



# 9624-10 PQA HiVIEW PRO

Power Measuring Instruments



## Complete Data Analysis at Your Fingertips !



- EN50160 data display
- ITIC curve display
- Report generation/output
- Download via LAN
- 3196 Viewer \*  
(equivalent to the 3196 screen)
- Demand and Integrated Power calculations \*
- Per Period Calculations \*
- Binary to CSV conversion \*
- Full Printing Capabilities \*

\*Also available in Model 9624

# 9624-10 PQA HiVIEW PRO

Download measurement data from the PC Card or via LAN to a PC for detailed analysis

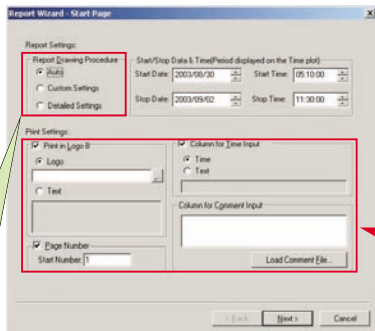
## ■ Downloading from LAN

Data (BINARY/TEXT/BMP) recorded on a PC card or the internal memory of the 3196 can be downloaded via LAN to a personal computer. (\*This can be done without use of the freeware Down96. Measurement on the 3196 must be halted during download.)

Upgraded report generation ability and richer output functions such as detailed print settings and print all data

## ■ Report generation function

Choose from 3 types of report generation settings to take care of all the troublesome reporting operations, and either send the data to a printer or save as a Rich Text file. (Automatic: Output basic items. Individual setting: Select any item for output. Detailed setting: Specify a time-series graph in details for output.)



● The report output period, print pages, logo mark, and other print report settings can easily be customized.

In a printing operation, logo mark and comment can be input for printing.

Report output items	Automatic setting	Individual setting
RMS voltage fluctuation graph	●	○
RMS current fluctuation graph	×	○
Worst case	●	○
Transient waveform	×	○*
Maximum value/minimum value list	●	○
Total harmonic voltage distortion graph	●	○
Total harmonic current distortion graph	×	○
EN50160 Overview	●	○
EN50160 Signaling	●	○
EN50160 Harmonic	×	○
EN50160 measurement result sorting	×	○
All event detailed list	●	○
Setting list	×	○

●: Output  
 ×: Do not output  
 ○: Output ON/OFF can be set  
 \*: Can be selected only when the worst case is selected

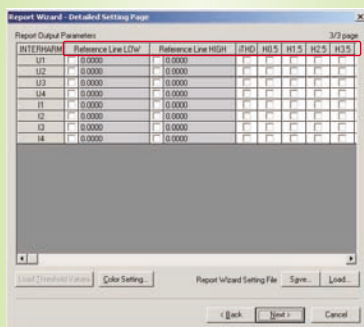
■ Automatic setting: Voltage problem analysis data can all be output together without any detailed settings.

■ Individual setting: Frequently used items can all be selected with just one touch and then output together.



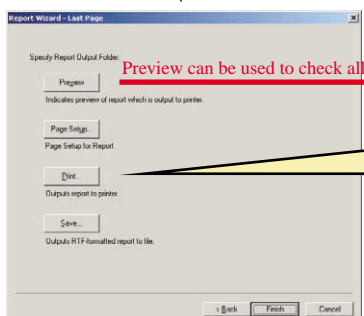
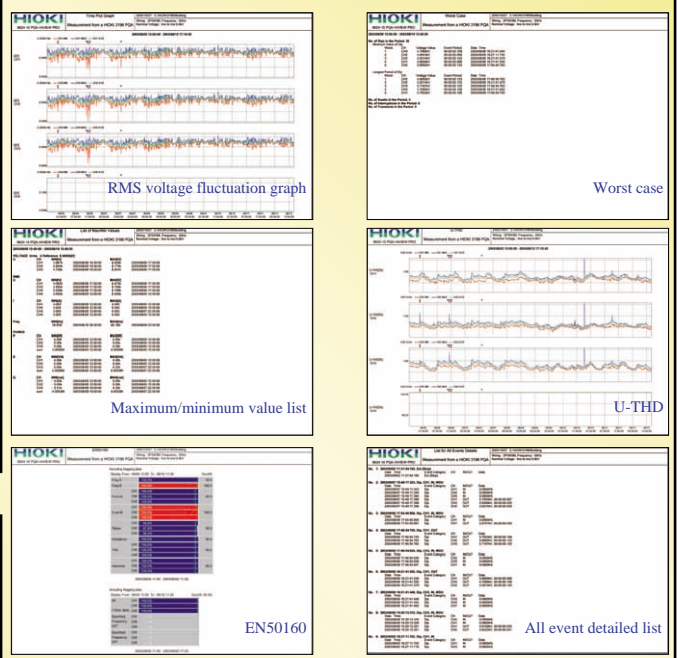
Report settings can be saved or loaded from a file.

