# OMRON

# SNMP/Web Card SC20G2

# Operation Manual

Detailed setting

# Introduction

Thank you for purchasing the OMRON SNMP/Web card lately

## ■ Corresponding model

- This product is equipment which makes network connection possible by inserting in the slot of the OMRON uninterruptible power supply (UPS).

## ■ Functional feature

- By inserting this product in an uninterruptible power supply (UPS), status acquisition from an uninterruptible power supply (UPS) and command issue to an uninterruptible power supply (UPS) are enabled.
- By inserting this product in an uninterruptible power supply (UPS), an uninterruptible power supply (UPS) is manageable even from the personal computer which does not carry a serial port.

## ■ Offer of automatic shutdown software

- Automatic shutdown software is enclosed by this product. (Please look at the newest information by our homepage.)
- It is possible to shut down by setup in the following cases.
  - When a main power supply system is downed
  - When the battery of an uninterruptible power supply (UPS) falls
  - When the connection capacity of an uninterruptible power supply (UPS) exceeds
  - When the temperature of an uninterruptible power supply (UPS) rises
- Automatic shutdown software and a script shutdown can perform schedule operation.
- A computer can be safely suspended by automatic shutdown software and script shutdown.

## ■ License for automatic shutdown software

- You can use this product for two or more computers which perform shutdown via a network by installing it.

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### ■ About export of this product
When you wish issue of parameter sheet, please apply to our homepage.

.[Homepage address]

https://socialsolution.omron.com/jp/ja/products_service/ups/support/export.html

In the case of an inquiry, the serial number of this product is required.
I have indicated the serial number (S/N) on the seal of pasting at the container box side or the main part base back.
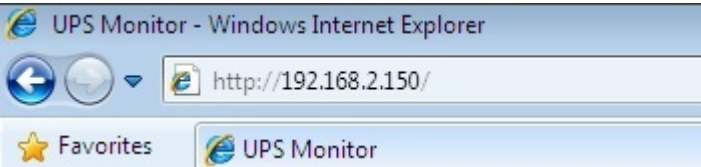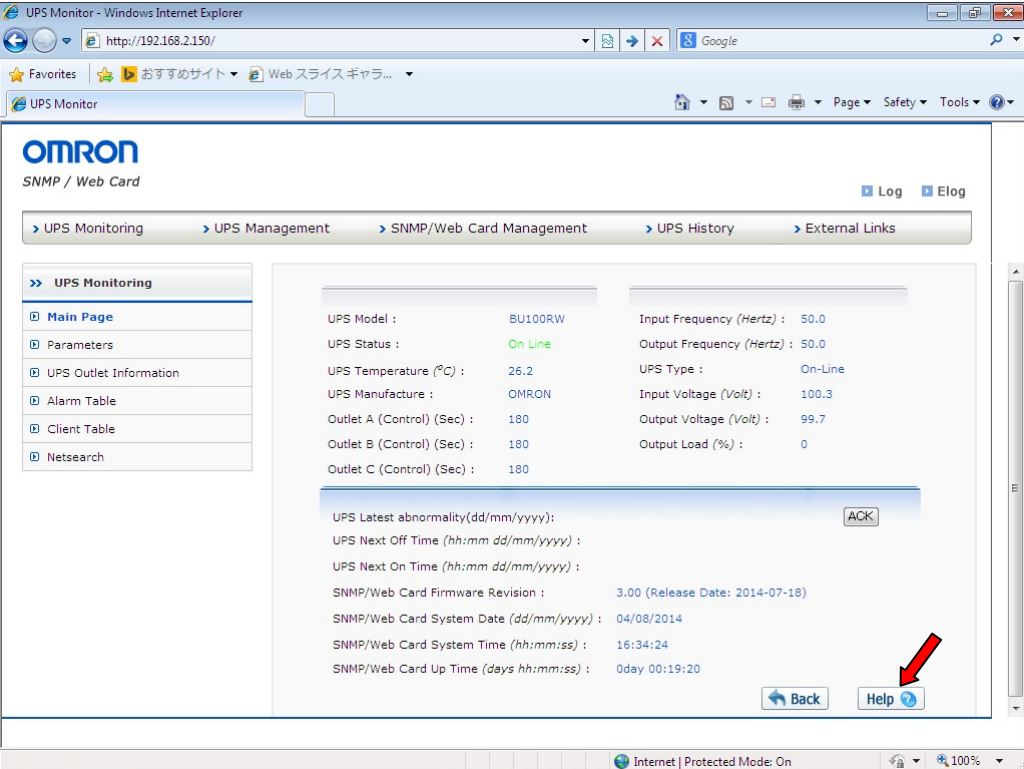
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# Table of contents

# 1. Management by a web browser

## 1.1. How to use the setting screen

### ■ Display procedure of setting screen

| | |
|---|---|
| **1** | Please start a web browser. |
| **2** | Please input the IP address of a SNMP/Web card into an address bar. (Example: When an IP address is 192.168.2.150)<br><br>About the setting method of the IP address of a SNMP/Web card, Please refer to "3.3 Network Configuration Method 2 :via Telnet " or " 3.2 Network Configuration Method 1: via serial port "of installation section in operation manual. |
| **3** | The screen for a setup of a SNMP/Web card is displayed.<br>In order to check the detailed information of each screen, click [Help] under a screen.<br>Please click the menu of the upper part and left-hand side to check other setting items. |

## 1.2. [UPS Monitoring] Menu

・ The information about an uninterruptible power supply (UPS) is displayed.
・ The user can browse all those sub menus by read-only.

### ■ [Main Page] Menu

・ The basic operating state of the present uninterruptible power supply (UPS) is displayed by list.
・ In order to set up the update time of this screen, please carry out by [SNMP/Web card management] -[SNMP/Web card configuration] - [Page Refresh Rate (Sec)].

The detail description of a screen

1. **UPS Model**
   The Model of an uninterruptible power supply (UPS) is displayed.
   Example: BN150S Etc.

2. **UPS Status**
   The present operating state of an uninterruptible power supply (UPS) is displayed as follows.

   - **On Line**
     An input power source state is normal and is in the state currently operated normally.

   - **Standby**
     It is in the state after a shutdown. An input power source is normal.

   - **UPS Power Off**
     The uninterruptible power supply (UPS) is turned off.

   - **Bypass**
     It is a state that is output in bypass operation. Operating status only uninterruptible power supply (UPS) of the regular Inverter type

   - **Backup**
     It is a state that is moved to the backup operation by input power failure.

   - **Test**
     It is a function test or battery test.

   - **UPS Fail**
     This is a state in which some abnormality is detected in uninterruptible power supply (UPS).

   - **UPS not Found**
     SNMP / Web card cannot communicate with the uninterruptible power supply (UPS).

3. **UPS Temperature (℃)**
   Displays the temperature of internal uninterruptible power supply (UPS).

4. **UPS Manufacture**
   "OMRON" is displayed.

5. **Outlet A/B/C(Control)(sec)**
   Display the used time of each output of the uninterruptible power supply (UPS).

6. **Input Frequency**
   The present input frequency is displayed.

7. **Output Frequency**
   The present output frequency is displayed.

8. **UPS Type**
   The power supply system of the uninterruptible power supply (UPS) is displayed as one of the [Regular] or [Regular Inverter]. Uninterruptible power supply line interactive type (UPS) will be displayed at [Regular].

9. **Input Voltage**
   The present input voltage is displayed.

10. **Output Voltage**
    The present output voltage is displayed.

11. **Output Load**
    The present connection capacity is displayed.

| | |
|---|---|
| **INFORMATION** | **12.** UPS latest abnormality<br>Last abnormality of UPS and time are displayed.<br>**13.** ACK<br>Recovery notice of UPS last abnormality is issued by SNMP, Syslog, Mail.<br>**14.** UPS Next Off Time<br>The schedule of the next uninterruptible power supply (UPS) power supply Off by schedule operation setup is displayed.<br>**15.** UPS Next On Time<br>The schedule of the next uninterruptible power supply (UPS) power supply On by schedule operation setup is displayed.<br>**16.** SNMP/Web Card Firmware Revision<br>It is a version of firmware.<br>**17.** SNMP/Web Card System Date<br>A system date setup of a SNMP/Web card is displayed.<br>**18.** SNMP/Web Card System Time<br>A system time setup of a SNMP/Web card is displayed.<br>**19.** SNMP/Web Card Up Time<br>The total operating time after a SNMP/Web card starts is displayed. |

## ■ [Parameters] Menu

・ Each state of the input power, output power and a battery of the present uninterruptible power supply (UPS) is displayed.
・ This page is automatically updated in [Page Refresh Rate (Sec)] time which can be set up at [SNMP/Web card management].

**INFORMATION**

The detail description of a screen

**[**Output Parameters**]**
1. Output Source
   The source of output power is displayed in the following state. [on line], [bypass], [battery],[no output]
2. Output Frequency
   The present output frequency is displayed.
3. Output Voltage
   The present output voltage is displayed.
4. Output Load
   The connected-load capacity of the present uninterruptible power supply (UPS) is displayed by "%".
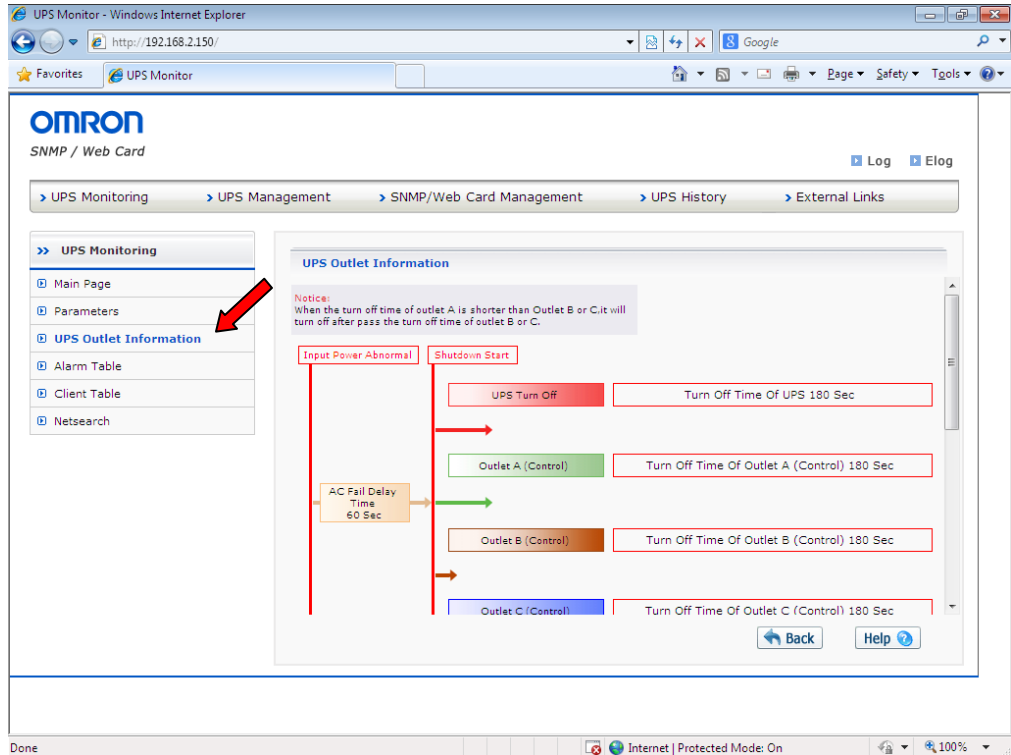
**[**Input Parameters**]**
1. Input Voltage
   The present input voltage is displayed.
2. Max.Input Voltage Last 1 minute
   The maximum input voltage for 1 minute to this time is displayed.
3. Min.Input Voltage Last 1 minute
   The minimum input voltage for 1 minute to this time is displayed.
4. Input Frequency
   The present input frequency is displayed.

**[**Battery Parameters**]**
1. Battery Status
   The state of a battery is displayed by the following contents.
   [ Normal],[Battery Low],[Discharging],[Battery aging],[Not Connected]
2. Time since on Battery Power
   The time which is operating by battery power is displayed.
3. Battery Capacity Remaining
   The remaining battery capacity of the present to a full charge state is displayed.
4. Current Battery Voltage
   The voltage of the present battery is displayed.
5. UPS Temperature(℃)
   The temperature inside an uninterruptible power supply (UPS) is displayed.
6. Battery Last Replaced Date
   It is the date which started (exchange) to use the battery of the uninterruptible power supply (UPS). When battery exchange is newly performed, please reset up on a [SNMP/Web card management]-[SNMP/Web card configuration] screen.
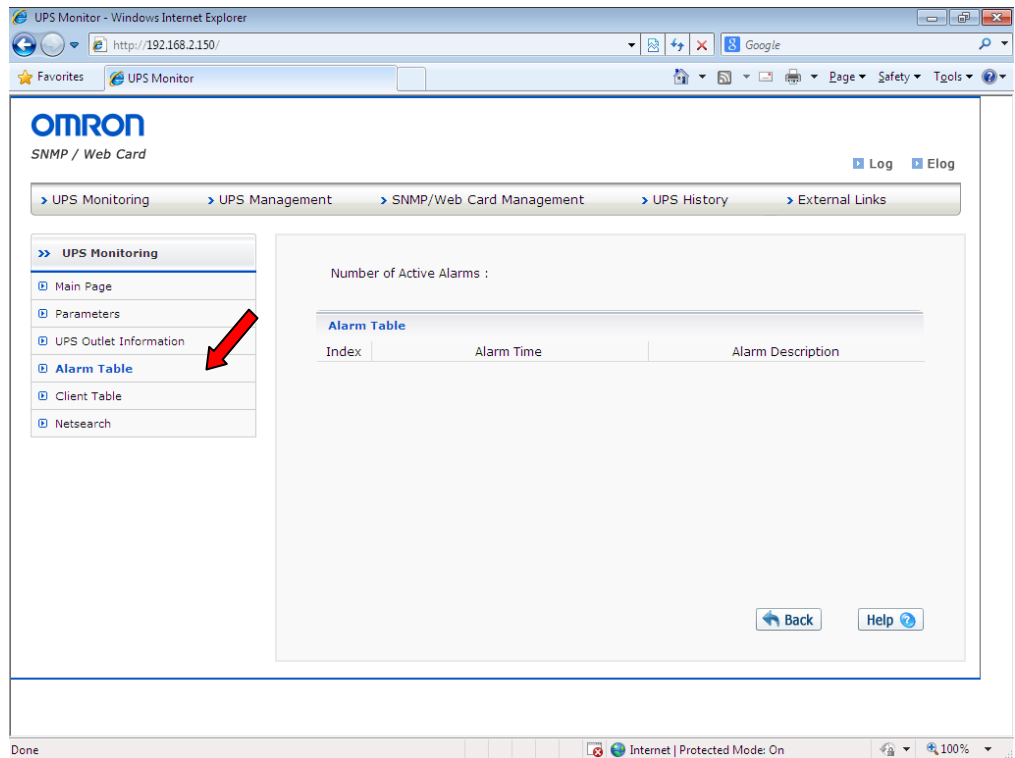
# ■ [UPS Outlet Information] Menu

・ The time chart to the uninterruptible power supply (UPS) shutdown set up by a shutdown setup and an uninterruptible power supply (UPS) outlet control function can be displayed according to an each outlet.

