# PW8001 Data Receiver user's manual

# 1.Introduction

"PW8001 Data Receiver" is an application software to save the measurement data calculated by HIOKI PW8001 power analyzer on PC.

Supported models	Product name
PW8001	Power Analyzer

PW8001 Data Receiver can do the following.

- $\cdot$  Save measurement data to PC in CSV format
- $\cdot$  Remote control of the PW8001 instrument from PC

# 2.System Requirements

The following systems must be installed on your computer to use PW8001 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

Delete the previous version of the "PW8001 Data Receiver" folder, folder by folder. If you have created a shortcut icon on the desktop, delete the shortcut icon as well.

Perform the following steps using an administrator account.

-1. Double-click on [Setup\_PW8001DataReceiver\_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.)

User Account Control Do you want to allow this app to make changes to your device?	×
HIOKI PW8001 DataReceiver Setup Verified publisher: HIOKI E.E.Corporation File origin: Removable media on this computer Show more details	
Yes No	

-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".

Setup - HIOKI PW8001 Da	itaReceiver	1 <u>00</u>		×
ΗΙΟΚΙ	Completing the HI DataReceiver Setu	OKI PW Ip Wizar	8001 d	
G.	Setup has finished installing HIOK your computer. The application m the installed shortcuts. Click Finish to exit Setup.	I PW8001 Data	Receiver	on tting
		Finish		

-7. Installation is completed.

## 4. Using the Software

## 4.1. Setting up the PW8001 instrument

Before starting the application, please set up the PW8001 instrument. The PW8001 instrument wiring can be set as desired.

4.2. Connection between PW8001 and PC

Connect the PC to the PW8001 instrument via LAN.

\* Firmware version v1.61 or later is required for the PW8001 instrument.

4.3. Launching the Application

To start the application, click on "HIOKI" - "HIOKI PW8001 DataReceiver" from the Start menu.



#### 4.4. How to connect to PW8001

- First, make a communication connection between the PW8001 instrument and the PC.
- Double-click on the line under IP Address to display the configuration dialog.

ng PW8001 Data Rec e Help	ceive	r						:
No.	j)	IP Address   Mode	I No.   Serial N	lo.   Remote	Co	Save Items	Item Num	Save Wavef
1		192.168.1.1		Sel	ect	Select	0	SaveData
		double	click					
Sampling Period 10ms/S	•	Recording Length	Days	Hours	Min	Sec00	Start	t Stop Reset
CSV Output Folde C:\Work\PW [	r Dati	a Receiver\data				Browse	File Name	
Maximum Number 1000000	of L	ines						

Set the IP address of the PW8001 instrument.

\*For details on how to recognize the IP address of PW8001, refer to the user's manual of PW8001.

IP Address	
192.168.1.11	

• If the connection is successful, the Model No. and Serial No. information of the recognized PW8001 will be displayed.

# 4.5. Measurement data storage settings

Sets the measurement data storage settings.

No.	IP Address	Model No.	Serial No.	Remote Co	S	ave Items	Item Num	Save Wave
1	192.168.1.11	PW8001-16	000000000	Select	) (	Select	0	SaveDat
						\$	22	
7	2		- LIBVS	Hours	Min	Sec	Star	t Stop R
mpling Period Ims/S	Recording Length     0		00	00	00	00		
V Output Folde	ar <b>3</b>						4	

	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 are not
		selectable.)
		10ms/S : Max. 500ch
		50ms/S : Max. 2, 500ch
		100ms/S : Max. 5,000ch
		200ms/S or later: Max. 10,000ch
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 0 point is specified, the measurement is continuous.
		Maximum recording time is 10 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.
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".
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.
		Range: 1,000 - 1,000,000 lines

\* 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 at 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 closes 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.

🚆 PW8001 Data Receiv	er						_ □
No.	IP Address   Model No.	Serial No.	Remote Co	S	ave Items	Item Num	Save Wavef
1	192.168.1.11 PW8001-16	6 00000000	Select	) (	Select	68	SaveData
Sampling Period 10ms/S 💂	Recording Length	Days 00	Hours 00	- Min	Sec	Start	Stop Reset
CSV Output Folder C:\Work\PW Dat	a Receiver\data				Browse	File Name	
Maximum Number of 1 1000000	Lines					<u>.</u>	

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.	
	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 PW8001 at the start of measurement. This application and the auto-save function of PW8001 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.

🚆 PW8001 Data Rec le Help	eive	a						
No.	Ĩ.	IP Address   Model No.	Serial No	.   Remote	• Co   Sa	ave Items	Item Num	Save Wavef
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								\$
Constant Desired		Decoder Locals	- Days		Min	Sec.	Star	t Stop Reset
10ms/S	×	0	00	00	00	00		
CSV Output Folder C:\Work\PW E	)ati	a Receiver\data		1		Browse	File Name	
Maximum Number 1000000	of L	ines						

# 4.9. remote control of the instrument

 $Clicking \ on \ the \ remote \ control \ "Select" \ button \ opens \ the \ remote \ control \ window.$ 

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Help								
No.	IP Address	Model No.	Serial No.	Remote Co	Sav	e Items	Item Num	Save Wavef
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ampling Period	Recording Lengt	th	Days	- Hours	Min	Sec		
0ms/S 🚽	0		00	00	00	00		
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OFF 1.00000 OFF

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OFF OFF MEAN RMS 100H;

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OFF OFF MEAN RMS Q Q

đ.

BINGLE

OFF 1.00000 OFF When you open the remote-control window, the dialog below may appear. However, the connection has been made; press OK to close the dialog.

pw8001-data-receiver	×
Failed to connect to remote control page. Only one user can connect.	
	OK

#### 4.10. Saving and loading settings

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

DATA	PW800	1 Data Receiver
File	Help	
Open		Ctrl+O
S	ave as	Ctrl+Shift+S

	項目	説明
1	Open	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.

#### 4.11. 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.

DATA	PW800	1 Data Receiver
File	Help	
	Ał	oout PW8001 Data Receiver
	Cł	neck the latest version

When the latest version is released:

pw8001-da	ata-receiver	×
1	The latest version of PW8001 DataReceiver (V1.02) is available.	
	OK Cancel	

Click OK to start upgrading.

When the version was already up to date:



	Item	Description
1	Check for newer versions	By checking this checkbox, PW8001 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.

4.12. Quitting the Application

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



... and upwards