■ Detailed setting: The necessary reports can be selected and set in detail, and then output together.



● Choose the printing style for a single page.  
**Single** :Gather all CHs to one graph, and then output to one page.  
**Division** :Create a graph for each CH, and then output all graphs of the CHs to one page.  
**Separate** :Create a graph for each CH, and then output each graph to one page.  
 ● Threshold values can also be printed for easy reference.  
 Display the set threshold as a reference line together with the recorded data on the graph. You can also change the settings.

Example on printing when "Automatic" is selected for report generation



Preview can be used to check all pages to be printed.

**EN50160 display functions (applicable standard is EN50160:1999) Note: All EN50160 screens are displayed in English.**

**Effectively evaluate and analyze the quality of power according to EU standards.**

The "Overview, Harmonic, Signaling, Measurement Result Sorting" screen is displayed, which is equivalent to the EN50160 measurement screen of the 3196.

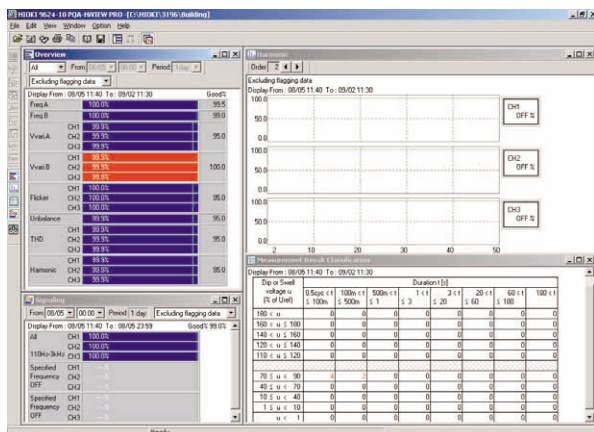
**Overview screen**

Use this screen to display the judgement result according to the EN50160 standards.

\* The judgement base value can be changed as desired (Good % setting)

**Signaling screen**

Use this screen to determine the voltage component of each frequency based on the results of the EN50160 mode.



**Harmonic screen**

Use this screen to display the details of the harmonics analysis based on the analysis results of the EN50160 mode.

**Measurement Result Sorting screen**

Use this screen to display voltage problem data (swell, dip, interruption) detected by an event, by using the continuous period and worst value (official voltage setting ratio) classifications.

\* The continuous period and worst value range can be changed as desired.

**ITIC curve display function**

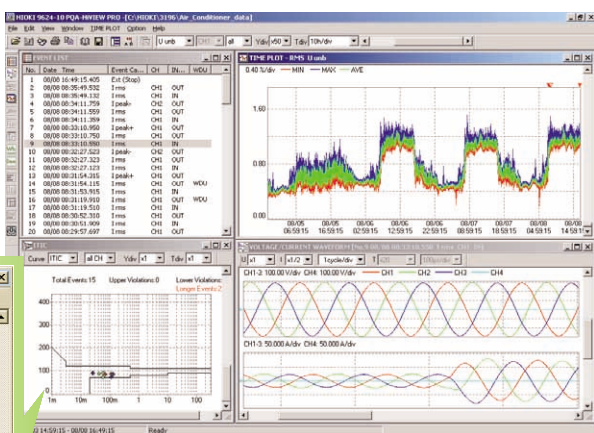
**Make ITIC (CBEMA) curve analyses (limit curve) based on the power quality control standards of the U.S.A.**

**Event list screen**

Use this screen to display the list of event-detected data.