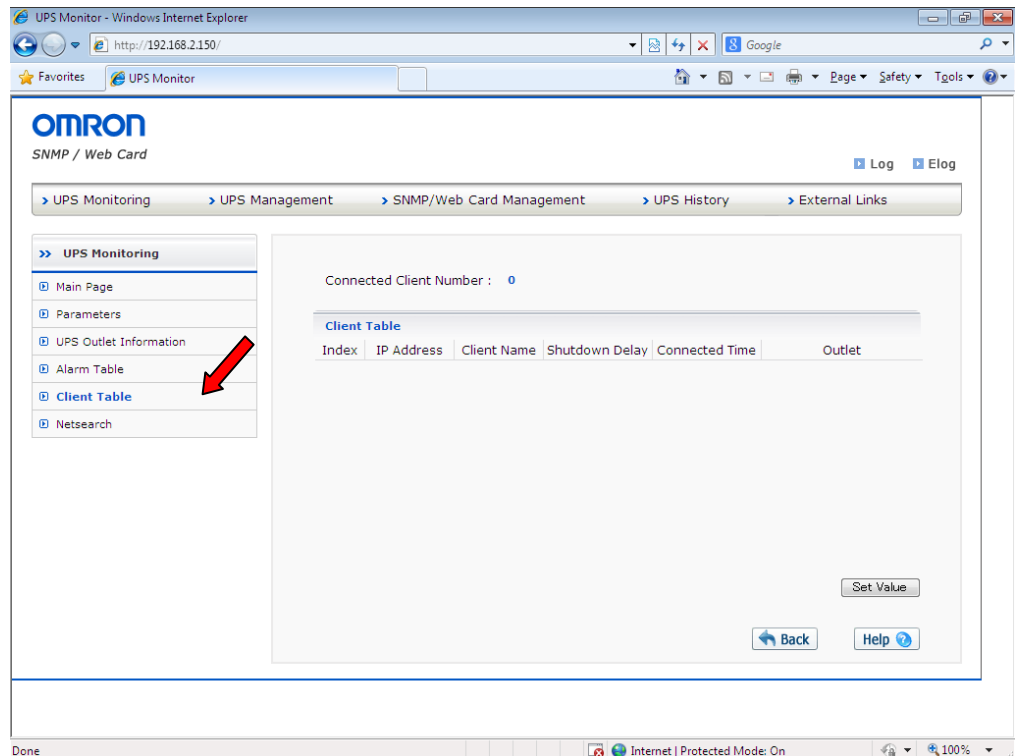・ Overall operation of each outlet is checked with this chart.



| | The detail description of a screen |
|---|---|
| INFORMATION | **1.** UPS Outlet Information　The time chart according to outlet is displayed. This screen is only a display. |

## ■ [Alarm Table] Menu

- ・ The state of alarm (buzzer) is displayed.
- ・ This page is automatically updated in [Page Refresh Rate] time which can be set up by a [SNMP/Web card configuration].



| | INFORMATION | The detail description of a screen |
|---|---|---|
| | | **1.** Number of Active Alarms<br>The number of factors with which the present alarm is sounded is displayed.<br>**2.** Alarm Time<br>The time that each alarm was sounded.<br>Display time follows a setup of a SNMP/Web card.<br>**3.** Alarm Description<br>It is a factor of sounding the alarm.<br>For the past alarms, it is stored in the log. |

## ■ [Client Table] Menu

・ The information about the client and server on the network where automatic shutdown software is operating is displayed by list
・ A client is the computer which the shutdown agent is operating and is registered on the SNMP/Web card. If the IP address of the uninterruptible power supply (UPS) is set to automatic shutdown software, registration will be performed automatically.



| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Connected Client Number<br>It is the number of clients under present operation.<br>**2.** IP Address<br>It is an IP address of a client.<br>**3.** Client Name<br>It is a computer name of a client.<br>**4.** Shutdown Delay<br>It is processing time required in order to terminate the application set as the shutdown of a client. Please refer to the [uninterruptible power supply (UPS) management]-[shutdown setting] for the time setting of a shutdown.<br>**5.** Connected Time<br>The time when a client registered into the SNMP/Web card is displayed.<br>**6.** Outlet<br>Displays the outlet of the uninterruptible power supply (UPS) to which the client is connected. |

# ■ [Netsearch] Menu

・ The PowerAct Pro agent on a network and a list of a SNMP/Web card are displayed.



| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Master / Slave Group<br>　Master:　The computer name which has installed SC20G22 or the master agent of PowerActPro is displayed.<br>　Slave:　The computer name which has installed the slave agent of PowerActPro is displayed.<br>**2.** Model<br>　UPS model is displayed.<br>**3.** UPS Status<br>　The state of UPS is displayed.<br>**4.** Battery Status<br>　The state of a battery is displayed.<br>**5.** Communication Status<br>　A communication state is displayed. |

# 1.3. [UPS Management] Menu

- The controllable parameter information on an uninterruptible power supply (UPS) that the SNMP/Web card was inserted is displayed and set up.
- The user can browse all those sub menus by read-only.
- Read-write access is granted only to the system administrator.

## ■ [UPS Configuration] Menu

- Display and set the main operation of uninterruptible power supply (UPS).

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Input Voltage<br> It is rated input voltage.<br>**2.** Input Frequency<br> It is rated input frequency.<br>**3.** Output Voltage<br> It is rated output voltage.<br>**4.** Output Frequency<br> It is rated output frequency.<br>**5.** Output VA<br> It is maximum output capacity (VA display).<br>**6.** Over Temperature Set Point<br> It is a maximum of the operative temperature of an uninterruptible power supply (UPS). When the temperature of an uninterruptible power supply (UPS) exceeds this value, a SNMP/Web card operates an uninterruptible power supply (UPS) according to a setup of an uninterruptible power supply (UPS) shutdown menu.<br>**7.** Over Load Set Point<br> It is a maximum of the load of an uninterruptible power supply (UPS). When the connection capacity of an uninterruptible power supply (UPS) exceeds this value, a SNMP/Web card operates an uninterruptible power supply (UPS) according to a setup of an uninterruptible power supply (UPS) shutdown menu.<br>**8.** Voltage Detect Level (Only line interactive type)<br> The voltage sensitivity of an uninterruptible power supply (UPS) is set up by normal sensitivity or low sensitivity.<br>**9.** Output Mode (Only line interactive type)<br> The output voltage of an uninterruptible power supply (UPS) is set up by 115V or 100V.<br>**10.** Buzzer<br> It is a setup of the buzzer operation of uninterruptible power supply (UPS).<br>**11.** All Buzzer Function<br> The enable/disable of all the buzzer functions is set up (There is also a model that cannot be set by the UPS) |

# ■ [UPS Control] Menu

- The immediate stop and reboot of an uninterruptible power supply (UPS) can be performed.
- Some items can browsed by the access authority holder which can be read and written.

Before login



After login



14

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Shutdown Immediately<br>Immediate halt of an uninterruptible power supply (UPS) is performed. After clicking execute, UPS will stop after [UPS shutdown delay time] that appears at the bottom. The client shuts down immediately.<br>**2.** Restart UPS<br>An uninterruptible power supply (UPS) is rebooted. After clicking execute, UPS will stop after [UPS shutdown delay time] that appears at the bottom. In addition, UPS will start after a lapse of [UPS restart delay time]. The client shuts down immediately. The client shuts down immediately.<br>**3.** Delay Time for UPS Reboot<br>Time to hold the Off state at the time of reboot is set up.<br>**4.** UPS Shutdown Delay Time<br>The delay time to an uninterruptible power supply (UPS) stop is set up after clicking execute. It becomes a common setting of [UPS management] - [shutdown setting] screen.<br>**5.** Turn On UPS/Cancel UPS Shutdown<br>The halt condition of an uninterruptible power supply (UPS) is canceled and started. When power supply Off is manually carried out from the front panel of an uninterruptible power supply (UPS), it cannot start by this setup.<br>**6.** Buzzer Test<br>A buzzer is immediately sounded for about 1 second.<br>**7.** Outlet B/C(control)<br>The output of the outlet B and C of an uninterruptible power supply (UPS) is controlled.<br>**8.** UPS cold start function<br>Set whether to enable the cold start function of uninterruptible power supply (UPS)<br>**9.** Maximum Backup Time for AC Fail<br>Backup time of the UPS is set when an abnormality occurs in the power input of the uninterruptible power supply (UPS) |

## ■ [UPS Test] Menu

・ A battery test and a function test are set up.
・ A short-time (about 10 seconds) simple battery test is included in a function test.
・ Some items can browsed by the access authority holder which can be read and written.

Before login



After login

| | |
|---|---|
| **INFORMATION** | The detail description of a screen<br><br>[Battery Auto Test]<br>**1.** Battery Auto Test<br>Enable/disable of the automatic battery test of once every four weeks is set. Battery test is not done if it is disabled.<br>**2.** Last Test Start Time<br>It is the implementation date and time of the last battery test.<br>**3.** Last Test Result<br>It is the last battery test result.<br><br>[Self Test]<br>**1.** Self Test<br>The enable/disable of a test is set up.<br>**2.** Last Test Start Time<br>It is the implementation date of the previous test.<br>**3.** Last Test Result<br>It is the last battery test result.<br><br>[Backup Time Test] (Only line interactive type)<br>**1.** Backup Time Test<br>The enable/disable of a test is set up.<br>**2.** Last Test Start Time<br>It is the implementation date of the previous test.<br>**3.** Last Test Result<br>It is the last battery test result. |

# ■ [UPS Test Schedule] Menu

・ The schedule for a test is displayed and set up.

Before login



After login

| | |
|---|---|
| **INFORMATION** | The detail description of a screen<br><br>**1.** Test Day<br>Please set up a test execution day in a week.<br>**2.** Test Time<br>Please set the test execution time.<br><br>**3.** Test Action<br>Please specifies one of the following whether you carry out the self-test.<br>   • Backup time test<br>     A backup time test is done.<br>   • Self test<br>     A self-diagnosis test is done. |

# ■ [Shutdown Setting] Menu

・ The parameter at the time of performing the shutdown of a computer and a stop of an uninterruptible power supply (UPS) is set.

Before login



After login

・ [Shutdown Event]

The classification of an event is displayed.

| | The detail description of a [Shutdown Event] |
|---|---|
| **INFORMATION** | **1.** AC Failed<br>They are the abnormalities of the input power source represented by power failure.<br>**2.** Battery Low<br>It is the charge capacity decreasing of the battery.<br>**3.** UPS Overload<br>The capacity of connection apparatus exceeds the connection capacity maximum of a [UPS management] - [UPS configuration] page.<br>**4.** UPS Over Temperature<br>It is a case where the internal temperature of an uninterruptible power supply (UPS) exceeds the operative temperature maximum of a [UPS management]-[UPS configuration] page.<br>**5.** Weekly Schedule<br>It is a schedule in a week.<br>**6.** Special Day<br>It is a schedule of a special day. |

・ Shutdown Actions

The operation at the time of each event occurring is displayed and set up.

| | A detail description of [Shutdown Actions] |
|---|---|
| **INFORMATION** | **1.** Disabled<br>Nothing operates.<br>**2.** Warning<br>A warning message is transmitted to a client.<br>A shutdown, a stop, etc. are not performed.<br>**3.** Client Shutdown<br>A shutdown command is sent out to a client computer.<br>A stop of an uninterruptible power supply (UPS) is not performed.<br>**4.** UPS Turn Off<br>An uninterruptible power supply (UPS) stop is performed after a client shutdown. |

・ [Warning Period]
The waiting time after event generating is set up. Warning is issued to a client by set up during this time. It goes into shutdown operation by setup after waiting time.

・ [1st Warning]
It set the time until sending the first warning after an event has occurred.

・ [Warning Interval]
The sending interval of warning is set up. The minimum is 3.

・ [UPS Shutdown Delay Time]
It is the time to the stop of an uninterruptible power supply (UPS) after warning period elapsed. Please set up sufficiently the time for client shutdown

・ [AC Restore/ AC Reboot]
It reboots, when a power supply is restored, after the input power source of an uninterruptible power supply will be failed and it will stop, if set up enabled. When you hold a power supply OFF state then, please set up invalid. It may be unable to change depending on a model.
・ [Renewal of UPS restart condition after AC recover]
It is specified whether UPS reboot conditions can be renewed or not.
・ [UPS restart condition]
Battery capacity and UPS initiation delay time are specified.
・ [Battery Level (%)]
Required charging capacity is set up at a start-up. When the power down occurred immediately after, unless there is sufficient capacity for a shutdown, since it is dangerous, it does not start, unless charge is completed to specification capacity.
・ [Output Start Delay Time of UPS Boot Up]
Please set up time until the outlet output from the power-on of an uninterruptible power supply (UPS).

■ **Operation in a client shutdown / uninterruptible power supply (UPS) stop**
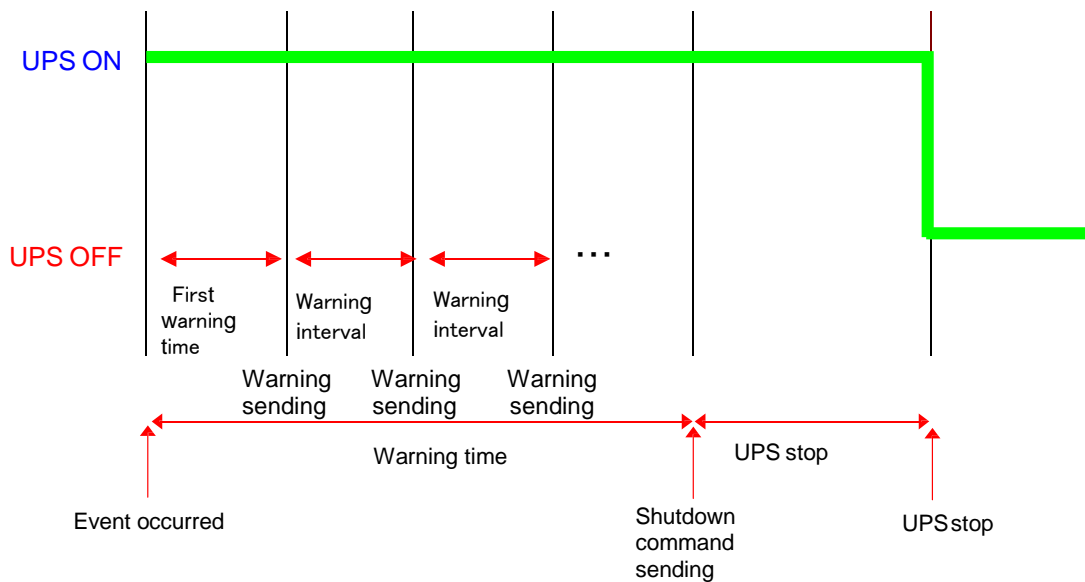
## ■ [UPS Information] Menu

- The information on an uninterruptible power supply (UPS) is displayed.



| INFORMATION | The detail description of a screen |
|---|---|
| | **1.** UPS Model<br>It is the model of an uninterruptible power supply (UPS).<br>**2.** UPS Serial Number<br>It is the SN of an uninterruptible power supply (UPS).<br>**3.** Latest Battery Replace Date<br>It is the last battery exchange day.<br>**4.** Battery Unit<br>It is the number of battery unit of uninterruptible power supply (UPS).<br>**5.** UAS0<br>It is the maintenance information about UPS.<br>**6.** UOS<br>It is the maintenance information about UPS.<br>**7.** DIC<br>It is the maintenance information about UPS.<br>**8.** RRTC<br>It is the maintenance information about UPS.<br>**9.** TOT ?<br>It is the maintenance information about UPS.<br>**10.** TBN ?<br>It is the maintenance information about UPS.<br>**11.** UAS<br>It is the maintenance information about UPS. |

## ■ [UPS Remote Shutdown] Menu

・ The remote shutdown with multiple uninterruptible power supplies (UPS)  is set up.
It is used when backing up an uninterruptible power supply (UPS) and storage with a respectively different uninterruptible power supply (UPS).

