# PW Data Receiver user's manual

Oct. 2025 Revised edition 1.c

## 1.Introduction

"PW Data Receiver" is an application software to save the measurement data calculated by HIOKI PW8001 or PW4001 power analyzer on PC. Hereafter, PW8001 and PW4001 will be referred to as power analyzer in this document.

| Supported models | Product name   |
|------------------|----------------|
| PW8001           | Power Analyzer |
| PW4001           | Power Analyzer |

PW Data Receiver can do the following.

- · Save measurement data to PC in CSV format
- · Remote control of the power analyzer from PC
- · Download files from the power analyzer

#### 2.System Requirements

The following systems must be installed on your computer to use PW Data Receiver.

## Minimum System Requirements

| Operating system        | Windows 11, Windows 10 (64-bit edition) Version 21H2 or later |
|-------------------------|---|
| CPU                     | Intel ® Corei3 or higher or equivalent processor              |
| Memory                  | 4GB or more   |
| Storge                  | 250GB or more   |
| Display                 | Display High-definition (1366 x 768) or higher                |
| Communication Interface | LAN   |
| Input device            | Keyboard, Mouse, Touch devices                                |

#### Recommended System Requirements

| Operating system        | Windows 11, Windows 10 (64-bit edition) Version 21H2 or later |  |
|-------------------------|---|--|
| CPU                     | Intel ® Corei7 or higher or equivalent processor              |  |
| Memory                  | 8GB or more   |  |
| Storge                  | SSD 500GB or more   |  |
| Display                 | Full high definition (1920 x 1080) or higher                  |  |
| Communication Interface | LAN   |  |
| Input device            | Keyboard, Mouse, Touch devices                                |  |

# PW8001 Requirements

| Firmware version number | V1.61 or later |
|-------------------------|----------------|
|                         |                |

# PW4001 Requirements

| Firmware version number | V1.00 or later |
|-------------------------|----------------|
|-------------------------|----------------|

## 3.Installation

#### 3.1. Installation Procedure

Perform the following steps using an administrator account.

-1. Double-click on [Setup\_PWDataReceiver\_x.xx.x.exe]



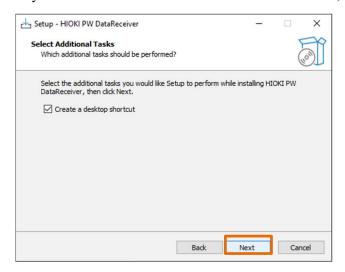
-2. Another warning message will appear. Click "Yes" to agree to add changes to the device. (This message may not appear depending on previously made settings.)



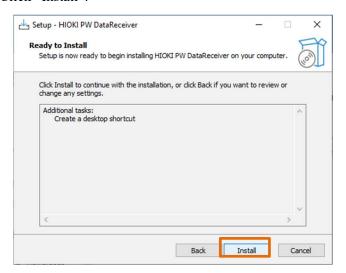
-3. The Welcome screen will appear, and click on "Next."



-4. Verify that the check boxes are activated as shown below, and click "Next".



-5. Click "Install".



-6. When the following dialog window is displayed, click "Finish".

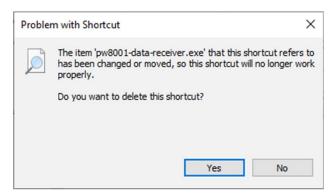


-7. Installation is completed.

## 3.2. Update from PW8001 Data Receiver

The application has been updated and renamed from "PW8001 Data Receiver" to "PW Data Receiver". This change reflects the fact that the number of supported models of the application has increased from PW8001 only to PW8001 and PW4001.

For users who have installed PW8001 Data Receiver, the PW8001 Data Receiver shortcut will be disabled after the update and the following window will appear. Click "Yes" to remove the shortcut.



A new shortcut for PW Data Receiver will be created during the update.

## 4. Using the Software

## 4.1. Setting up the power analyzer

Before starting the application, please set up the power analyzer.

The wiring of the power analyzer can be set as desired.

## 4.2. Connection between power analyzer and PC

Connect the PC to the power analyzer via LAN.

\* The software of the instrument must meet the system requirements.

## 4.3. Launching the Application

To start the application, click on "HIOKI" - "HIOKI PW DataReceiver" from the Start menu.



