A, 0:15, 0:30, 0:45,....., 23:30, 23:45, 24:00 2014/08/11 (Thu) 15 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Thu) Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014/08/11 (Thu) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Thu) 15 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Thu) Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014/08/11 (Thu) 15 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014/08/11 (Thu) Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136

13.3.8 Date comparison graph: Zoom

Display interval = Zoom 5min

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All data displayed
	1st line	Project name,,,,,Time,....., Time
	From 2nd line i'th line	[Energy] Display date '5 min. amount' Group: Measure point name, Data,....., Data Display date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data
	3rd line	Time,....., Time
	4th line	[Energy] Comparison date '5 min. amount' Group: Measure point name, Data,....., Data Comparison date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Comparison date 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when [Zoom (5 min.)] is selected for display interval
Building A, 7:05, 7:10, 7:15,....., 8:00, ..., 8:50, 8:55, 9:00 2014/08/11 (Thu) 5 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,.., 10,.., 10, 4, 2 2014/08/11 (Thu) Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,..., 10,..., 174, 178, 180 2014/08/11 (Thu) Measuring value Others: Ambient temperature, 21, 22, 23,..., 10,..., 24, 22, 21 2014/08/11 (Thu) 5 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,..., 10,..., 1, 0, 0 2014/08/11 (Thu) Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,..., 10,..., 44, 44, 44 2014/08/11 (Thu) 5 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,..., 10,..., 9, 4, 2 2014/08/11 (Thu) Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,..., 10,..., 130, 134, 136

Display interval = Zoom 1min

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		All graph data displayed
	1st line	Project name,,,,,Time,....., Time
	2nd line	[Energy] Display date '1 min. amount' Group: Measure point name, Data,....., Data Display date 'Acc.' Group: Measure point name, Data,....., Data [Analog value] Display date 'Measuring value' Group: Measure point name, Data,....., Data

Specific example when [Zoom (1 min.)] is selected for display interval
Building A, 7:01, 7:02, 7:03,....., 7:58, 7:59, 8:00 2014/08/11 (Thu) 1 min. amount Virtual calc. point: Building A air conditioning Energy, 0, 2, 5,....., 10, 4, 2 2014/08/11 (Thu) Acc. virtual calc. point: Building A air conditioning Energy, 0, 2, 7,....., 174, 178, 180 2014/08/11 (Thu) Measuring value Others: Ambient temperature, 21, 22, 23,....., 24, 22, 21 2014/08/11 (Thu) 1 min. amount Building A: Building A 1F air conditioning Energy, 0, 1, 2,....., 1, 0, 0 2014/08/11 (Thu) Acc. Building A: Building A 1F air conditioning Energy, 0, 1, 3,....., 44, 44, 44 2014/08/11 (Thu) 1 min. amount Building A: Building A 2F air conditioning Energy, 0, 1, 3,....., 9, 4, 2 2014/08/11 (Thu) Acc. Building A: Building A 2F air conditioning Energy, 0, 1, 4,....., 130, 134, 136

13.3.9 Specific consumption graph: Annual

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Production, Specific consumption, Energy, Accumulation of energy, Sp. Cons. planned value
	1st line	Project name, Jan., Feb., Mar., ..., Oct., Nov., Dec. (Display interval = Annual (Jan. - Dec.)) Project name, Apr., May, Jun., ..., Jan., Feb., Mar. (Display interval = Annual (Apr. - Mar.))
	2nd line	Display date 1 'Monthly production amount' Group: Production measure point name, Data,....., Data
	3rd line	Display date 2 'Monthly production amount' Group: Production measure point name, Data,....., Data
	4th line	Display date1 'Specific consumption' Name, Data,..., Data
	5th line	Display date2 'Specific consumption' Name, Data,..., Data
	6th line	Display date 1 'Monthly energy amount' Group: Energy measure point name, Data,....., Data
	7th line	Display date 2 'Monthly energy amount' Group: Energy measure point name, Data,..., Data
	8th line	Display date 1 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	9th line	Display date 2 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	10th line	'Sp. Cons. planned value' Name, Planned value

Specific example when [Annual (Year (Jan. - Dec.)] is selected for display interval
Building A, Jan., Feb., Mar., ..., Oct., Nov., Dec. 2014 Monthly production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 2014 Monthly production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 2014 Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 2014 Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 2014 Monthly energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 2014 Monthly energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 2014 Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 2014 Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