Before login



After login

The detail description of a screen

1. **UPS-UPS Shutdown**
   The enable/disable of an uninterruptible power supply (UPS) remote shutdown is set up.
2. **Work as master/slave UPS**
   It specifies that which is used for this UPS between the master(UPS) or the slave(UPS). A master is only one set although it is possible to cooperate as one group and to operate two or more sets (UPS) of uninterruptible power supplies.
3. **Event Occurs on Master/Slave UPS**
   It set the operation when a shutdown event occurs in uninterruptible power supply (UPS) of only one of either.
4. **Notify Master UPS / Ignore information from Slave UPS**
   By setup, only a master or a slave uninterruptible power supply (UPS) goes into stop operation.
   The operation in the case of a stop follows a shutdown setting.
5. **Notify ALL**
   All the uninterruptible power supplies (UPS) that have a cooperation relation (a master, slave relations) go into stop operation.
   In any case, stop operation follows a shutdown setting.
6. **UPS Master(IP Address)**
   The IP address of a master uninterruptible power supply (UPS) is set up. If set up correctly, it will register with the client table of a master uninterruptible power supply (UPS).

Please refer to a [2.6 setup of a remote shutdown] about details of operation.

## ■ [Weekly Schedule] Menu

- ・ A schedule setup in a week unit is performed.
- ・ Please determine operation on a [UPS management]-[shutdown setting] screen after a setup by this page.
- ・ When set up correctly, it is displayed on [UPS monitor]-[UPS main page] as a UPS next Off/On time.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Shutdown day<br>The day which halts an uninterruptible power supply (UPS) is set up per day of the week.<br>**2.** Shutdown Time<br>The time which halts an uninterruptible power supply (UPS) is set up.<br>**3.** Restart Day<br>The day which starts an uninterruptible power supply (UPS) is set up per day of the week.<br>**4.** Restart Time<br>The time which starts an uninterruptible power supply (UPS) is set up. |

## ■ [Special Day Schedule] Menu

・ A schedule setup of a special day is performed.
・ Please determine operation on a [UPS management]-[shutdown setting] screen after a setup by this page.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** Shutdown day<br>The day which halts an uninterruptible power supply (UPS) is set up.<br>**2.** Shutdown Time<br>The time which halts an uninterruptible power supply (UPS) is set up.<br>**3.** Restart Day<br>The day which starts an uninterruptible power supply (UPS) is set up.<br>**4.** Restart Time<br>The time which starts an uninterruptible power supply (UPS) is set up. |

# 1.4.  [SNMP/Web Card Management] Menu

・ The information about the control parameter of a SNMP/Web card is displayed and set up.
・ Read-write access is granted only to the system administrator.

## ■ [Date and Time] Menu

・ The system time of a SNMP/Web card is displayed and set up.

Before login



After login

| | The detail description of a screen |
|---|---|
| <br>**INFORMATION** | **1.** SNMP/Web Card System Date<br>The system day of a SNMP/Web card is displayed. Changes can be set by way of lower.<br>**2.** SNMP/Web Card System Time<br>The system time of a SNMP/Web card is displayed. Changes can be set by way of lower.<br>**3.** Synchronize with computer time<br>System time of the SNMP / Web card will be synchronized with the time on the computer. It will perform synchronization when you press the [Save]. It does not even attempt to synchronization periodically thereafter.<br>**4.** Synchronize with NTP server<br>The system time of a SNMP/Web card is synchronized with a NTP server. It synchronizes when [preservation] is pushed, and it synchronizes every 6 hours after that.<br>**5.** Set manually<br>The system time of a SNMP/Web card is set up manually. It sets up when [preservation] is pushed. |

### ■ [SNMP/Web Card Configuration] Menu

- ・ The network parameter of a SNMP/Web card is displayed and set.

Before login



After login

**INFORMATION**

The detail description of a screen

1. SNMP/Web Card MAC Address
   The Mac address of a SNMP/Web card is displayed and set up.
2. SNMP/Web Card IP Address
   The IP address of a SNMP/Web card is displayed and set up. (Input example: 192.168.2.150)
3. SNMP/Web Card Gateway Address
   A gateway address is displayed and set up.
   (Input example: 192.168.2.1)
4. SNMP/Web Card Subnet Mask
   A subnet mask is displayed and set up. (Input example: 255.255.255.0)
5. System Name
   "System Name" specified to MIB-II is displayed. Please set if necessary.
6. System Contact
   "System Contact" specified to MIB-II is displayed. Please set if necessary.
7. System Location
   "System Location" specified to MIB-II is displayed. Please set if necessary.
8. Battery Last Replaced Date
   The date the beginning of use(exchange) the battery in uninterruptible power supply (UPS). Please re-set when you make a new battery replacement.
9. History Log Interval
   This is the time interval to record log(data log) of output voltage, connected load, such as a battery capacity. The minimum value is 5 seconds.
10. Extended Log Interval
    It is a unit of time to get the extended data log. Extended data log will record minimum, maximum, and average values within a fixed time.
11. SNMP/Web Card Polling Rate
    It is the interval to update the parameters by which SNMP / Web card performs communication with the uninterruptible power supply (UPS).

| | |
|---|---|
| **INFORMATION** | **12.** Page Refresh Rate<br>It will display and set the update time of the [Uninterruptible power supply (UPS) operating state list], [battery parameters], [input parameter], [output parameter], [alarm table], [Client Table] page.<br>**13.** BootP/DHCP Status<br>It displays and sets up the enable/disable of the BootP/DHCP protocol which acquires an IP address. When you use IP by fix, please set to "enable"<br>**14.** Telnet Connection<br>Enable/disable of telnet connection are displayed and set up.<br>**15.** SNMP Function<br>Enable/disable of an SNMP function are displayed and set up.<br>**16.** SNMP Version<br>The version of SNMP used for SNMP connection is displayed and set up.<br>**17.** Network Upgrade<br>Enable/disable of the firmware upgrade via a network are displayed and set up.<br>**18.** Broadcast<br>Enable/disable of broadcasting are displayed and set up.<br>Please enable, when you use automatic shutdown software. |

■ ［**SNMP/Web Card Control**］ Menu

・ Restart (reboot) of a SNMP/Web card and reset of an internal parameter can be performed.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** SNMP/Web Card Reset to Default<br>Please choose when you reset the parameter of a SNMP/Web card to the initial value at the time of factory shipments.<br>**2.** Restart SNMP/Web Card<br>Please choose, when you restart a SNMP/Web card.<br>**3.** Same Setting With<br>Please set up the IP address of equipment which refers to the parameter of a SNMP/Web card. |

## ■ [Syslog Configuration] Menu

・ A Syslog function is displayed and set up.

Before login



After login

| | |
|---|---|
| **INFORMATION** | The detail description of a screen<br><br>**1.** Syslog<br>    Enable/disable of a Syslog function are displayed and set up.<br>**2.** Facility<br>    Facility of a Syslog function is displayed and set up.<br>**3.** Syslog server<br>    The IP address of a Syslog server is displayed and set up.<br>**4.** Map to Syslog's Severity<br>    The information level at the time of sending out to a Syslog server<br>    about information level"Severe"and "Warning" and<br>    "Informational"on a SNMP/Web card  respectively is specified. |

# ■ [Port Number Configuration] Menu

・ The port number of SNMP, HTTP, and Telnet is displayed and set up.

Before login



After login

## ■ [SNMP/Web Access Control] Menu

・ The IP address of NMS(computer) in which the read/write by SNMP/HTTP to a SNMP/Web card is enable is displayed and set up.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** NMS(NMS IP Address)<br>The IP address of NMS is displayed and set up.<br>It means not being set up in the case of 0.0.0.0.<br>(Example: When 192.168.7.255 is set up, it means that the ranges from 192.168.7.0 to 192.168.7.255 of IP address were set up)<br>**2.** Community<br>The community of the set-up IP address is set up.<br>**3.** Access Type<br>It can set up from three kinds of not access, read, read/write. |

| | Please refer to [5. About security setting ] for detailed information on how to use the access control. |
|---|---|

# ■ [SNMP V3 Access Control] Menu

・ A setup at the time of communicating using SNMP V3 is performed to SC20G22.

Before login



After login

| | |
|---|---|
| **INFORMATION** | The detail description of a screen<br><br>**1.** User Name<br>The user name set up by the SNMP manager is inputted.<br>**It may be unnecessary by the security level to set up.**<br><br>**2.** Password<br>The password set up by the SNMP manager is entered.<br>**It may be unnecessary by the security level to set up.**<br><br>**3.** Security Level<br>The security level of the user who set up can be set up from three kinds of noAuthNoPriv, authNoPriv, and authPriv. Please use the same setup as the SNMP manager that performs communication with SC20G22.<br><br>**4.** Authentication<br>An authentication method can be set up from two kinds, HMAC-MD5 and HMAC-SHA. Please use the same setup as the SNMP manager that performs communication with SC20G22.<br><br>**5.** User Status<br>It indicates whether the item can be used. |

# ■ [SNMP TRAP Receivers] Menu

- ・ The addressee of an SNMP trap is displayed and set up.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** NMS(NMS IP Address)<br>It is an IP address of NMS used as the trap receiver's address.<br>**2.** Community String<br>It is a community.<br>It can set up by a maximum of 19 characters.<br>**3.** Trap Type<br>It is a trap type which transmits. It chooses from the following and sets up.<br>・ None(No trap sending)<br>・ RFC-1628 trap<br>・ SWC trap(SNMP/Web Card trap)<br>**4.** Severity<br>The level of the trap which transmits can be set up from the following three items.<br>・ Informational :<br>All the traps are transmitted.<br>・ Warning :<br>The trap more than a Warning level is transmitted.<br>Example) When load exceeds a preset value and it changes to battery mode etc.<br>・ Severe :<br>The trap of a warning level is transmitted.<br>Example) uninterruptible power supply (UPS) failure, a battery low, etc.<br>**5.** Description<br>The information about the receiver's address can be indicated. |

## ■ [Ping Monitor Setting] Menu

・ The apparatus connected to UPS is registered, and it supervises by Ping to the IP address of apparatus, and performs a setup which controls shutdown operation of SC20G2 according to the success or failure of Ping.

Before login



After login

| | The detail description of a screen |
|---|---|
| <br>**INFORMATION** | **1.** IP Address<br>The IP address of the apparatus linked to UPS is inputted.<br>**2.** Load Device<br>The arbitrary character strings which identify and explain the apparatus linked to UPS are inputted.<br>**3.** Device Shutdown Action<br>When an error occurs in the response of Ping, it is set up individually whether script shutdown operation is performed to apparatus.<br>**4.** Fail Number of Ping Monitoring<br>It will be set up whether it is judged that a system has abnormalities when how many sets among the apparatus connected occurs the response error of Ping.<br>**5.** UPS Action<br>Operation of UPS is set when abnormalities occur to Ping monitoring. It can choose from five items of output stop, an output stop and start, a UPS stop, a UPS stop and start, continue.<br>**If UPS stop or UPS stop and start is chosen by the outlet A, the outlet B and the outlet C will stop an output according to a UPS stop.**<br>**6.** Pass Rate<br>Among the Ping test in which they are tried, it will specify the number of times of response which can be judged as pass.<br>**7.** Test Rate<br>The number of times of the Ping signal of how many times to transmit to apparatus by one Ping test is specified.<br>**8.** Interval Time<br>It specifies the intervals of which 1 times of a Ping signal is transmitted. A unit is a minute.<br>**9.** Ping Delay Time<br>It specifies the start delay time of ping signal after the SNMP/Web card boot. |

## ■ [Send UPS Command] Menu

・ it is used in a maintenance etc. Usually, please do not use it.

## ◼ [WakeOnLAN Targets] Menu

・ The MAC Address which transmits a WakeOnLAN packet is registered.
It is used when rebooting two or more client PCs simultaneously at the time of an
uninterruptible power supply (UPS) reboot.

Before login



After login

| | The detail description of a screen<br><br>**1.** Repeating Times<br>The sending number of a WakeOnLAN packet is set up.<br>**2.** Interval Timer (Sec)<br>The sending interval of a WakeOnLAN packet is set up.<br>**3.** WakeOnLAN Numbers<br>The number of the addressees of a WakeOnLAN packet is set up.<br>**4.** MAC Address<br>The addressee MAC Address of a WakeOnLAN packet is set up.<br>**5.** Action<br>The reception site operation at the time of WakeOnLAN packet reception is set up.<br>**6.** Description<br>The information of an addressee (including computer name etc.,) is set up. |
|---|---|
| INFORMATION | |


| Attention |
|---|
| A WakeOnLAN function may be unable to be used with PC of use. |


| | For details, please refer to P91<the network adapter setting method for enabling a WakeOnLAN function>. |
|---|---|

# ■ [Script Shutdown] Menu

- ・ Set the shutdown operation which does not depend on the presence of automatic shutdown software by sending the script to the devices connected to the UPS.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | **1.** <u>The Number of Shutdown by Script</u><br>After entering the number of devices which you want to shut it down by using a script and press the Set Value button.<br><br>**2.** <u>Load Device</u><br>The arbitrary character strings which identify and explain the apparatus which wants to perform a script shutdown are inputted.<br><br>**3.** <u>IP Address</u><br>The IP address of apparatus which wants to perform a script shutdown is inputted.<br><br>**4.** <u>User Name</u><br>A user name effective in login of apparatus which wants to perform a script shutdown is specified.<br><br>**5.** <u>Password</u><br>A password effective in login of apparatus which wants to perform a script shutdown is specified.<br><br>**6.** <u>Retry Times</u><br>It is arbitrarily specifies the number of times of the retry at the time of login failure.<br><br>**7.** <u>Time Out (sec)</u><br>It is arbitrarily sets up the timeout time in the case of login.<br><br>**8.** <u>Wait time for run script (Sec)</u><br>It delays the start time of script shutdown.<br><br>**9.** <u>Select Script Number</u><br>The script performed when SC20G2 starts shutdown operation is specified. A script is set up by the following clause "a script setup."<br><br>**10.** <u>Condition</u><br>It selects the condition to execute script.<br>AC Fail:It is executed when it shutdown by input power failure.<br>AC Recover: It is executed when it rebooted by AC recovery after shutdown by ac failure.<br><br>**11.** <u>Protocol</u><br>It specifies the communication method used by the SC20G2.<br>It supports two types of Telnet, SSH V2.<br><br>**12.** <u>Result</u><br>The result of a script shutdown is displayed.<br><br>**13.** <u>Test</u><br>By pushing a [Execution] button, for every setup, it can do the test of a script shutdown of operation individually. |

| | Please refer to the item of "Ping monitoring setting menu" for execution of a script shutdown. |
|---|---|

| | SSH protocol supports V2 only. |
|---|---|

# ■ [Script Setting] Menu

・ The script which transmits to the apparatus connected to UPS is set up.