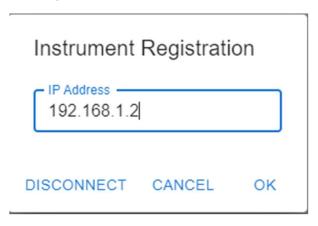
## 4.4. How to connect to power analyzer

- First, make a communication connection between the power analyzer and the PC.
- Double-click on the line under IP Address to display the configuration dialog.



Set the IP address of the power analyzer.

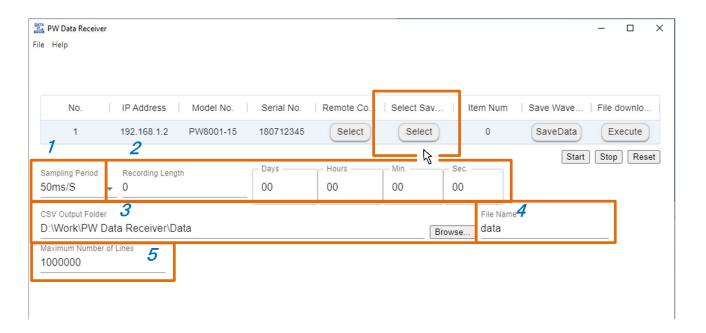
\*For details on how to recognize the IP address of power analyzer, refer to the user's manual of power analyzer.



• If the connection is successful, the Model No. and Serial No. information of the recognized power analyzer will be displayed.

# 4.5. Measurement data storage settings

Sets the measurement data storage settings.



|   | Item             | Description  |
|---|------------------|--|
| 1 | Sampling Period  | Set the recording interval.                              |
|   |                  | Selectable range: 1ms/S, 10ms/S, 50ms/S,                 |
|   |                  | 100ms/S, 200ms/S, 500ms/S,                               |
|   |                  | 1s/S, 2s/S, 5s/S,  |
|   |                  | 10s/S, 30s/S, 1min/S                                     |
|   |                  | The maximum number of items that can be measured depends |
|   |                  | on the recording interval.                               |
|   |                  | 1ms/S : Max. 50ch (Harmonic measurement items cannot be  |
|   |                  | saved.)  |
|   |                  | 10ms/S : Max. 500ch                                      |
|   |                  | 50ms/S : Max. 2,500ch                                    |
|   |                  | 100ms/S : Max. 5,000ch                                   |
|   |                  | 200ms/S or later: Max. 10,000ch                          |
|   |                  |  |
|   |                  | In IEC measurement mode, the sampling period that can be |
|   |                  | set is 100 m/S or later.                                 |
| 2 | Recording Length | Sets the record length of the measurement.               |
|   |                  | You can configure the data recording time for both the   |
|   |                  | number of points and duration.                           |

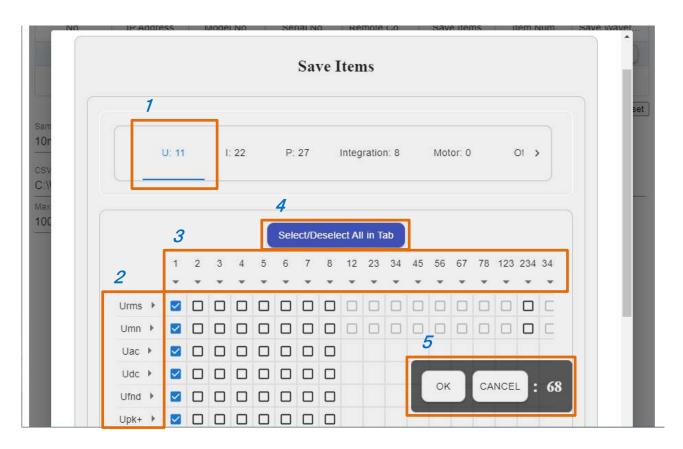
|   |                         | If O point is specified, the measurement is continuous.     |
|---|-------------------------|---|
|   |                         | Maximum recording time is 100 days.                         |
| 3 | CSV output folder       | Specify the folder for CSV output.                          |
|   |                         | Press the [Browse] button to specify the folder.            |
|   |                         | * Please create the folder you wish to specify in advance   |
|   |                         | before entering a folder name.                              |
|   |                         |   |
|   |                         | If there is not enough free space in the specified folder,  |
|   |                         | the file saving may fail, and an error message may be       |
|   |                         | displayed.  |
| 4 | File Name               | Specify the name of the CSV output file.                    |
|   |                         | A number representing a sequential number will be added     |
|   |                         | to the name entered here.                                   |
|   |                         | Example: If the file name is "name", the output file name   |
|   |                         | is "name_1.csv".  |
|   |                         |   |
|   |                         | The following characters are not allowed.                   |
|   |                         | '¥', '/', ':', '*', '?', '"', '<', '>',                     |
|   |                         | ' '   |
| 5 | Maximum number of lines | Set the maximum number of lines in the CSV output file.     |
|   |                         | If the maximum number of lines is exceeded, the file will   |
|   |                         | be split.   |
|   |                         | If the maximum number of lines is also set to a large value |
|   |                         | when the number of measurement items is large, the size     |
|   |                         | of the created file may become too large for some viewer    |
|   |                         | software to open.   |
|   |                         | Range: 1,000 - 1,000,000 lines                              |
|   |                         |   |

