HIOKI

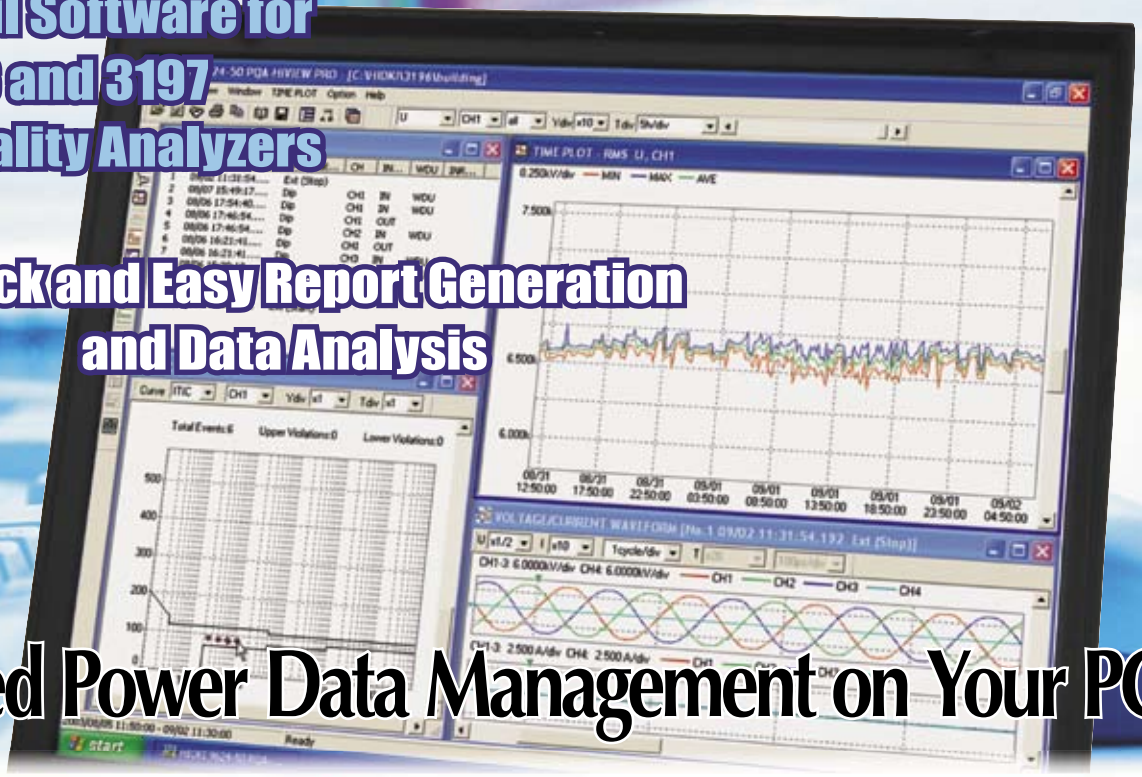
New

PQA-HiVIEW PRO 9624-50

Power Measuring Instruments

» Powerful Software for 3196 and 3197 Power Quality Analyzers

» Quick and Easy Report Generation and Data Analysis



Advanced Power Data Management on Your PC

- ✔ Viewer function lets you see the 3196 or 3197 screen on your PC
- ✔ Calculate demand and energy consumption
- ✔ Calculate over defined periods
- ✔ Convert binary data to CSV
- ✔ Create and print professional reports
- ✔ ITIC curve and EN50160 data display from the 3196

ISO 9001 JMI-0216

ISO14001 JQA-E-90091

INTERNET HIOKI Website http://www.hioki.co.jp/

HIOKI company overview, new products, environmental considerations and other information are available on our website.

PQA Hi-VIEW PRO 9624-50

Powerful Functions to Make the Most of your Power Quality Data

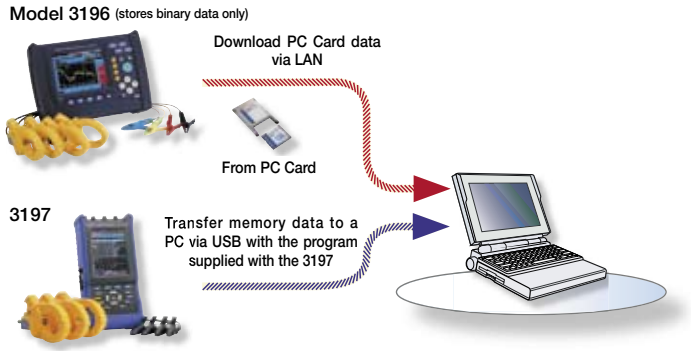
■ Viewer Function

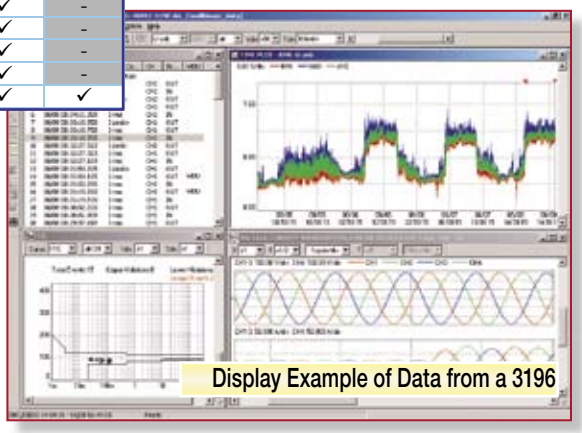
Display and analyze measurement data the same as you would on the **Power Quality Analyzer.**