**ITIC screen**

Use this screen to display the ITIC (CBEMA) curve graph.

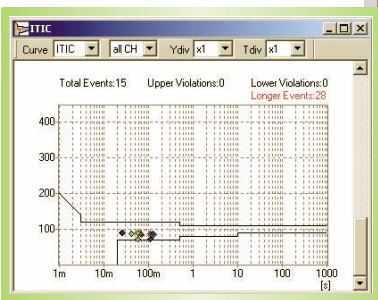


**TIME PLOT screen**

Use this screen to display all data recorded in long durations in the PC card (display of each of the following screens: RMS fluctuation, voltage fluctuation, harmonics fluctuation, and interharmonics screen)

**Event data screen**

Use this screen to display the details of event-detected data (display of detailed value, waveform, vector, DMM, and harmonics list/bar graph).



**What is an ITIC(CBEMA) curve?**

An ITIC curve is a graph created by the Information Technology Industry Council in the U.S.A. that shows data of voltage problems detected by an event, in terms of occurrence period and worst value (official voltage setting ratio). The graph enables you to easily see distribution of event data that should be analyzed as well as make quick searches.

\* You can freely change the upper or lower limit of the curve as desired (user-defined curve setting).

**Positive phase, negative phase, and zero phase function**

Recalculate event data captured by 3P4W circuits, and display each component of the voltage/current of the positive phase, negative phase, and zero phase.

**Functions common between the 9624 and the 9624-10**

**Viewer**

View the 3196 screen on your PC, including the **TIME PLOT screen** (voltage fluctuation, RMS fluctuation, harmonics fluctuation, interharmonics fluctuation), **event list screen**, **event data screen** (waveform, vector, DMM, harmonics, event details), **flicker screen**, and **setting screen**. For the TIME PLOT screen, you can use the two cursors (A and B) to perform calculations within a specified period.

**Demand and Integrated Power Calculations**

Calculate the demand and integrated power based on the TIME PLOT data of the active power.

**Binary to CSV format conversionPC printer**

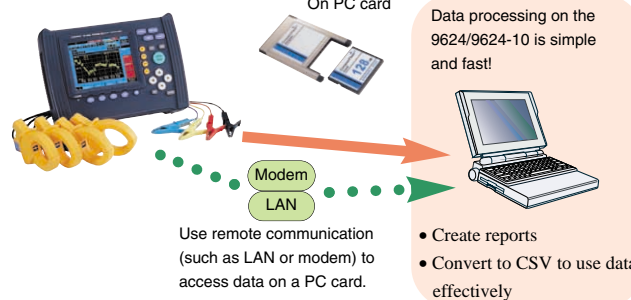
Convert **binary data of the range (specified on the TIME PLOT screen) or the event waveform (selected on the event waveform screen) to CSV files.**

Open the CSV files with common PC office applications such as a spreadsheet for further processing.

**Printing**

Each screen can be output as a report to a PC printer.

Save measurement data in binary format



On PC card

Data processing on the 9624/9624-10 is simple and fast!

Use remote communication (such as LAN or modem) to access data on a PC card.

- Create reports
- Convert to CSV to use data effectively

## 9624-10 Specifications (Items in blue ■ symbolize specifications unique to Model 9624-10, and are not available in the standard Model 9624.)