Specific example when [Annual (Year (Apr. - Mar.)] is selected for display interval
Building A, Apr., May, Jun., ..., Jan., Feb., Mar. FY2014 Monthly production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 FY2014 Monthly production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 FY2014 Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 FY2014 Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 FY2014 Monthly energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 FY2014 Monthly energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 FY2014 Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 FY2014 Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

13.3.10 Specific consumption graph: Monthly

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Production, Specific consumption, Energy, Accumulation of energy, Sp. Cons. planned value
	1st line	Project name,,,,,1st, 2nd,....., 30th, 31st
	2nd line	Display date 1 'Daily production amount' Group: Production measure point name, Data,....., Data
	3rd line	Display date 2 'Daily production amount' Group: Production measure point name, Data,....., Data
	4th line	Display date1 'Specific consumption' Name, Data,..., Data
	5th line	Display date2 'Specific consumption' Name, Data,..., Data
	6th line	Display date 1 'Daily energy amount' Group: Energy measure point name, Data,..., Data
	7th line	Display date 2 'Daily energy amount' Group: Energy measure point name, Data,..., Data
	8th line	Display date 1 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	9th line	Display date 2 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	10th line	'Sp. Cons. planned value' Name, Planned value

Specific example
Building A, 1st, 2nd, 3rd,....., 29th, 30th, 31st 2014/04 Daily production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 2014/04 Daily production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 2014/04 Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 2014/04 Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 2014/04 Daily energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 2014/04 Daily energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 2014/04 Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 2014/04 Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

13.3.11 Specific consumption graph: Weekly

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Production, Specific consumption, Energy, Accumulation of energy, Sp. Cons. planned value
	1st line	Project name,,,,,Time,....., Time
	2nd line	Display date (1st day) 'Hourly production amount' Group: Production measure point name, Data,....., Data
	3rd line	Display date (1st day) 'Specific consumption' Name, Data,..., Data
	4th line	Display date (1st day) 'Hourly energy amount' Group: Energy measure point name, Data,..., Data
	5th line	Display date (1st day) 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	6th line	Display date (2nd day) 'Hourly production amount' Group: Production measure point name, Data,....., Data
	7th line	Display date (2nd day) 'Specific consumption' Name, Data,..., Data
	8th line	Display date (2nd day) 'Hourly energy amount' Group: Energy measure point name, Data,..., Data
	9th line	Display date (2nd day) 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	:	
	29th line	Display date (7th day) 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	30th line	'Sp. Cons. planned value' Name, Planned value

*1 When the logging period is 30 min, 'Hourly amount' is changed to '30 min. amount'.
When the logging period is 15 min, 'Hourly amount' is changed to '15 min. amount.'

Specific example when logging period is 60 min.

```
Plant A, 1:00, 2:00, 3:00,....., 22:00, 23:00, 24:00
2014/04/18 (Wed) Hourly production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/18 (Wed) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
2014/04/18 (Wed) Hourly energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14
2014/04/18 (Wed) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
2014/04/19 (Thu) Hourly production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
      :
2014/04/24 (Tue) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
Sp. Cons. planned value B production line, 0.45
```

Specific example when logging period is 30 min.

```
Plant A, 0:30, 1:00, 1:30,....., 23:00, 23:30, 24:00
2014/04/18 (Wed) 30 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/18 (Wed) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
2014/04/18 (Wed) 30 min. energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14
2014/04/18 (Wed) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
2014/04/19 (Thu) 30 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
      :
2014/04/24 (Tue) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
Sp. Cons. planned value B production line, 0.45
```

Specific example when logging period is 15 min.

```
Plant A, 0:15, 0:30, 0:45,....., 23:30, 23:45, 24:00
2014/04/18 (Wed) 15 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/18 (Wed) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
2014/04/18 (Wed) 15 min. energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14
2014/04/18 (Wed) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
2014/04/19 (Thu) 15 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214
2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07
2014/04/24 (Tue) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321
Sp. Cons. planned value B production line, 0.45
```