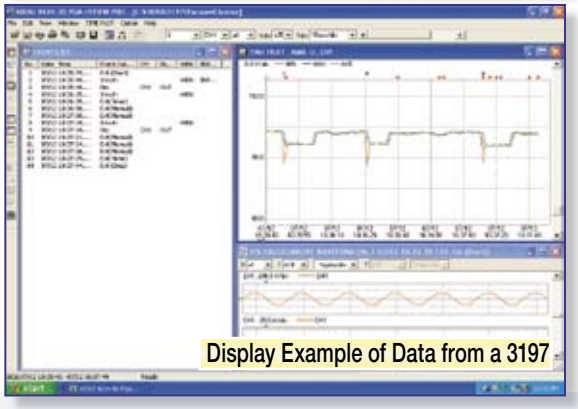
	3196	3197
TIME PLOT screens		
RMS	✓	✓
Voltage	✓	✓
Harmonic and inter-harmonic fluctuations	✓	-
Demand and energy consumption	✓	✓
Event screens		
List	✓	✓
Event details	✓	✓
Waveforms	✓	✓
Vector	✓	-
DMM	✓	-
Harmonics	✓	-
Flicker	✓	-
Settings screens	✓	✓

In the TIME PLOT window, calculations can be applied to measurements within a time span specified by A and B cursors.

Easy and quick data processing
- Generate reports
- Convert to CSV for data handling applications




Display Example of Data from a 3196


Display Example of Data from a 3197

■ Convert measurement data to CSV format

Measurement data within a time span specified in the TIME PLOT window, and **binary data of an event waveform selected in the Event Waveform window, can be converted to CSV format.** CSV-format files can be loaded into a spreadsheet program on the PC.

■ Printing

Output each report window to your PC's printer.

Features for complete report generation

■ Print complex reports in batches or store in rich text format files using three report generation setting methods:

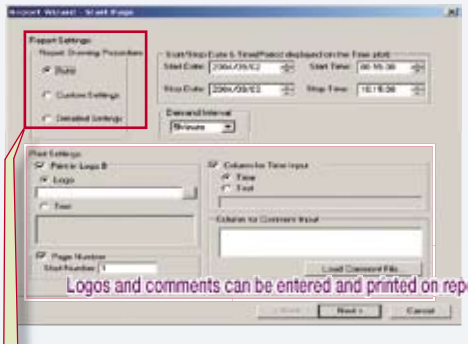
- ❍ Auto: Outputs basic parameters
- ❍ Custom: Outputs any selected parameter
- ❍ Detailed: Outputs a specified time-series graph with details

Report Output Parameters	3196			3197		
	Auto	Custom	Detailed	Auto	Custom	Detailed
RMS voltage fluctuation graph (TIME PLOT window)	○	◎	◎	○	◎	◎
RMS current fluctuation graph (TIME PLOT window)	×	◎	◎	×	◎	◎
Voltage, rms (TIME PLOT window)	×	×	◎	×	×	◎
Harmonic fluctuations, and inter-harmonics (TIME PLOT window)	×	×	◎	—	—	—
Energy consumption graph, demand graph	×	×	◎	×	×	◎
Flicker graph	×	×	◎	—	—	—
Voltage total harmonic distortion percentage list (TIME PLOT window)	○	◎	◎	○	◎	◎
Current total harmonic distortion percentage list (TIME PLOT window)	×	◎	◎	—	—	—
EN50160 overview and signaling	○	◎	×	—	—	—
EN50160 harmonics and classified measurement results	○	◎	×	—	—	—
Worst case	○	◎	×	○	◎	×
Transient waveform	×	◎*	×	—	—	—
Maximum/minimum list	○	◎	×	○	◎	×
All event waveforms	○	◎	×	○	◎	×
Detailed list of all events	○	◎	×	○	◎	×
Settings list	×	◎	×	×	◎	×

○: Output, ×: Not output, ◎: Selectable for output, —: Not applicable
*: Only selectable for worst case