<sup>\*</sup> Regarding the specified recording length, we guarantee normal operation for a maximum of 72 hours. Within this range, you can expect stable performance and proper functionality.

If longer usage exceeding 72 hours is required, please proceed with your own responsibility.

Next, set the measurement items to be saved.

Click the "Select" button to open the Save Item Selection window.



|   | Name                  | Description  |
|---|-----------------------|--|
| 1 | Save Item Type Tab    | This tab classifies the type of stored items.            |
|   |                       | U: Voltage measurement items                             |
|   |                       | I: Current measurement items                             |
|   |                       | P: Power measurement items                               |
|   |                       | Integration: Integration measurement items               |
|   |                       | Motor: Motor analysis measurement items                  |
|   |                       | Others: Other measurement items                          |
|   |                       | Harmonic: Harmonic measurement items                     |
|   |                       | Flicker: Flicker measurement item (*1)                   |
|   |                       | Interharmonics: Intermediate harmonic measurement item   |
|   |                       | (*1)   |
|   |                       | *1: Displayed only in IEC measurement mode.              |
|   |                       |  |
|   |                       | The number to the right of each tab indicates the number |
|   |                       | of measurement items currently selected on that tab.     |
| 2 | Measurement item name | This label indicates the name of the measurement item.   |
|   |                       | For details, refer to "Detailed Specifications of        |

|   |                        | Measurement Parameters" in the instruction manual.         |
|---|------------------------|--|
|   |                        | Clicking the arrow to the right of a measurement item name |
|   |                        | allows you to select all the checkboxes in that line at    |
|   |                        | once.  |
| 3 | CH name                | This label indicates the CH name.                          |
|   |                        | Clicking the arrow under a CH name selects all the         |
|   |                        | checkboxes in that column.                                 |
| 4 | Select/deselect all in | All checkboxes in the currently selected tab are selected  |
|   | tabs                   | or deselected.   |
| 5 | OK / CANCEL            | After selecting the items to be stored, press the OK       |
|   |                        | button to determine the items to be saved and close the    |
|   |                        | window.  |
|   |                        | Pressing the Cancel button returns the window to the       |
|   |                        | state it was in before it was opened and closed it.        |
|   |                        | The number on the right indicates the number of all the    |
|   |                        | currently selected measurement items.                      |

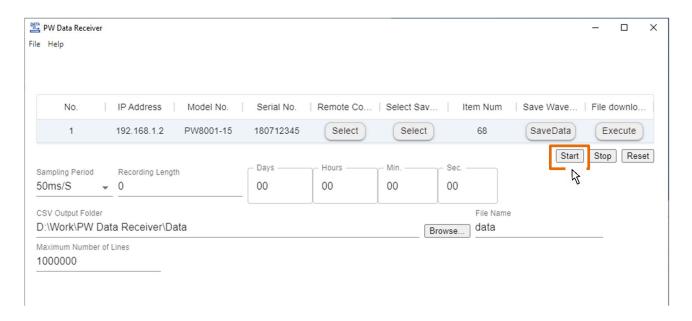
## Note

The measurement items that can be saved change depending on the measurement mode, wiring settings, and channel settings. After selecting an item to save, do not change the setting and start measurement. Also, be sure to select the save item again after changing the setting.