13.3.12 Specific consumption graph: Daily

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Energy displayed in graph, Production, Specific consumption, Sp. Cons. planned value
	1st line	Project name,,,,,Time,....., Time
	2nd line	Display date 1 'Hourly production amount' Group: Production measure point name, Data,....., Data
	3rd line	Display date 2 'Hourly production amount' Group: Production measure point name, Data,....., Data
	4th line	Display date1 'Specific consumption' Name, Data,..., Data
	5th line	Display date2 'Specific consumption' Name, Data,..., Data
	6th line	Display date 1 'Hourly energy amount' Group: Energy measure point name, Data,..., Data
	7th line	Display date 2 'Hourly energy amount' Group: Energy measure point name, Data,..., Data
	8th line	Display date 1 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	9th line	Display date 2 'Accumulation of energy' Group: Energy measure point name, Data,..., Data
	10th line	'Sp. Cons. planned value' Name, Sp. Cons. planned value

*1 When the logging period is 30 min, 'Hourly amount' is changed to '30 min. amount'.
When the logging period is 15 min, 'Hourly amount' is changed to '15 min. amount.'

Specific example when logging period is 60 min.
Plant A, 1:00, 2:00, 3:00,....., 22:00, 23:00, 24:00 2014/04/19 (Thu) Hourly production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 2014/04/20 (Fri) Hourly production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 2014/04/20 (Fri) Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 2014/04/19 (Thu) Hourly energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 2014/04/20 (Fri) Hourly energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 2014/04/19 (Thu) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 2014/04/20 (Fri) Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

Specific example when logging period is 30 min.
Plant A, 0:30, 1:00, 1:30,....., 23:00, 23:30, 24:00 2014/04/19 (Thu) 30 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 2014/04/20 (Fri) 30 min. production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 2014/04/20 (Fri) Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 2014/04/19 (Thu) 30 min. energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 2014/04/20 (Fri) 30 min. energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 2014/04/19 (Thu) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 2014/04/20 (Fri) Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

Specific example when logging period is 15 min.
Plant A, 0:15, 0:30, 0:45,....., 23:30, 23:45, 24:00 2014/04/19 (Thu) 15 min. production amount Line 1: Part B-1 Product, 112, 110, 153,....., 209, 245, 214 2014/04/20 (Fri) 15 min. production amount Line 1: Part B-1 Product, 125, 0, 38,....., 172, 155, 161 2014/04/19 (Thu) Specific consumption B production line, 0.11, 0.10, 0.08,....., 0.04, 0.02, 0.07 2014/04/20 (Fri) Specific consumption B production line, 0.12, 99999999999.00, 0.26,....., 0.07, 0.03, 0.01 2014/04/19 (Thu) 30 min. energy amount Line 1: System B Energy, 12, 11, 13,....., 9, 5, 14 2014/04/20 (Fri) 30 min. energy amount Line 1: System B Energy, 15, 9, 10,....., 12, 5, 1 2014/04/19 (Thu) Accumulation of energy Line 1: System B Energy, 12, 23, 36,....., 302, 307, 321 2014/04/20 (Fri) Accumulation of energy Line 1: System B Energy, 15, 24, 34,....., 361, 366, 367 Sp. Cons. planned value B production line, 0.45

13.3.13 Equipment graph: Daily

[Equipment group graph]

Item		Description
File name		'Graph_' + 'Min. (2 digits)' + 'Sec. (2 digits)' + '.csv'
File content		Accumulated value for each equipment
	1st line	Project name, Equipment measuring point name1,....., Equipment measuring point name 42
	2nd line	Display date 1 Name: Defective product, Defective product data of Equipment 1,....., Defective product data of Equipment 42
	3rd line	Display date 1 Name: Downtime, Downtime data of Equipment 1,....., Downtime data of Equipment 42

Specific example
Plant A, electro-deposition coating, electro-deposition drying oven, compound plating,....., vibration coating 2014/05/06 (Thu) Group A: Defective product, 23, 27, 25,....., 23 2014/05/06 (Thu) Group A: Downtime, 83, 26, 21,....., 0

[Equipment efficiency, Detail graph]

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Availability, Performance, Quality, Overall equipment efficiency, Hourly amount or 30 min. amount, Accumulated value
	1st line	Project name, 1:00, 2:00,....., 23:00, 24:00 (Logging period = 60 min.) Project name, 0:30, 1:00,....., 23:30, 24:00 (Logging period = 30 min.)
	2nd line	Display date 'Equipment efficiency' Name: Equipment name: 'Availability', Data,....., Data
	3rd line	Display date 'Equipment efficiency' Name: Equipment name: 'Performance', Data,....., Data
	4th line	Display date 'Equipment efficiency' Name: Equipment name: 'Quality', Data,....., Data
	5th line	Display date 'Equipment efficiency' Name: Equipment name: 'Overall equipment efficiency', Data,....., Data
	6th line	Display date 'Hourly amount' Name: Equipment name: 'Measure point name', Data,....., Data
	7th line	Display date 'Acc.' Name: Equipment name: 'Measure point name', Data,....., Data
		: :
	11th line	Display date 'Hourly amount' Name: Equipment name: 'Measure point name', Data,....., Data
	12th line	Display date 'Acc.' Name: Equipment name: 'Measure point name', Data,....., Data

*1 When the logging period is 30 min, 'Hourly amount' is changed to '30 min. amount'.
When the logging period is 15 min, 'Hourly amount' is changed to '15 min. amount.'