Before login



After login

| | The detail description of a screen<br><br>**1.** Script Name<br>　　It set in any meaningful name to script, such as the target OS.<br>**2.** Script form<br>　　A script to execute is described.<br>**3.** Set Value<br>　　Descriptive content is saved by pressing the [Set Value] button. |
|---|---|
| **INFORMATION** | |

| | Please refer to the item of "Ping monitor setting" for execution of a script shutdown. |
|---|---|

| | An initial (default) setup of each script is as follows.<br>"As for the contents, all are execution about the shutdown operation after logging in to object apparatus."<br>Please refer to the following, when operation becomes unstable. |
|---|---|

| [**Script 1 : Windows**] | [**Script 2 : Linux**] |
|---|---|
| rcv=login:<br><br>snd=$u1<br><br>rcv=password:<br><br>snd=$p1<br><br>rcv=C:¥<br><br>snd=shutdown  -s  -f | rcv=login:<br><br>snd=$u1<br><br>rcv=Password<br><br>snd=$p1<br><br>rcv=]$<br><br>snd=$u2<br><br>rcv=Password:<br><br>snd=$p2<br><br>rcv=]#<br><br>snd=init 0 |
| [**Script 3 : UNIX**] | [**Script 4 : Mac(OS X)**] |
| rcv=login:<br><br>snd=$u1<br><br>rcv=Password:<br><br>snd=$p1<br><br>rcv=$<br><br>snd=$u2<br><br>rcv=Password:<br><br>snd=$p2<br><br>rcv=#<br><br>snd=shutdown  -y  -i0  -g10 | rcv=login:<br><br>snd=$u1<br><br>rcv=Password:<br><br>snd=$p1<br><br>rcv=$<br><br>snd=$u2<br><br>rcv=Password:<br><br>snd=$p2<br><br>rcv=#<br><br>snd=halt |

| ［**Script 5 : AVAYA Server**］ | [**Script 6 : Netapp]** |
|---|---|
| rcv=login: | rcv=login: |
| snd=$u1 | snd=$u1 |
| rcv=Password: | rcv=Password: |
| snd=$p1 | snd=$p1 |
| rcv=Enter your terminal type | rcv=root logged in |
| snd=<CR> | snd=<CR> |
| rcv=> | rcv=> |
| snd=stop -h -f | snd=halt |
| ［**Script 7 : FortiNet**］ | ［**Script 8 : Symantec**］ |
| rcv=login:<br>snd=$u1<br>rcv=Password:<br>snd=$p1<br>rcv=#<br>snd=execute shutdown<br>rcv=Do you want to continue?<br>(y/n)<br><br>snd=y | rcv=login:<br><br>snd=$u1<br><br>rcv=Password:<br><br>snd=$p1<br><br>rcv=><br><br>snd=shutdown |

[About description of a script]

1. Each line of a script should describe "rcv=" or "snd=" at the head.

2. Each set of a script contains one "rcv=" and one "snd=", respectively.

3. Please use one line for every command.

4. It is necessory to be under 256 bytes per one script.

5. It can be up to 32 lines per one script at maximum.

6. A capital letter and a small letter are distinguished, respectively.

7. The blank by the tab key and the space key is distinguished, respectively.

8. A script continues after a start symbol.

9. "$u1" corresponds to the user name 1 of a script shutdown page, and "$u2" corresponds to the user name 2."$p1" corresponds to the password of the user name 1, and, similarly "$p2" corresponds to the password of the user name 2."$cr" refers that a user needs to press the enter key.

10. Please do not enter Enter Key (line feed) after the last line of the script.

11. Please do not put spaces after each line of script.

---

Example of a shutdown command:

| .[Windows] | shutdown –s –f |
| .[Linux] | /sbin/halt |
| .[Mac] | /sbin/halt |
| .[Unix] | shutdown –y –i0 –g10 |

## ■ [User Limited Function] Menu

・ The access restriction to the function to each user is set up.

Before login



After login

| INFORMATION | The detail description of a screen |
|---|---|
| | **1.** Admin User Name<br>It is arbitrary and sets up an administrator's ID.<br>(Factory default: "OMRON")<br><br>**2.** Admin Password<br>It is arbitrary and sets up an administrator's password.<br>(Factory default: "admin")<br><br>**3.** Limit User Name<br>It is arbitrary and sets up ID of the user who wants to restrict a function.<br><br>**4.** Limit User Password<br>It is arbitrary and sets up the password of the user who wants to restrict a function.<br><br>**5.** Select User Name<br>No. of the user who wants to set up the contents of concrete function restriction is specified.<br><br>**6.** Limited Function Setting(Only for Limited Users)<br>Enable/Disable is chosen about each item. |

## ■ [CO2 Setting] Menu

- ・ The result of having computed at estimate the carbon-dioxide emissions of the apparatus (whole) connected to the uninterruptible power supply (UPS) is displayed.

Before login



After login

| | |
|---|---|
| **INFORMATION** | The detail description of a screen<br><br>**1.** CO2 Discharge Coefficient<br>It is arbitrary and sets up the discharge coefficient of $CO_2$.(At the time of factory shipments: Initial value 0.000555 provided in the Ministry of Economy, Trade and Industry and an environmental ministerial ordinance third number)<br>Data acquisition will be started, if the acquisition period of a log is set up and an execution button is pushed.<br>After certain fixed period passed, if an update button is pushed and being logged in, the set-up data of a period will be displayed.<br>**2.** CO2 Log<br>CO2 log for the past one month can be saved.<br>**3.** Clear<br>The log on a screen is eliminated. |

# ■ [Email Notification] Menu

・ The notice of E-Mail of an uninterruptible power supply (UPS) state is set up.

Before login



After login

The detail description of a screen

1. **Mail Server**
   The host name or IP address of an SMTP server is displayed and set up. When a host name is inputted, it is necessary to also input the DNS address of the lower.

2. **User Account**
   The user account of a mail server is displayed and set up.

3. **User Password**
   The password of a mail server is displayed and set up.

4. **Sender's Email Address**
   A sender's address displayed on e-mail is displayed and set up.

5. **Mail Subject Prefix**
   The character string added to the head of an e-mail title is displayed and set up.

6. **DNS Address**
   The address of DNS is displayed and set up.

7. **Mail Daily Status Report AT) (hh:mm)**
   When transmitting a daily status report from a SNMP/Web card, transmitting time is set up here.

8. **Mail Account**
   This is the address of the mail notification destination.

9. **Description**
   It is possible to indicate the information about an addressee as a memo.

10. **Mail Type**
    The contents which transmit can be set up from the following four items for every addressee.
    - None It does not send.
    - Event Only information about the occurrence event is sent.
    - Daily Status
      The contents of the data log saved on the SNMP/Web card and the event log are transmitted as an attached file in csv form.
    - Event/Status
      Both events and status of the above will be sent.

11. **Event Level**
    A setup of the importance of the information to transmit is possible. It chooses from the following and sets up.[Informational], [Warning], [Severe].

## ■ [External Links] Menu

・ The link to the external is displayed and set up.
・ A maximum of four kinds of external link setup can be performed.
・ By putting an external Web page and link, a related Web page can be browsed easily.
  For example, you can easily access to the Web page in which technical support
  information is described or Web page of other uninterruptible power supply(UPS) in
  which the SNMP / Web card is inserted.

Before login



After login

| | The detail description of a screen |
|---|---|
| **INFORMATION** | 1. Screen Text<br>A name given in this column is displayed under the link on the left-hand side of a screen.<br>2. Link Address<br>URL of a link place is displayed and set up.<br>3. Status<br>Enable/Disable of a link display is set up. |

# 1.5.   [UPS History] Menu

- It displays according to the type of a [UPS history log], a [UPS extended log], a [UPS event log], a [SNMP/Web card event log], and a [UPS info log].
- By referring to these logs, the detection and diagnosis of a trouble relevant to a SNMP/Web card can be performed.
- Download and elimination of data are possible on a [UPS history] - [clear and save log data] page.
- When the maximum record number (the number of input lines) is exceeded, the existing log information is overwritten.

## ■ [UPS History Log] Menu

- It is a log of the fundamental operating states (input-and-output voltage, connection capacity, etc.) of an uninterruptible power supply (UPS).The contents of the log become a parameter of the moment of performing data acquisition of operation.
- The time interval of acquisition can be set up on a [SNMP/Web card management]-[SNMP/Web card configuration] screen.

## ■ [UPS Extended Log] Menu

- It is the log which summarized the operating state of the definite period of time of an uninterruptible power supply (UPS).
- The log of the maximum , the minimum, and average value of a definite period of time is taken about each parameter.
- The time interval of acquisition can be set up on a [SNMP/Web card management]-[SNMP/Web card configuration] screen.

## ■ [UPS Events Log] Menu

- The event which occurred on the uninterruptible power supply (UPS) is recorded one by one.

## ■ [UPS Info Log] Menu

- The information on an uninterruptible power supply (UPS) is recorded one by one.

## ■ [SNMP/Web Card Event Log] Menu

- All the events of a SNMP/Web card are displayed by list.

| | |
|---|---|
| **INFORMATION** | The standard of the maximum save number of each log is as follows.<br>**UPS History Log**　　　　　　　1048 list<br>**UPS Extended Log**　　　　　　600 lists<br>**UPS Events Log**　　　　　　　450 lists<br>**SNMP/Web Card Event Log**　　450 lists<br><br>・ The number of cases which can actually be saved changes somewhat with length of an event, etc.<br>・ When a log reaches the maximum number of lists, it is discarded from an old log. |

## ■ [Clear & Save Log Data] Menu

・ Download and elimination of data are possible.
・ The log file of a SNMP/Web card can be saved by CSV format from this menu screen.



| | The detail description of a screen |
|---|---|
| INFORMATION | **1.** Clear Log Data<br>When an administrator eliminates specific log data, please click [clear] after putting a check beside object data.<br><br>**2.** Save Log Data<br>If it clicks each lower log data, log data will download to a computer by CSV. Please choose in advance "Clear the corresponding log data***" . |

| Attention |
|---|
| In the state that [Clear the corresponding log data***] is set to [Yes], Log data associated will be deleted when any one of the links to each log data but it is clicked at least once. |

# 2. Power management UPS

2.1 clauses explain the power supply state of a SNMP/Web card and 2.2 clauses or later explain power supply management of an uninterruptible power supply (UPS).

## 2.1. Power supply state of a SNMP/Web card

According to the state of AC input to an uninterruptible power supply (UPS) and an uninterruptible power supply (UPS), etc., the power of a SNMP/Web card becomes as follows.

### ■ Power state of the normal time

| AC input to the UPS / UPS power | Off (No AC input) | On (Yes AC input) |
|---|---|---|
| Off | SNMP/Web card Off | SNMP/Web card On |
| On | SNMP/Web card On | SNMP/Web card On |

### ■ The power states at the time of a shutdown, etc.
・ At the time of schedule operation, etc.

| No. | state | AC input to the UPS | UPS power | The power supply of a SNMP/Web card |
|---|---|---|---|---|
| 1 | Immediate stop of UPS from the Web page | On | Off | SNMP/Web card On |
| 2 | UPS stop by schedule operation | On | Off | SNMP/Web card On |
| 3 | AC input OFF after a power stop by schedule operation | Off | Off | SNMP/Web card Off (*1) |
| 4 | AC input restoration after the state of No.3 | On | Off | SNMP/Web card Off |
| 5 | UPS starting by schedule operation after the state of 4 | On | On | SNMP/Web card On |

*1: An uninterruptible power supply (UPS) is stopped by schedule operation, and also when AC input is set to Off, power supply to a SNMP/Web card is stops, but a schedule setup is effective and the uninterruptible power supply (UPS) start to operate according to schedule.

・ At the time of the uninterruptible power supply (UPS) stop by a power failure etc.

| No. | state | AC input to the UPS | UPS power | The power supply of a SNMP/Web card |
|---|---|---|---|---|
| 1 | After a UPS stop at a power failure | Off | Off | SNMP/Web card Off |
| 2 | AC input is restored after a UPS stop by a power failure. In case of "AC Restore/ AC Reboot: Disable" | On | Off | SNMP/Web card Off |
| 3 | AC input is restored after a UPS stop by a power failure. In case of "AC Restore/ AC Reboot: Enable" | On | On | SNMP/Web card On |

Note: The communication with a card cannot do at the time of "the SNMP/Web card Off."