#### 4.6. Start the measurement

Click the "Start" button to start measurement.

Do not stop or reset the integration by operating the instrument during measurement.



| Item  | Description  |
|-------|--|
| Start | Press this button to start measurement.                  |
| Stop  | Press this button to pause measurement.                  |
|       | The next time measurement is started, and the result is  |
|       | appended to the previous CSV file.                       |
| Reset | Resets the measurement.                                  |
|       | When the next time measurement is started, the result is |
|       | output to a new CSV file.                                |

#### Note

In IEC measurement mode, restarting measurement after it has been stopped will result in an error. Reset once and then start measurement.

Turn off the auto-save setting of the power analyzer at the start of measurement. This application and the auto-save function of the power analyzer cannot be used together.

#### 4.7. Saving CSV data

During the measurement, the data is automatically saved in CSV format.

CSV data will be saved in a folder created for the time when recording started under the folder specified in the "CSV Output Folder" setting.

Example: When recording started at 12:34:56 on 09/31/2023, the data will be saved in the folder "20230931123456".

\*When you resume the measurement, it will be appended to the same file. However, if you have the CSV file open in Excel or any other application, the file will be locked by Excel, preventing the application from writing to the file and causing an error. Please be careful not to have the CSV file open in Excel or any other application when starting the measurement.

#### Note

When the measured value is in a specific state, a specific string is stored instead of the measured value.

| Peak-over value | "OVER"  | In case of overload or peak overload, "OVER" is stored to  |
|-----------------|---------|--|
|                 |         | indicate the peak-over value.                              |
| Invalid value   | "ERROR" | If the range is changed or calculation is not possible, an |
|                 |         | "ERROR" is stored to indicate an error value.              |

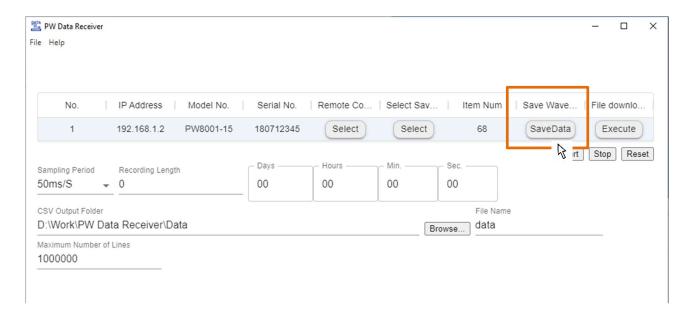
## 4.8. Saving waveform data

Save the waveform data currently displayed on the instrument by clicking the "Save" button in the "Save Waveform" section.

The waveform data will be saved in the "WAVEdata" folder under the folder specified in the "CSV Output Folder" and the data will be saved there.

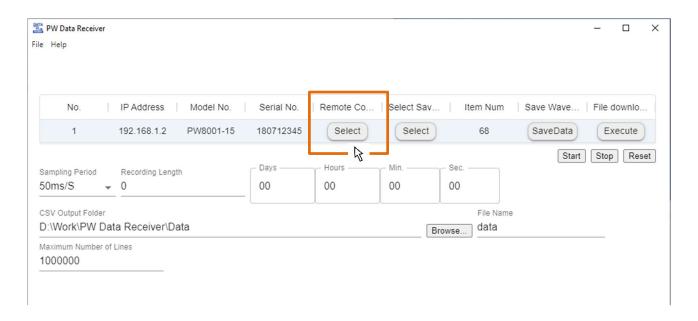
If you are in continuous waveform recording mode, waveform saving will result in an error. Press the SINGLE key to record the waveform.