Specific example when logging period is 60 min.

```
Plant A, 1:00, 2:00, 3:00,....., 22:00, 23:00, 24:00
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Availability, 0, 100, 91.666,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Performance, 0, 8, 888, 36,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Quality, 0, 90, 100,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Overall equipment efficiency, 0, 8,
33.333,....., 0
2014/05/06 (Thu) Hourly amount Group A: Electro-deposition coating: Energy, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: Energy, 23, 50, 75,....., 587, 605, 628
      :
      :
2014/05/06 (Thu) Hourly amount Group A: Electro-deposition coating: No. of stops, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: No. of stops, 23, 50, 75,....., 587605628, 23
```

Specific example when logging period is 30 min.

```
Plant A, 0:30, 1:00, 1:30,....., 23:00, 23:30, 24:00
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Availability, 0, 100, 91.666,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Performance, 0, 8, 888, 36,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Quality, 0, 90, 100,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Overall equipment efficiency, 0, 8,
33.333,....., 0
2014/05/06 (Thu) 30 min. amount Group A: Electro-deposition coating: Energy, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: Energy, 23, 50, 75,....., 587, 605, 628
      :
      :
2014/05/06 (Thu) 30 min. amount Group A: Electro-deposition coating: No. of stops, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: No. of stops, 23, 50, 75,....., 587, 605, 628
```

Specific example when logging period is 15 min.

```
Plant A, 0:15, 0:30, 0:45,....., 23:30, 23:45, 24:00
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Availability, 0, 100, 91.666,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Performance, 0, 8, 888, 36.364,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Quality, 0, 90, 100,....., 0
2014/05/06 (Thu) Equipment efficiency Group A: Electro-deposition coating: Overall equipment efficiency, 0,
8,33.333,.....,0
2014/05/06 (Thu) 15 min. amount Group A: Electro-deposition coating: Energy, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: Energy, 23, 50, 75,....., 587, 605, 628
      :
2014/05/06 (Thu) 15 min. amount Group A: Electro-deposition coating: No. of stops, 23, 27, 25,....., 35, 18, 23
2014/05/06 (Thu) Acc. Group A: Electro-deposition coating: No. of stops, 23, 50, 75,....., 587, 605, 628
```

13.3.14 Demand trend graph: Annual

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Max demand of a month, max demand of a month (ctrl time limit)
	1st line	Project name, Year/month,....., Year/month
	2nd line	From YYYY/MM 'Max demand of a month Whole day Demand', Data,....., Data
	3rd line	From YYYY/MM 'Max demand of a month (ctrl time limit) Whole day Demand', Data,....., Data

YYYY/MM: Data starting year/month (year/month selected for the display date on the demand trend graph screen - 1 year)

Specific example when 2014/01 is selected for display date
Building A, 2013/01, 2013/02,....., 2013/12, 2014/01 From 2013/01 Max demand of a month Whole day Demand, 125, 118,....., 129, 131 From 2013/01 Max demand of a month (ctrl time limit) Whole day Demand, 2013/01/31 14:00, 2013/02/04 15:00,....., 2013/12/15 13:00, 2014/01/22 16:00

13.3.15 Demand trend graph: Monthly

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Max demand of a day
	1st line	Project name,,,,,1st, 2nd,....., end of month
	2nd line	From YYYY/MM 'Max demand of a day Whole day Demand', Data,....., Data

YYYY/MM: Year/month selected for the display date on the demand trend graph screen

Specific example when 2014/04 is selected for display date
Building A, 1st, 2nd,....., 29th, 30th 2014/04 Max demand of a day Whole day Demand, 125, 118,....., 129, 131