## 2.2. Shutdown Immediately

### ■ Setup Steps

| | |
|---|---|
| **1** | Please access the Web page of a SNMP/Web card and choose the [UPS management] - [UPS control] from an initial screen. |
| | Next, click [Become Administrator] and enter a user/password as an administrator. |
| | Next, please choose the radial button on the right of a [Shutdown Immediatly].Then, please click [execute]. |
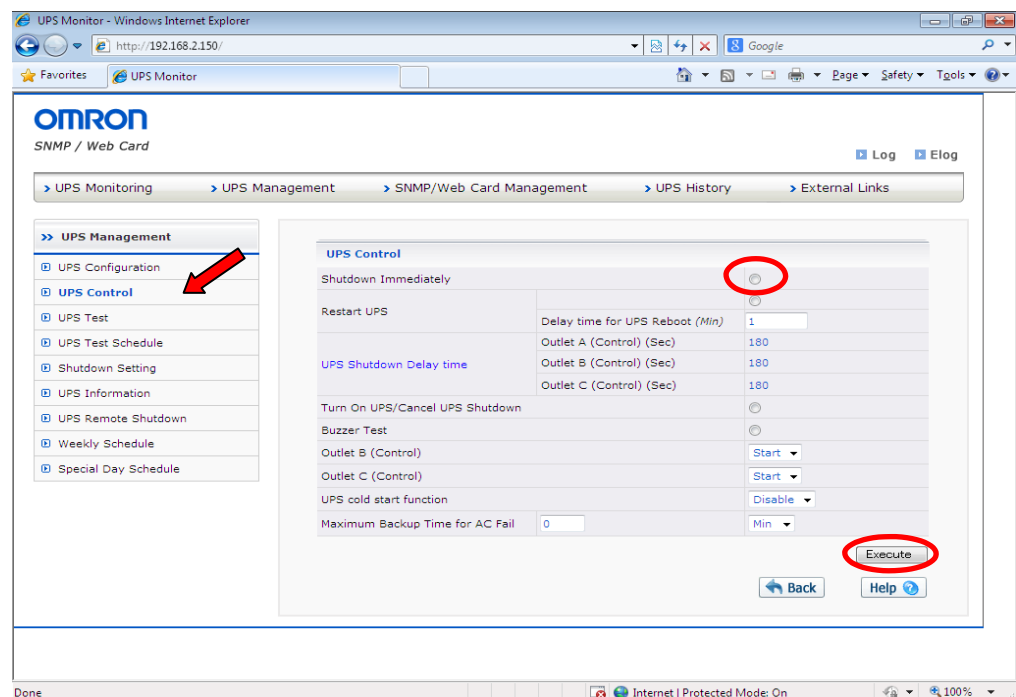
# ■ The example of a time chart

Here, the case where the following conditions are set up is illustrated.

Setting conditions

| | |
|---|---|
| Waiting time to a UPS stop (Sec) | : 180(Initial value) |
| Execution time of immediate shutdown | : 22:20:00 |

The setting conditions of a client computer

| | |
|---|---|
| Time required for the end of application software | :30 sec(Initial value) |

**22 : 20 : 00**    **22 : 23 : 00**

UPS ON

UPS OFF

Execution of immediate shutdown    UPS stop

**22 : 20 : 00**    **22 : 23 : 00**

client
computer
ON

client
computer
OFF

Shutdown command
reception    OS
stop    Power OFF

The end of  waiting  time
Shutdown start
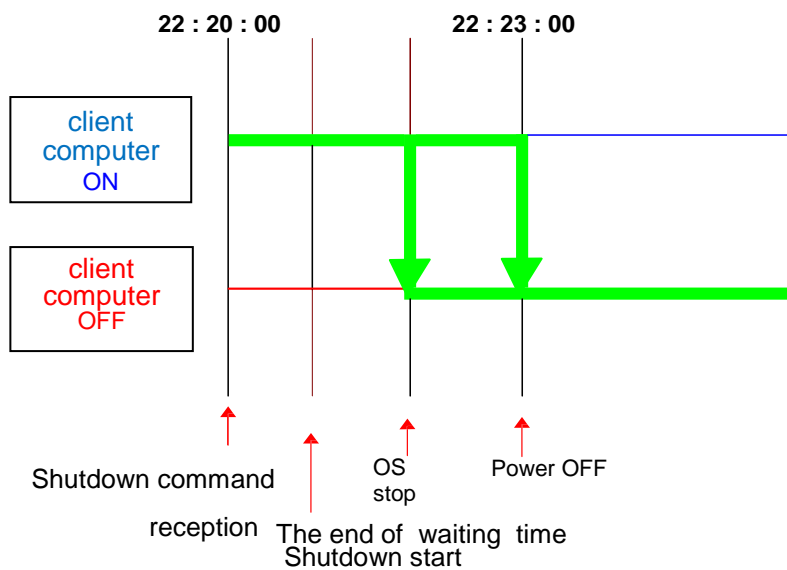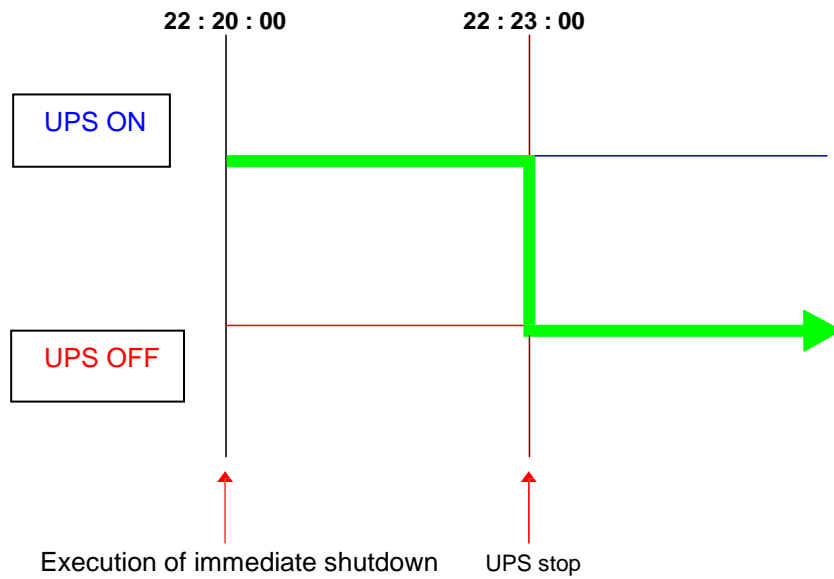
## 2.3. UPS Restart

### ■ Setup Steps

<table>
<tr>
<td>1</td>
<td>

Please access the Web page of a SNMP/Web card and choose the [UPS management] - [UPS control] from an initial screen.

Next, click [Become Administrator] and enter a user/password as an administrator.

Next, please choose the radial button on the right of a [Restart UPS].Then, please click [execute].



</td>
</tr>
</table>
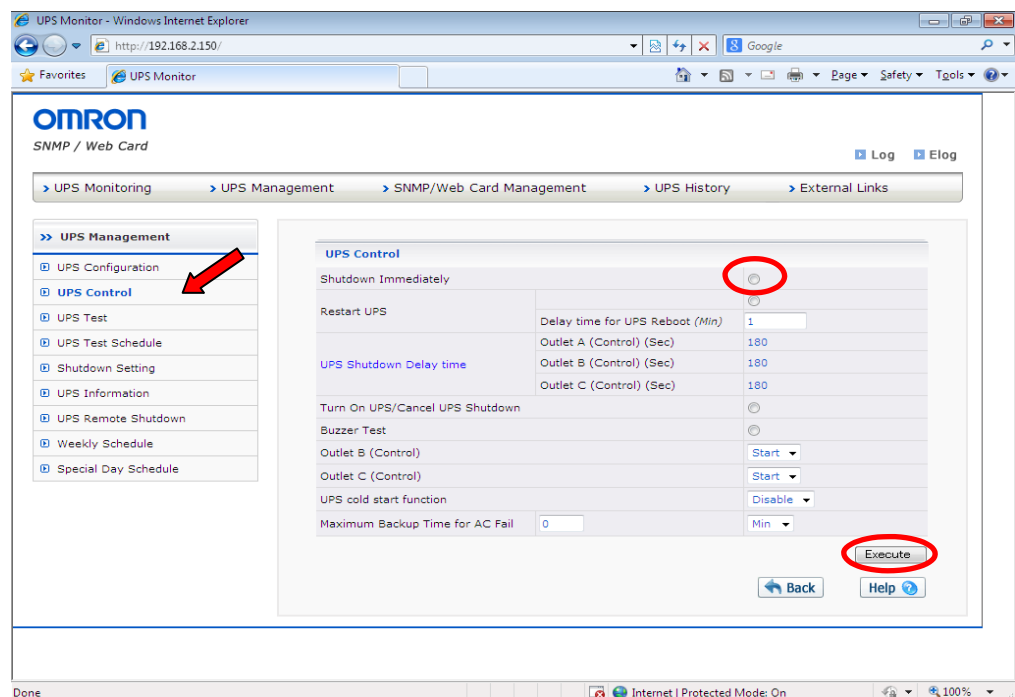
# ■ The example of a time chart

Here, the case where the following conditions are set up is illustrated.

Setting conditions

| |
|---|
| Waiting time to a UPS stop (Sec) :180(Initial value) |
| Delay time for UPS reboot(Min) :60 |
| Reboot execution time :22:20:00 |

The setting conditions of a client computer

| |
|---|
| Time required for the end of application software :30 sec(Initial value) |

**22 : 20 : 00    22 : 23 : 00                 23 : 23 : 00**

UPS ON

UPS OFF

Restart execution   UPS stop            UPS restart

**22 : 20 : 00    22 : 23 : 00                 23 : 23 : 00**

client
computer
ON

client
computer
OFF

Shutdown command
reception

UPS
stop

restart

The end of  delay  time
Shutdown start
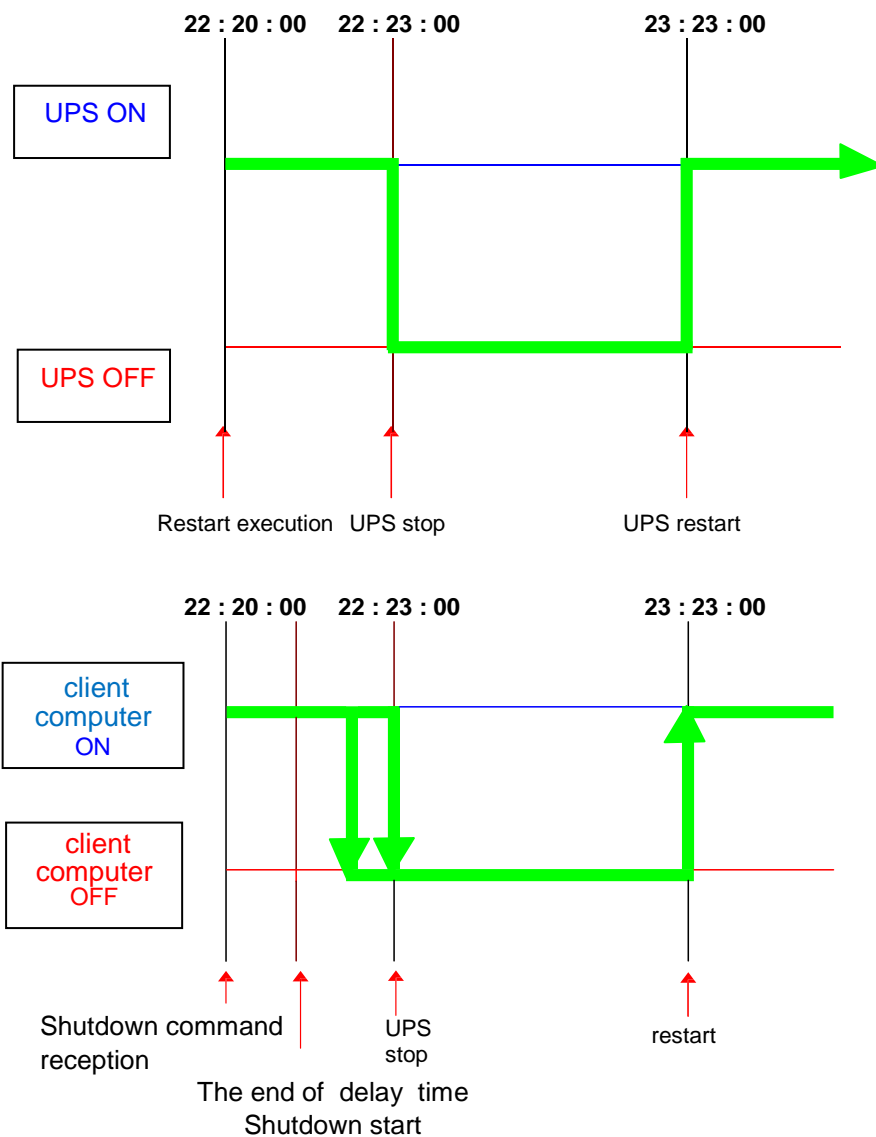
## 2.4. The shutdown at the time of an abnormal condition

・ The SNMP/Web card assumes four kinds of abnormal conditions, "AC failed", a "battery low", "UPS overload", and a "UPS Over temperature."

■ **Setup Steps**

| 1 | Please access the Web page of a SNMP/Web card and choose the [UPS management] - [Shutdown setting] from an initial screen.<br><br>Next, click [Become Administrator] and enter a user/password as an administrator.<br><br>Next, please perform a setup required according to a day of the week. Then,<br><br>please click [Set Value].<br><br> For details, please refer to a 19 page [shutdown setting] Menu.<br><br> |
|---|---|

## ■ The example of a time chart

[Example **1**] Here, the case where the following conditions
are set up is illustrated.

Setting conditions

| Operation | :client shutdown / UPS stop |
| --- | --- |
| Waiting time (Min) | :10(Initial value) |
| 1st warning (Sec) | :30(Initial value) |
| Warning period (Sec) | :30(Initial value) |
| Waiting time to a UPS stop (Sec) | :180(Initial value) |
| AC failure occurring time | :22:20:00 |

The setting conditions of a client computer

| Time required for the end of application software | :30 sec(Initial value) |
| --- | --- |

**22 : 20 : 00**  **22 :30 :00**  **22 : 33 : 00**

UPS ON

UPS OFF

Warning sending
by 30sec interval

AC failure occurring    The end of  waiting
time
shutdown command
sending to a client
computer

UPS stop

**22 :30 :30**

client
computer
ON

client
computer
OFF

OS stop    Power off

Shutdown command    The end of  waiting
reception    time
Shutdown start

---

## 2.5. Schedule shutdown

### ■ The kind of schedule shutdown

The schedule shutdown which can be set as a SNMP/Web card is two kinds, "a schedule/weekly" and "a schedule/special day."

### ■ Before setting up

Please check that the date and time of a SNMP/Web card are set up correctly.

### ■ [Weekly Schedule] Setup steps

| 1 | Please access the Web page of a SNMP/Web card and choose the [UPS management] - [Weekly Schedule ] from an initial screen.<br><br>Next, click [Become Administrator] and enter a user/password as an administrator.<br><br>Next, please perform a setup required according to a day of the week. Then,<br><br>please click [Set Value]. |
|---|---|

| 2 | After [Set Value] and choose the [UPS management] - [Shutdown setting] from an initial screen.  Please choose [client shutdown / UPS turn off] from a column [Shutdown actions], and set up various time. |
| --- | --- |
| | Next click [Set Value] Button. |



| | The setting method of a schedule/special day is the same as that of a schedule/weekly. Please set it by referring to the schedule/week of described above. |
| --- | --- |
| INFORMATION | |

# ■ The example of a time chart

[Example **1**] Here, the case where the following conditions.