### -1. Basic specifications

Supplied media	: One CD-R disc
Operating environment	: PC/AT compatible
OS	: Japanese or English version Microsoft Windows 98/Me/NT 4.0/2000/XP
Memory	: 128 MB or more

### -2. Functional specifications

#### [Data read function]

Data read	: Binary data recorded on the 3196 (maximum up to 528 MB)
SET file	: Setting data
ITV file	: TIME PLOT data
EVT file	: EVENT data
WDU file	: Event voltage fluctuation data
FLC file	: Flicker data ( $\Delta V_{10}$ , IEC)
TRN file	: Transient over voltage waveform data
EN50160.EN file	: EN50160 data
EVENT.EN file	: EN50160 event data

#### [Data display function]

##### SYSTEM display function

Screen display	: SYSTEM (setting) content
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##### TIME PLOT display function

Screen display	: RMS fluctuation, voltage fluctuation, harmonics fluctuation, and interharmonics fluctuation
Cursor function	: A and B cursors (calculation function available within period)

##### EVENT list display function

Screen display	: EVENT list content
Display method selection	: Chronological or priority order

##### EVENT data display function

Display function	: Display event data selected on the EVENT list screen.
Screen display	: Display one of the following screens (1 to 4).
(1) Waveform display	: Voltage/current waveform and voltage/transient over voltage waveform
(2) Vector display	: Harmonics RMS value and harmonic phase angle
(3) DMM display	: Power, voltage, and current
(4) Harmonics display	: Harmonics bar graph and harmonics list
Cursor function	: A and B cursors for waveform display (calculation function available within period)

##### Positive/ Negative/ Zero phase calculation function

	: Display voltage and current of the positive phase, negative phase, and zero phase. (In vector display screen, this is conducted during the 3P4W wiring analysis.)
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##### Flicker graph display function

Screen display	: $\Delta V_{10}$ flicker graph or IEC flicker graph
Cursor function	: A and B cursors (calculation function available within period)

##### Event voltage fluctuation graph display function

Cursor function	: A and B cursors (calculation function available within period)
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#### [Integrated Power value calculation function]

Setting items	: Analysis start time/period: Year, month, day, time, minute, and second settings/1 to 31 days
Calculation items	: Integrated Power value graph, Integrated Power value (consumption+recovery value, cursor measurement function available), and Maximum integrated power value (last integrated power value in analysis period)

#### [Demand calculation function]

Setting items	: Analysis start time/period: Year, month, day, time, minute and second settings/1 to 31 days Demand period: 5/10/30 minutes, 1/2/3/6/12 hours
Calculation items	: Demand graph (consumption values only), average demand (average value in analysis period), maximum demand (maximum value in analysis period), and load factor (average value/maximum value)

#### [ITIC curve display function]

Display function	: Plot event points on limited value curve (points indicating swell/dip/interruption occurrence period and voltage)
Percent of nominal voltage	: Maximum swell voltage or residual voltage ratio against official voltage
Violation count display	: Number of upper-limit violations, number of lower-limit violations, and total number of events
Limit curve selection	: ITIC curve or user-defined curve (any setting)

#### [EN50160 display function]

Screen display	: Overview/Harmonic/Signaling/Measurement result sorting
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#### [Copy function]

Various screens are saved in BMP format.

#### [Printing function]

Screen image printing, printing on A4 or letter sized paper, and print preview are possible.

#### [CSV format conversion function]

Convertible screens	: TIME PLOT screen, event waveform screen, flicker graph screen, event voltage fluctuation screen, demand screen, and integrated power screen
Conversion	: Range can be specified, and conversion items can be selected (TIME PLOT screen only).

#### [Report creation function]

Output format	: Output setting contents can be printed, or saved as a rich text file.
(1) Automatic output	: RMS voltage fluctuation graph, worst case, maximum/minimum list, total harmonic voltage distortion graph, Overview and Signaling data of EN50160, and all event detail list.
(2) Arbitrary output	: Includes, in addition to automatic output, RMS current fluctuation graph, transient waveform, total harmonic current distortion graph, Harmonic and result classification data of the EN50160, and settings list.
(3) Detailed output	: Voltage fluctuation, RMS fluctuation, harmonics fluctuation, and interharmonics fluctuation.

#### [Settings save function]

Save user-defined curves, setting for sorting measurement result, report setting, etc.

#### [Download function]

Download data from the 3196 via LAN.

### ■ Accessories

#### 9624-10 PQA HiVIEW PRO

License key (for USB port or parallel port), tag (for USB key), and operating manual

A license key is required to use 9624-10 PQA HiVIEW PRO. When ordering, please select USB port license key or parallel port license key as appropriate for your PC.