13.3.16 Demand trend graph: Daily

Item		Description
File name		'Graph_' + Min. (2 digits) + Sec. (2 digits) + '.csv'
File content		Demand for each demand time limit
	1st line	[When the demand time limit is 15 min.] Project name, 0:00-0:15, 0:15-0:30,....., 23:30-23:45, 23:45-24:00 [When the demand time limit is 30 min.] Project name, 0:00-0:30, 0:30-1:00,....., 23:00-23:30, 23:30-24:00 [When the demand time limit is 60 min.] Project name, 0:00-1:00, 1:00-2:00,....., 22:00-23:00, 23:00-24:00
	2nd line	[When the demand time limit is 15 min.] Display date '15 min. demand Whole day Demand', Data,....., Data [When the demand time limit is 30 min.] Display date '30 min. demand Whole day Demand', Data,....., Data [When the demand time limit is 60 min.] Display date '60 min. demand Whole day Demand', Data,....., Data
	3rd line	Display date 'Target demand Whole day Demand', Data,....., Data
	4th line	Display date 'Fixed alarm value Whole day Demand', Data,....., Data

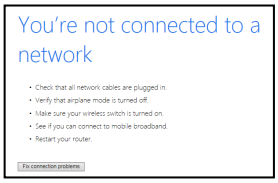
Specific example when the demand time limit is 15 min.
Building A, 0:00-0:15, 0:15-0:30,....., 23:30-23:45, 23:45-24:00 2014/08/11 (Mon) 15 min. demand Whole day Demand, 10, 12,....., 14, 12 2014/08/11 (Mon) Target demand, 20, 20,....., 20, 20 2014/08/11 (Mon) Fixed alarm value, 18, 18,....., 18, 18

Specific example when the demand time limit is 30 min.
Building A, 0:00-0:30, 0:30-1:00,....., 23:00-23:30, 23:30-24:00 2014/08/11 (Mon) 30 min. demand Whole day Demand, 10, 12,....., 14, 12 2014/08/11 (Mon) Target demand, 20, 20,....., 20, 20 2014/08/11 (Mon) Fixed alarm value, 18, 18,....., 18, 18

Specific example when the demand time limit is 60 min.
Building A, 0:00-1:00, 1:00-2:00,....., 22:00-23:00, 23:00-24:00 2014/08/11 (Mon) 60 min. demand Whole day Demand, 10, 12,....., 14, 12 2014/08/11 (Mon) Target demand, 20, 20,....., 20, 20 2014/08/11 (Mon) Fixed alarm value, 18, 18,....., 18, 18

13.4 Troubleshooting

This section describes corrective actions for error or failure during operation of EcoWebServerIII.
If an error occurs during operation of OS or other applications or if a message is displayed, refer to the manual of OS or application.

Item	Error details/questions	Point to be checked	Reference
Overall display	Screen is not displayed. Communication error message is displayed. 	Check if the IP address of the EcoWebServer entered in URL matches the IP address set for the EcoWebServer main unit.	Hardware, Operation Manual [7.2 Checking the IP address]
		Check if the PC IP address is correct.	2.2 Set Your PC's IP Address
		Access may go through the proxy server. Change the setting which does not go through the proxy server.	2.3.1Set with no proxy server used
		The number of units which can be connected simultaneously may be exceeded. Try access again some time later.	-
		Check if the LAN cable is connected.	Hardware, Operation Manual [8. Connection diagram]
		Check if the compact flash memory card is attached to the EcoWebServerIII main unit.	-
	Graph is not displayed.	Check if the Web browser security settings are correct.	2.3.2 Add to [Local intranet] sites
	Screen loading cannot be completed with the display of "Loading ..." displayed.	It is possible that the Web server is temporarily unresponsive while overloaded. Please refresh the display after a while.	-
	The screen layout collapses and is displayed.		
	The screen is not displayed and it is displayed in pure white.	The web server may be overloaded and not responding. Reset the EcoWebServerIII. If the same phenomenon occurs repeatedly, consider operating with a smaller number of display clients.	Hardware Manual [12.1 Reset of the product]
Change of settings	Settings are changed, but the display is not updated.	The cache function of the web browser may be valid. After change of settings, close the browser and reboot the PC.	2.3.3 Change the temporary Internet file settings
Current value monitor	After clicking the display button, the measuring value is not displayed.	Check if a measuring error has occurred. Occurrence of a measuring error can be checked with the system log.	4.187 Data Files: System Log
	Although measuring point ID is input in the point list, the measuring point data is not displayed.	The measuring point which can be displayed at a time is 10 points. If 10 points or more are input, change the page for display.	4.5 Monitor: Current Value
	Communication error is displayed.	Check the LAN cable or network status for appropriate communication.	Hardware, Operation Manual [8. Connection diagram]