Setting conditions

| | |
|---|---|
| Operation | :client shutdown / UPS stop |
| Waiting time **(Min)** | :10(Initial value) |
| 1st warning (Sec) | :30(Initial value) |
| Warning period (Sec) | :30(Initial value) |
| Waiting time to a UPS stop (Sec) | :180(Initial value) |
| The day of the week/time of shutdown execution | :Mon 22:20:00 |
| The reboot setting day of the week / time | :Tue 9:00:00 |

The setting conditions of a client computer

| |
|---|
| Time required for the end of application software  :30 sec(Initial value) |
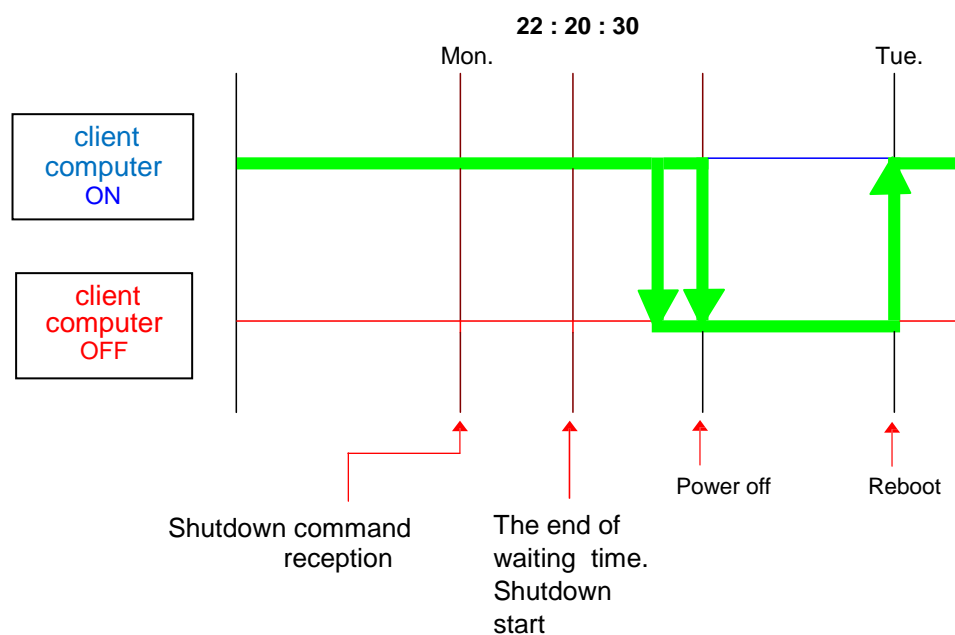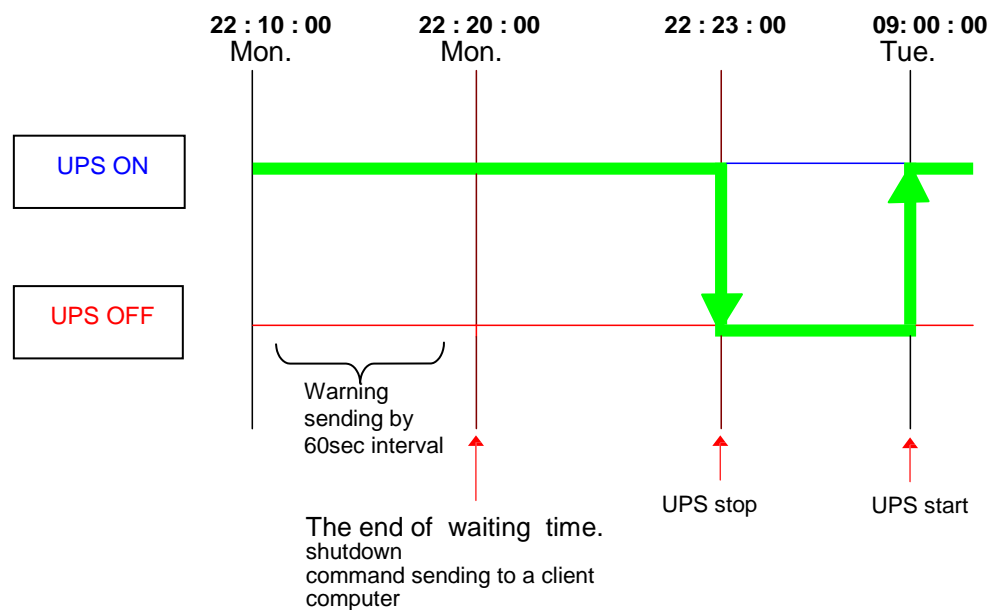
# 2.6.   Setting of remote shutdown

It is possible to be shut down multiple uninterruptible power supply(UPS) in cooperative using the SNMP / Web card. When carrying out cooperative operation, one set becomes a master uninterruptible power supply (UPS), and others become a slave uninterruptible power supply (UPS).
Master UPS manages a slave uninterruptible power supply (UPS) as a client.
Slave UPS will go into uninterruptible power supply (UPS) stop operation, if the shutdown command from a master uninterruptible power supply (UPS) is received.

It can be used when managing the power supply of the apparatus (storage in example) which is not connected with a computer and a network as follows.

< Configuration example >
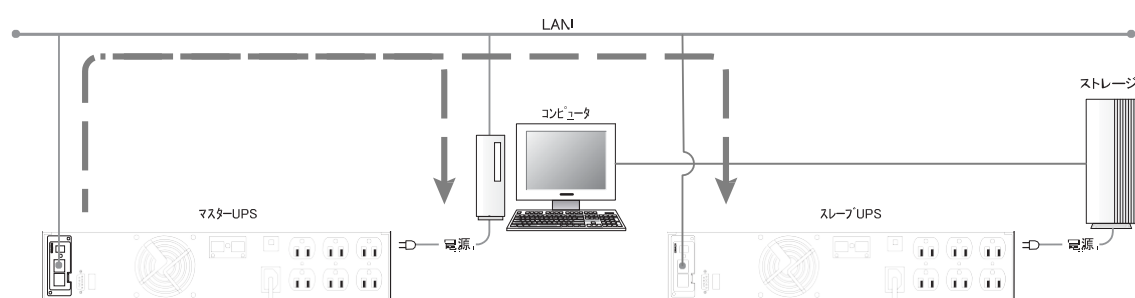


Notes: When  failure event occurs, shutdown command is sent out on a network from master UPS. The client computer and slave UPS which were received go into a shutdown and stop operation, respectively.

## ■ Setup steps

| 1 | The Web page of [UPS management]-[shutdown] on the master uninterruptible power supply (UPS) side is accessed, and a shutdown is set up according to the |
|---|---|
| **2** | The Web page of [UPS management]-[UPS remote shutdown] on the master uninterruptible power supply (UPS) side is accessed, and it sets up as follows.<br><br>    1.   UPS remote shutdown: Enable<br>    2.   Select  Work as master UPS<br>    3.   Event occurs on Master UPS: Notify All<br><br>    4.   Event occurs on Slave UPS: Notify All<br><br><br><br>3, 4 section: we have set the behavior when a failure occurs in the power of the uninterruptible power supply (UPS) of one of them. If the number of the power of two sets (UPS) of uninterruptible power supplies is one, since generating simultaneously is assumed, it is seldom necessary to be taken into consideration. If it is another system, please set up  whether to shut down both or to shut down one according to a setup. |
| **3** | The Web page of [UPS management]-[ UPS remote shutdown] on the slave uninterruptible power supply (UPS) side is accessed, and the waiting time to an uninterruptible power supply (UPS) stop is set up. |
| **4** | The Web page of [UPS management]-[UPS remote shutdown] on the slave uninterruptible power supply (UPS) side is accessed, and it sets up as follows.<br><br>    1.  UPS remote shutdown: Enable<br>    2.  Select Work as slave UPS<br>    3.  The IP address of master UPS is set up.<br><br> |

| **5** | The Web page of [UPS monitor]-[client table] on the master uninterruptible power supply (UPS) side is accessed, and it checks that the slave uninterruptible power supply (UPS) is registered as a client uninterruptible power supply (UPS). |
|---|---|



| | • A master uninterruptible power supply (UPS) sends a shutdown command to a slave uninterruptible power supply (UPS) also when six events of a shutdown setting page occur. |
|---|---|
| **INFORMATION** | • A slave uninterruptible power supply (UPS) notify four items of failure event to a master uninterruptible power supply (UPS) except a schedule shutdown. |
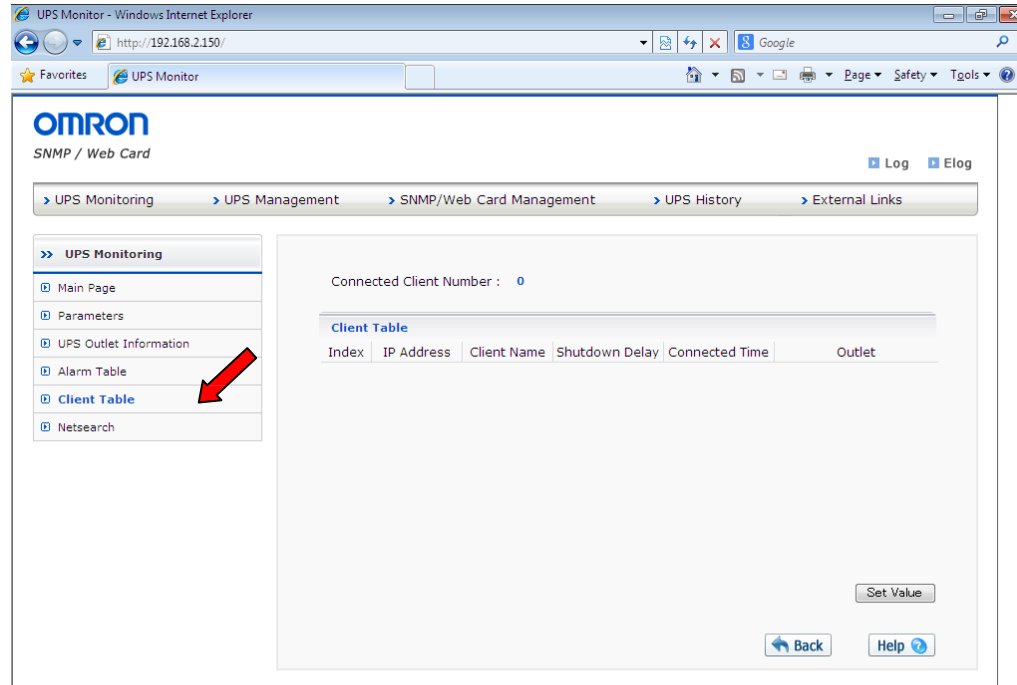
# ■ The example of a time chart

Setting conditions of Master UPS

| | |
|---|---|
| Operation | :client shutdown / UPS stop |
| AC fail delay time (Min) | :10(Initial value) |
| 1st warning (Sec) | :30(Initial value) |
| Warning period (Sec) | :30(Initial value) |
| Waiting time to a UPS stop (Sec) | :180(Initial value) |
| AC failure occurring time | :22:20:00 |

The setting conditions of a Slave UPS

| | |
|---|---|
| Waiting time to a UPS stop (Sec) | :300 |

The setting conditions of a client computer

| | |
|---|---|
| AC fail delay time | :30 sec |

**22 : 20 : 00**   **22 : 30 : 00**   **22 : 33 : 00**

Master UPS ON

Master UPS OFF

The input power failure occurs in the master UPS

AC fail delay time is ends.
Shutdown command sending

Master UPS stop

**22 : 35 : 00**

Slave UPS ON

Slave UPS OFF

Shutdown command reception

Slave UPS stop

**22 : 30 : 30**

Client computer ON

Client computer OFF

Shutdown command reception

The end of delay time
Start OS stop

Client computer Power OFF

# 3. Management by SNMP

## 3.1. Access control of a SNMP/Web card

When you use a SNMP/Web card in the SNMP environment, please perform appropriately the IP address of a SNMP/Web card, and a setup of a gateway beforehand.

It is recommendation about performing access control, in order to raise the security level of a SNMP/Web card. Access control can be set up from "access control "on a Web, "HTTP Security Control"and"Access Control Table" on Telnet/serial connection.

| | Please refer to "5. Setup of security " for more information. |
|---|---|

## 3.2. A setup of an SNMP trap addressee

In order to set up an SNMP trap addressee, it can perform from a [SNMP/Web card configuration] Menu.

| | For more information, please refer to the [[SNMP TRAP Receivers] Menu of page 43 |
|---|---|

## 3.3. SNMP manager's setup

### ■ Installation of MIB file

Please add the "Swc. mib" file in the [MIB] folder of CD-ROM enclosed by this product to an SNMP manager's MIB database.

| | For details, please refer to [an SNMP manager's operation manual]. |
|---|---|

### ■ A setup of a community
Please set up as follows.

| String name | Password name |
|---|---|
| GET community | public |
| SET community | admin (Initial value) |

Notes: The above community is an initial value.
When you change, please set up according to changes.

# 4. The monitor of the log by a JAVA applet

## 4.1. Feature

- The SNMP/Web card is equipped with GUI (graphical user interface) which moves by a JAVA applet. By GUI, the log of the uninterruptible power supply (UPS) on a network can be monitored in real time.
- There are two kinds of monitoring procedures by a JAVA applet, [UPS History Log (data log)] and [UPS Extended History Log (extended data log)].