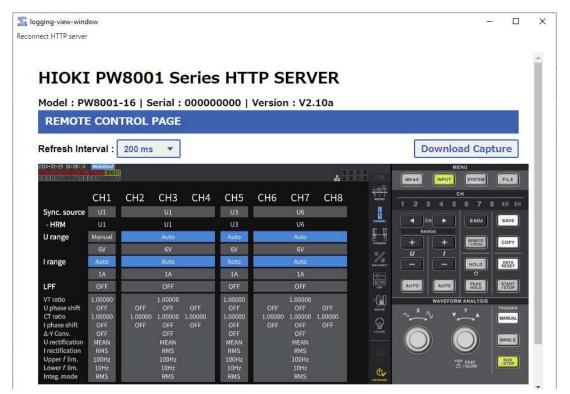
The saved data is stored as a BIN format file. Displayed by "GENNECT One", an application published by our company.



#### 4.9. Remote control of the instrument

Clicking on the remote control "Select" button opens the remote-control window.



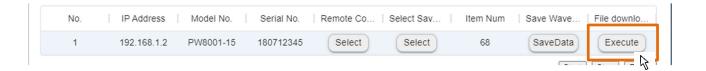


When you open the remote-control window, the dialog below may appear. However, the connection has been made; press OK to close the dialog.

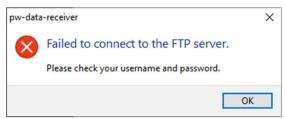


#### 4.10. Download files

Clicking on the file download "Execute" button opens the file download window.

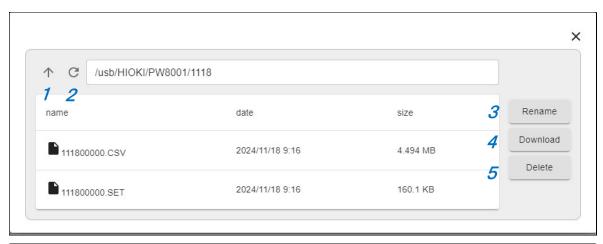


If the power analyzer's FTP server authentication setting is turned on, the following FTP connection failure window will display.



The Authentication Settings window will then appear. Enter the username and password for the power analyzer's FTP server authentication settings. If the authentication is successful, the file download window will open.



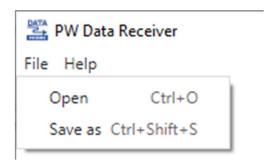


|   | 項目                | 説明  |
|---|-------------------|---|
| 1 | Go to upper level | Moves up one level from the currently displayed folder. |
| 2 | Update display    | Refresh the currently displayed folder.                 |
| 3 | Rename            | Renames the currently selected file/folder.             |
| 4 | Download          | Download the currently selected file/folder.            |
| 5 | Delete            | Deletes the currently selected file/folder.             |

Double-click on a folder to navigate into it.

## 4.11. Saving and loading settings

Click on the [File] menu in the upper left corner of the screen to display the Open / Save as menu.

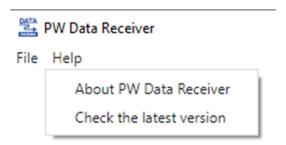


|   | 項目      | 説明   |
|---|---------|--|
| 1 | 0pen    | Open the app settings by specifying a JSON file. |
| 2 | Save as | Save the app settings to a JSON file.            |

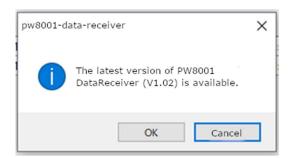
\* During measurement, pause, and waveform acquisition, you cannot perform the loading and saving of settings.

## 4.12. Checking the latest version

Click [File] in the upper left corner of the screen to display the menu. Click [Check for Latest Version] in the menu.



When the latest version is released:



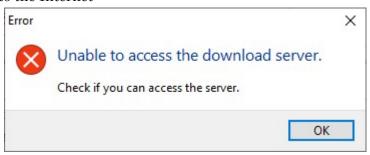
Click OK to start upgrading.

When the version was already up to date:



|   | Item                     | Description   |
|---|--------------------------|---|
| 1 | Check for newer versions | By checking this checkbox, PW Data Receiver will        |
|   | at startup.              | automatically check for the latest version release upon |
|   |                          | startup.  |

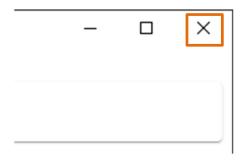
When not connected to the Internet:



An error dialog will appear. Please make sure you are connected to the Internet and execute again.

## 4.13. Quitting the Application

Click [X] on the top right corner of the application window to quit the application.



... and upwards