Item	Error details/questions	Point to be checked	Reference
		The number of units (5 units) which can be connected simultaneously may be exceeded. Try access again some time later.	-
		Check if the EcoWebServerIII main unit is being reset. During resetting, STA. LED of the EcoWebServer main unit is ON or blinking. Communication is disabled during resetting.	-
Measuring value	Min Cal of the measuring data is different from the terminal display. Only specific measuring items cannot be measured.	The terminal model information (phase/wire system, rated voltage and rated current) set in the software is not correct. Set the model information to the settings of the main terminal.	Settings, Operation Manual [Registration of 4.5.1 CC-Link terminal]
Measuring error	Measuring error has occurred.	Check if the power of the terminal with the measuring error is ON.	-
		Check if the address of the terminal with the measuring error conforms to the set address. Set content can be viewed on the measuring point list screen.	"11.2 Confirm the Settings of Measuring Points and Groups"
Operation history	It takes time from change of the operating state to recording in the operation history.	Although it depends on the number of measuring points registered, time lag of about 1 minute in the worst case may occur from change of the operating state to recognition by the EcoWebServerIII.	-
	It takes time from change of the operating state to arrival of e-mail.	Although it depends on the number of measuring points registered, time lag of about 1 minute in the worst case may occur from change of the operating state to recognition by the EcoWebServerIII. Then, an e-mail is sent through the SMTP (mail) server. Time lag additionally occurs. Do not monitor the circuit requiring emergency.	-
Monitoring notify-cation for upper and lower limit	It takes time from error of upper and lower limit to arrival of e-mail.	Although it depends on the number of measuring points registered, time lag of about 1 minute in the worst case may occur from upper and lower limit to recognition by the EcoWebServerIII. Then, an e-mail is sent through the SMTP (mail) server. Time lag additionally occurs. Do not monitor the circuit requiring emergency.	-
Contact output	Although the conditions of contact output are satisfied, the contact is not ON.	When the output type is one-shot (10 sec.) and the contact is OFF after 10 seconds, the contact cannot be ON until the conditions are satisfied again after the contact output conditions are recovered.	[8.2 Turning OFF the Contact for Alarm Output] [8.3 Control the Contact for Demand Load Control]
		When the output type is interlocked and the contact is manually OFF, the contact cannot be ON until the conditions are satisfied again after the contact output conditions are recovered.	

Item	Error details/questions	Point to be checked	Reference
	After the contact output conditions are satisfied, the contact cannot be ON immediately.	Although the contact output conditions are satisfied, the contact output cannot be performed immediately. If manual control is performed, the contact state cannot be immediately changed. Wait for about 10 seconds. Do not use it for control requiring emergency.	
	Although the contact OFF button was clicked from the manual control screen, contact OFF cannot be immediately implemented.		
Time change	[Setting condition] is not displayed on time set function.	When connection to the SNTP server is disabled, - is displayed. Check connection to the SNTP server.	-
Demand value monitor	Change setting (such as demand target value, demand calendar), demand setting list is reflected, but demand value monitor is not reflected.	Setting changes are immediately reflected in the demand set list screen, and monitoring the demand using setting value after the change that is from the next demand time limit. Therefore, it is reflected to the demand value monitor screen from the next demand time limit.	-
	Communication error is displayed.	Check the LAN cable or network status for appropriate communication.	Hardware, Operation Manual "8. Connection diagram"
		The number of units (5 units) which can be connected simultaneously may be exceeded. Try access again some time later.	-
		Check if the EcoWebServerIII main unit is being reset. During resetting, STA. LED of the EcoWebServer main unit is ON or blinking. Communication is disabled during resetting.	-
Data file	When displayed on the browser, it is garbled.	Depending on the browser type, characters may not be displayed correctly. Please press F5 key on the browser (screen update) or save it as a file and open it with spreadsheet software, text editor.	-
	Can’t open the downloaded file by tablet PC.	Make sure that the software to support the downloaded file (csv, log and etc.) is installed on the tablet.	-
Version up	There is invalid display layout after version up.	Please clear the browser cache, reopen the browser, and confirm again.	-

Mitsubishi Energy Saving Data Collecting Server EcoWebServerIII

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