## 4.2. The display of a monitoring screen

- At this monitoring screen, log data is displayed by a line graph.
- All the parameter data can be displayed on the same screen.
- It can set up easily a display / un-displaying of each parameter.

| 1 | First, please display the homepage of a SNMP/Web card. |
|---|---|
| 2 | In order to display the monitoring screen of an uninterruptible power supply (UPS) data log, click [Log] at the upper right of an initial screen. |
|   | In order to display the monitoring screen of an uninterruptible power supply (UPS) extension data log, click "Elog" at the upper right of an initial screen. |
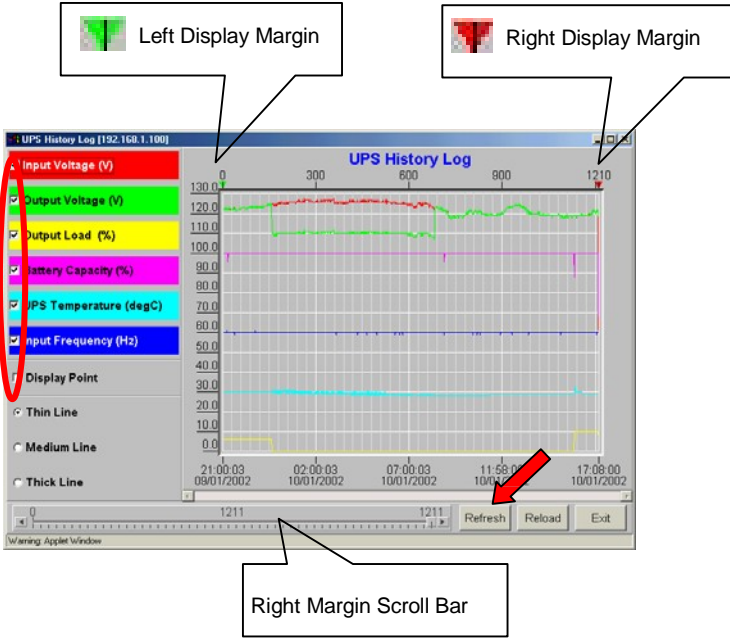
## 4.3. Details of a UPS data log screen

| **1** | If [Log] at the upper right of a screen is clicked by the homepage of a SNMP/Web card, an uninterruptible power supply (UPS) data log will be displayed on another window. |
|---|---|
| **2** | In order to set up a display / un-displaying of a parameter, use the check box beside a parameter name.<br>If it is not checked, the parameter is not displayed.<br>Please choose [Refresh], if a display / non-display setup is completed.<br><br><br><br>Above, The screen where six kinds of parametric expressions of [Input Voltage(V)], [Output Voltage(V)], [Output Load (%)], [Battery Capacity (%)], [UPS Temperature (degC)], and [Input Frequency (Hz)] were set up is illustrated. |

| | The detail description of a screen |
|---|---|
| **INFORMATION** | 1. Display point<br>   Please click this option to display a log interval on a graph.<br>2. Refresh<br>   Please choose this button, when you decide setting change of a screen.<br>3. Reload<br>   Please choose this button, when you update a screen and you set up a new display margin.<br>4. Exit<br>   Please choose this button, when you end the screen of an uninterruptible power supply (UPS) data log. |

## 4.4. Details of a UPS extended history log screen

| 1 | If [Elog] at the upper right of a screen is clicked by the homepage of a SNMP/Web card, an uninterruptible power supply (UPS) extension data log will be displayed on another window. |
|---|---|
| **2** | In order to set up a display / un-displaying of a parameter, use the check box beside a parameter name.<br>The parameter is not displayed when the check is not attached.<br>Please choose [Refresh], if a display/undisplay setup is completed.<br><br><br><br>Above, The screen where the display of [Input Voltage(V)], [Output Voltage(V)], [Output Load (%)], [Battery Capacity (%)], [UPS Temperature (degC)], and [Input Frequency (Hz)] is set up is illustrated. |

| | The detail description of a screen |
|---|---|
| **INFORMATION** | 1. Display point<br>Please click this option to display a log interval on a graph.<br>2. Refresh<br>Please choose this button, when you decide setting change of a screen.<br>3. Reload<br>Please choose this button, when you update a screen and you set up a new display margin.<br>4. Exit<br>Please choose this button, when you end the screen of an uninterruptible power supply (UPS) data log. |

# 5. Setup of security

It is possible to change a security level (permitted level of access to a card) by setup with this product.

**1** The initial value of a user name, a password, a community user name, and a password is as follows.

    User name:OMRON
    Password:admin

The community of SNMP is as follows.
    Read:public
    Read / Write:admin

Community of read / write and password are the same.

**2** The outline of a security setup
When setting up a security level, "HTTP Security Control" is first set as "Enable" from a setting menu by Telnet or serial connection, after that, By using "Access Control Table" on Telnet / serial connection or "access control" on a Web screen, the IP address which permits connection is set up.

Refer to the lower figure for the relation of each setup.
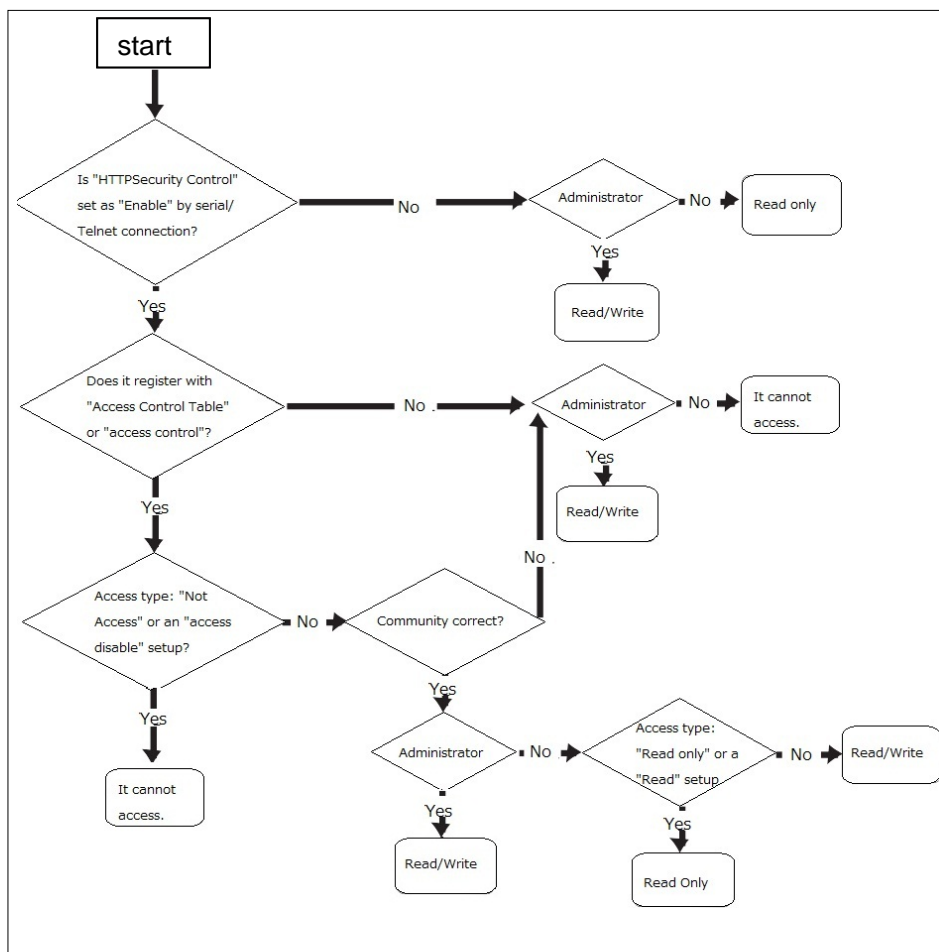
# 6. Reference data

## 6.1. Specification

| | |
|---|---|
| LAN Port | 10BASE-T/100BASE-TX |
| Network protocol | SNMP v1/v3, HTTP, HTTPS, SSHv2, ARP, RARP, TFTP, TCP/IP, UDP, Telnet, SNTP, SMTP, DHCP, BOOTP, IPv4 |
| Other communication path | Asynchronous serial interface (only setup) |
| Supported MIB | UPS MIB(RFC1628)<br>OMRON MIB |
| Operating temperature | 0～40℃ |
| Operating humidity | 10～80% |
| Supported UPS(UPS) | BN50T, BN75T, BN100T, BN150T, BN220T, BN300T<br>BN50S, BN75S, BN100S, BN150S, BN220S, BN300S<br>BN75R, BN150R, BN300R<br>BN100XR, BN150XR, BN240XR<br>BU50SW, BU75SW, BU100SW, BU150SW<br>BU75RW, BU100RW, BU200RW, BU300RW<br>BU60RE, BU100RE<br>BU1002SW, BU3002SW<br>BU1002RW, BU2002RWL, BU3002RWL, BU5002RWL |
| Power consumption | Maximum 3W |
| Outside dimension | 60(W)×130(D)×18.2(H)mm |
| Weight | About 70g |
| Standard | VCCI Class A (conformity) |
| Others | Built-in real-time clock |

Switch part

The position of  DIP switch
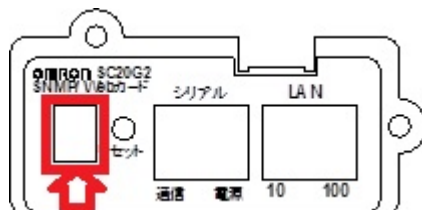


In the case of the bracket panel for BN-XR

The operating state of a DIP switch

| SW1 | SW2 | operating state |
|------|------|------------------|
| ON | ON | Unused |
| ON | OFF | Unused |
| OFF | ON | Unused |
| OFF | OFF | Operation mode |

LED

| Port | Green | Yellow | Operating state |
|------|-------|--------|------------------|
| LAN | Blink (1 sec) | OFF | 100Mbps Ethernet traffic |
| | OFF | Blink (1 sec) | 10Mbps Ethernet traffic |
| | OFF | OFF | Ethernet cutting |
| Serial | ON | Blink (1-3sec) | RS-232 port - active |
| | OFF | Blink (1 sec) | Serial upgrade mode |
| | Mutual blink | Mutual blink | Automatic-diagnosis mode |
| | ON | ON | Hardware error |

## 6.2. Upgrade of a firmware file

When the firmware file of SC20G2 is updated, upgrade can be performed in the following procedures.

■ **Work procedure**

| | |
|---|---|
| **1** | The web browser of the Windows computer on the same network as SC20G2 is started, and the IP address assigned to SC20G2 is inputted into an address bar following "http://".  Please carry out and push ⬚. <br><br> Input example) <br><br> When an IP address is a default (192.168.2.150) <br><br>  |
| **2** | The initial screen of a SNMP/Web card is displayed. <br><br>  |

| 3 | Please choose "SNMP/Web card management" from the upper menu. Then, from a left menu, please choose a "SNMP/Web card configuration" and check that the item of "network upgrade" is "enable". |
|---|---|
| |  |
| |  |

| 4 | Please confirm login ID (default: OMRON) and the password (default: admin) of SC20G2. Please put the SC20G2 firmware file used for update on the arbitrary places of a computer. |
|---|---|
| | Then, please insert enclosed CD-ROM in a computer and run "upgrade.exe" in a "SC20G2_Firmware_Upgrade" folder. The following screens are displayed. |



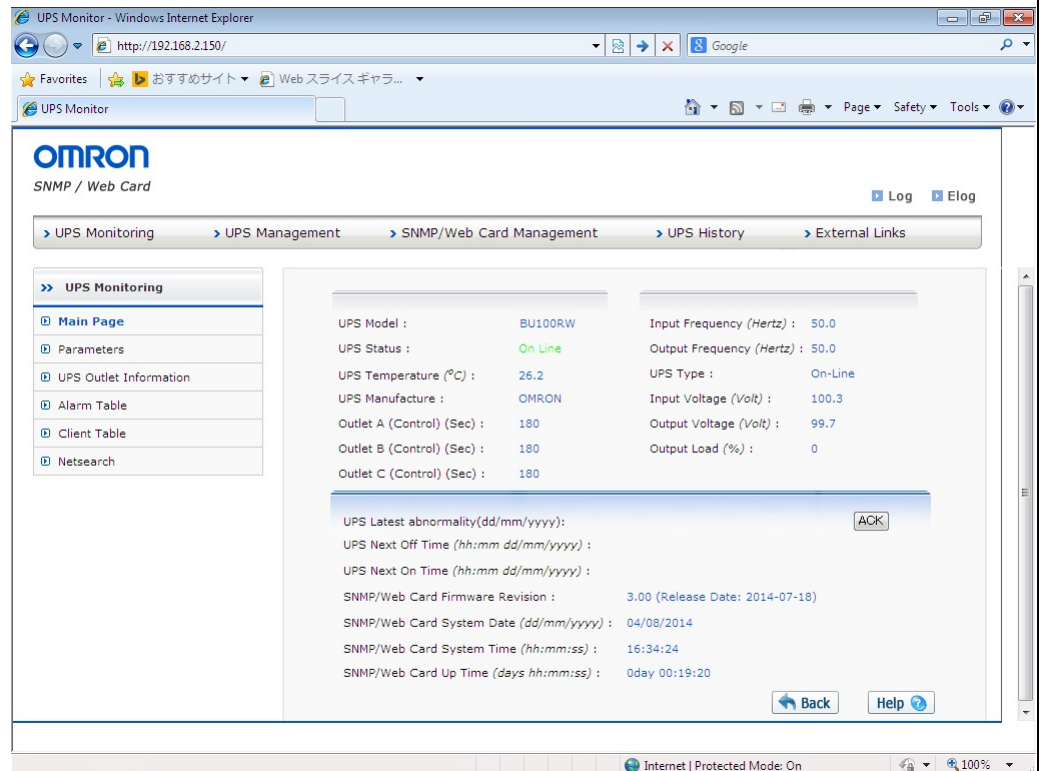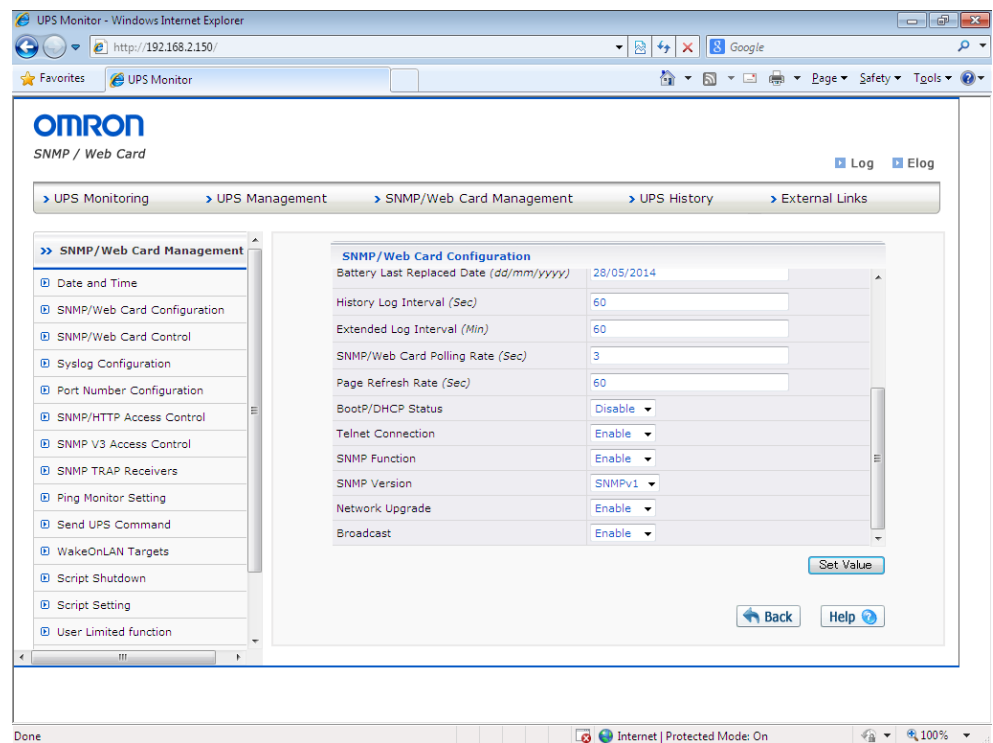| 5 | Click the "Discover" button. SNMP / Web card in the same network are displayed in the "UPS List" on. |
|---|---|
| 6 | Please choose the displayed uninterruptible power supply (UPS) and click the "Modify" button. Please enter login string information and a password and click the "OK" button. |
| 7 | Click the "OPEN" button, please choose the new firmware file used for upgrade, and click "it opens." |
| 8 | Click the "Upgrade" button. Then, since the screen which checks upgrade is displayed, please click the "OK" button. |
| 9 | Upgrade is completion, when processing is completed and a message is displayed. |
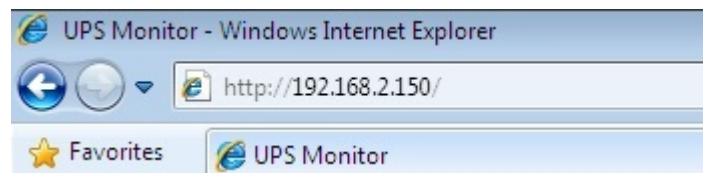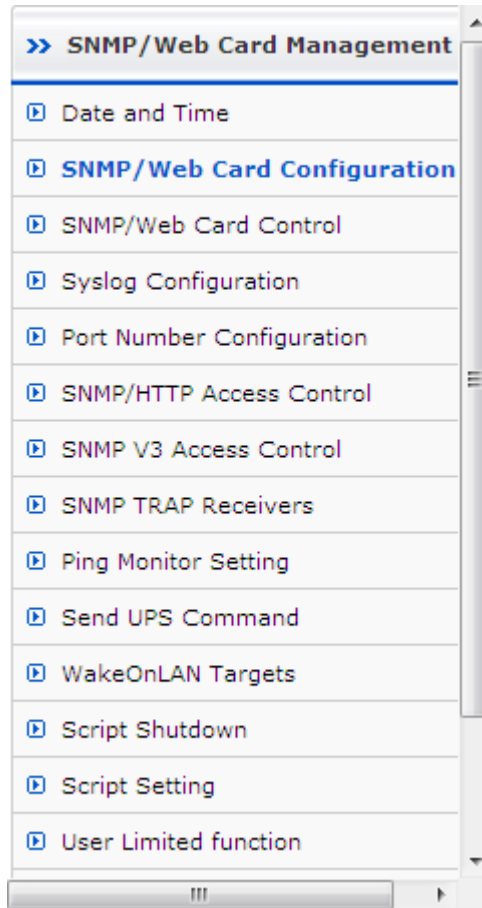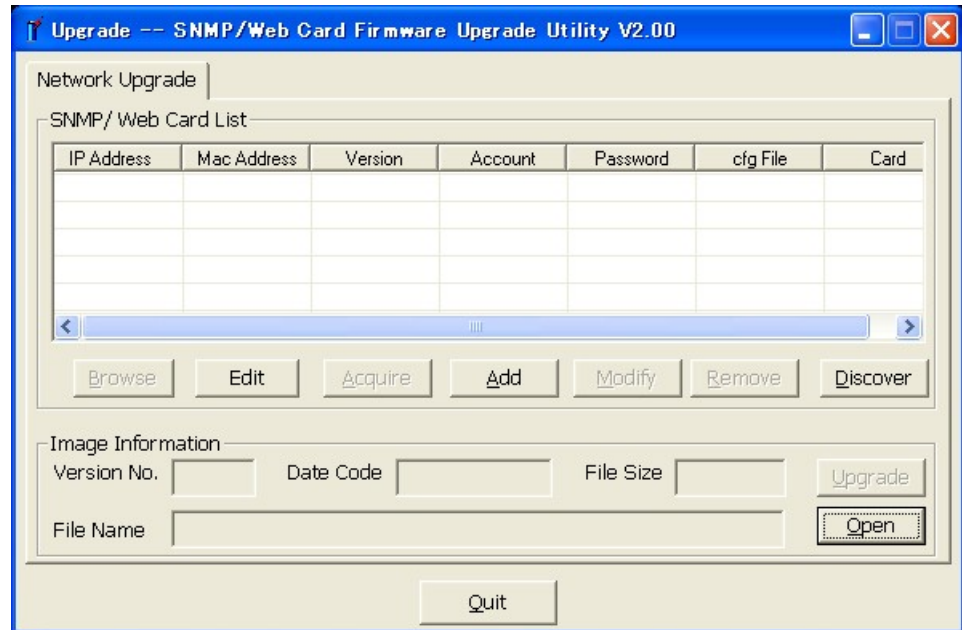
## 6.3.   Configuration file read-out, edit, and writing of SC20G2

Using upgrade software, the configuration file of SC20G2 can be read, edit can be added, and a setup can be written in SC20G2 (SC20G2 which read a setup is included) on a network.
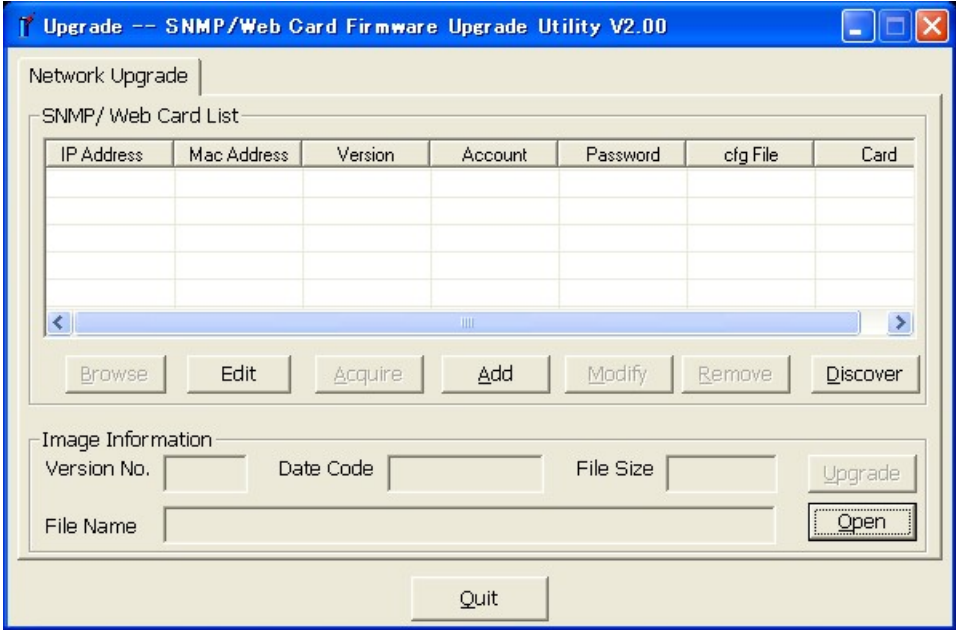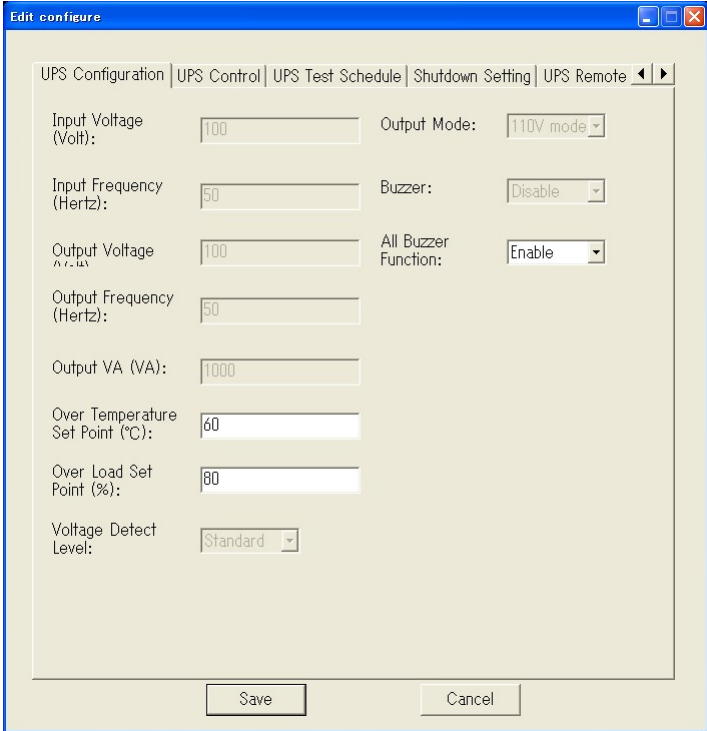
■ **Work procedure**

| 1 | Please insert enclosed CD-ROM in a computer and run "upgrade.exe" in a "SC20G2_Firmware_Upgrade" folder. The following screens are displayed.  |
|---|---|
| 2 | Click the "Discover" button. The SNMP/Web card on the same network is displayed on "UPS List." |
| 3 | Click the "Discover" button. The SNMP/Web card on the same network is displayed on "UPS List." |
| 4 | Please choose SC20G2 displayed and click the "Modify" button. Please enter login string information and a password and click the "OK" button. |
| 5 | Click the "Acquire" button. Since the save screen of the configuration file of selected SC20G2 opens, please save by arbitrary names in arbitrary places. Save of a configuration file is completed. |
| 6 | Next, please click the "Edit" button. Since the reading screen of a configuration file opens, please choose arbitrary configuration files and click the button "open" |

| | |
|---|---|
| **7** | The following setting screens can open and it can change an item freely.<br><br>Please click the "Save" button, if change is completed. A configuration file is updated.<br><br> |
| **8** | Next, please choose from a list SC20G2 on which a setup is reflected, and click the "Open" button like the time of firmware upgrade.<br>If the dialog which opens a file is displayed, the pull down menu written to be "Binary Files (*. bin)" will be clicked, Please choose "Config Files (*. cfg)" from a list, choose a configuration file to reflect in the next, and click the button "open". |
| **9** | Click the "Upgrade" button. A setup will be reflected, if processing is completed and a message is displayed. |

**< The network adapter setting method for enabling a WakeOnLAN function >**

The property of a network adapter is opened from a device manager, and WakeOnLAN by Magic
Packet is set up to enable.

1. Please open a [device manager] from [Control panel]> [System and Security]>[System].
2. Please open the property of the adapter currently used from the tree of a [network adaptor].
3. Please open [Power Management] and check to [Only allow a magic packet to wake the computer].
   as shown in figure*.

*About the item which can be set up, it is dependent on the version of a network adapter or a driver.
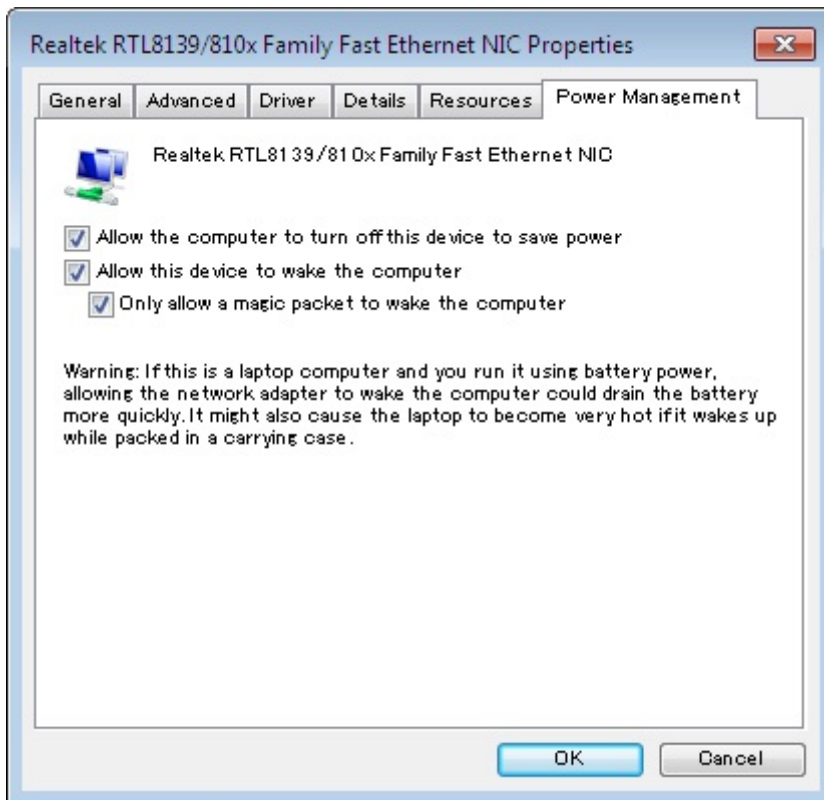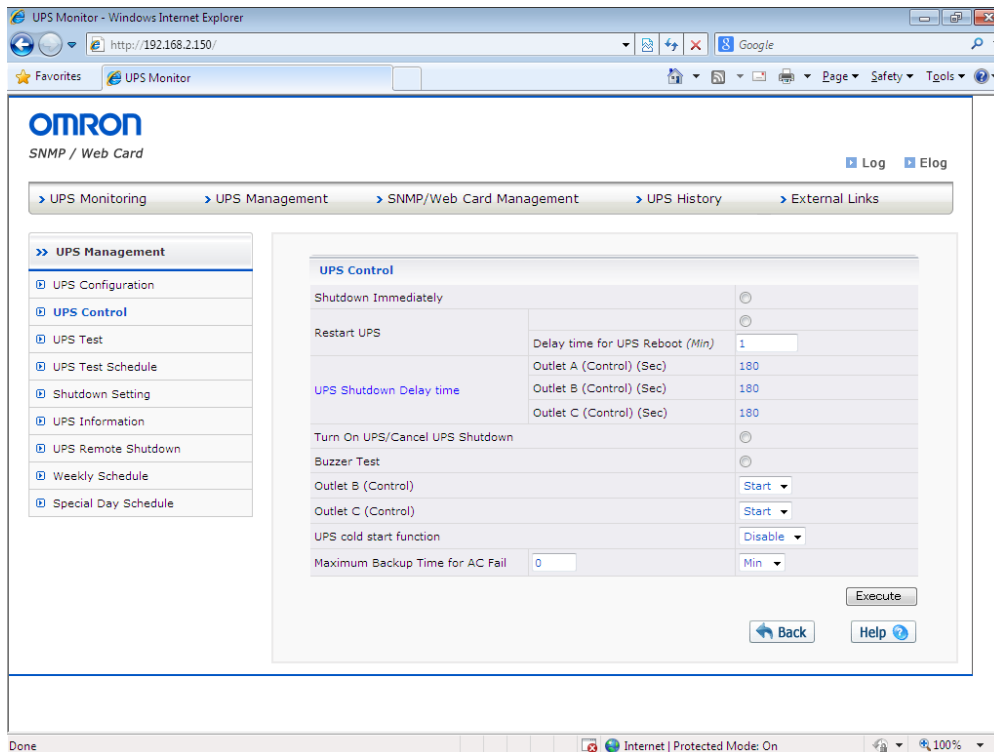
# [Points of concern]

If the firmware of this product is upgraded, it may return to the preset value at the time of factory shipments. After upgrade, Please reconfirm various setup at any cost.

# [Supplementary explanation]

## < About 「Turn On UPS」function >

About the "Turn On UPS" function in [UPS management]-[UPS control], the following usage restrictions occur from some models.

Please use a "UPS reboot" function to perform stop and starting of UPS.



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