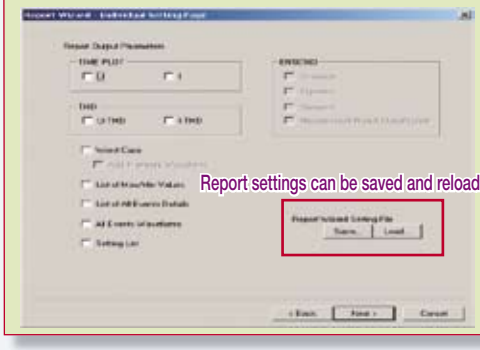
■ Auto setting:

Without changing Detailed settings, voltage anomaly analysis data is output as a batch



■ Custom setting:

Select frequently used parameters to print, and output as a batch



Model 3196-Specific Functions

Analyze voltage anomalies to predict and prevent future events! ITIC Curve Display Function

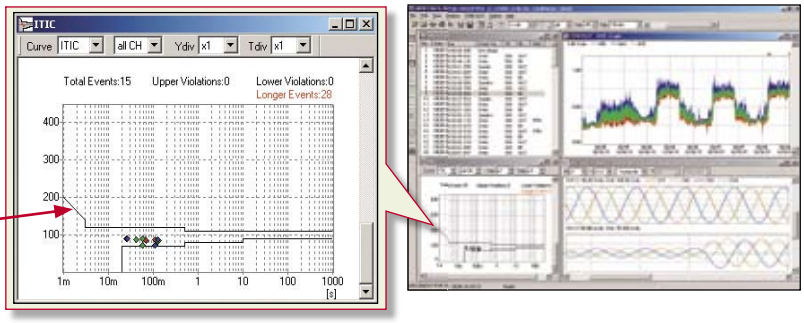
With the ITIC Curve display, perform ITIC (CBEMA) Curve (tolerance curve) analysis used in power quality management standards in the USA.

Tip: What's an ITIC (CBEMA) Curve?

Created by the US Information Technology Industry Council, the Curve graphically displays voltage anomaly data detected as a particular type of event over an occurrence time span with worst-case values (percentage of specified nominal voltage). The distribution of event data is displayed graphically for quick detection and analysis.

● **Predict and prevent power faults in your factory or office by customizing the threshold curves to suit your power conditions.**

*** User-defined curve setting function**
Set the upper and lower threshold curves for any required tolerance



Data Analysis Support Functions

■ EN50160 Display Function (Conformance Standard EN50160:1999) Note: The EN50160 window is displayed only in English

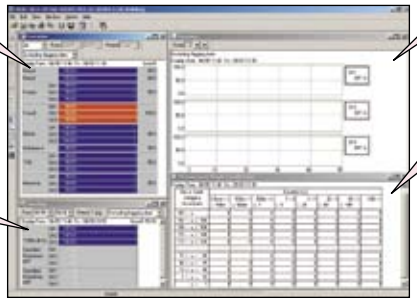
This is the power quality standard for the EU region. Power quality can be evaluated and analyzed according to the standard.

The information presented on the EN50160 measurement screen on the Model **3196** is duplicated in the Overview, Harmonic and Signaling Measurement Result Classification windows.

● **Overview Window**
Judgment results are displayed according to the EN50160 standard.

Note: Judgment standard values can be changed as needed. (Good % setting)

● **Signaling Window**
The voltage component at each frequency is determined based on EN50160 results analysis.



● **Harmonic Window**
Detailed results of harmonic analysis are displayed based on EN50160 results analysis.

● **Measurement Result Classification Window**
Voltage anomaly data for a detected event (swell, dip or interruption) is displayed by classification according to duration and worst-case values (percentage of specified nominal value).

Note: Classifications of duration and worst-case values are user-definable.

■ Download measurement data via LAN

Data (binary, text or bitmap) recorded on a PC Card or in the internal memory of the Model **3196** can be downloaded to a PC via LAN.
(Note: This does not require the free Down96 program, but measurement with the **3196** must be stopped while downloading.)

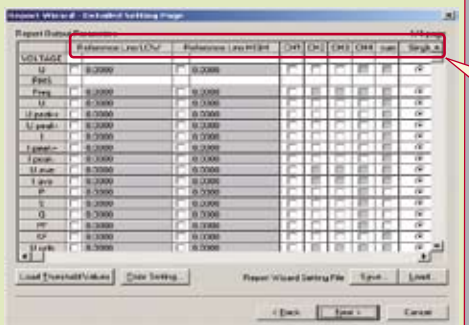
■ Positive-, negative- and zero-phase functions

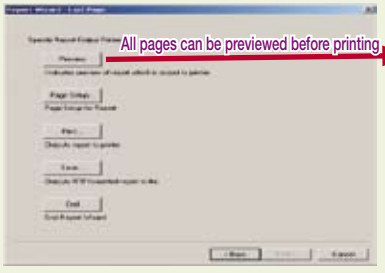
Event data detected in three-phase four-wire systems can be recalculated to display positive-, negative- and zero-phase voltage and current components.

■ Demand and energy consumption calculation

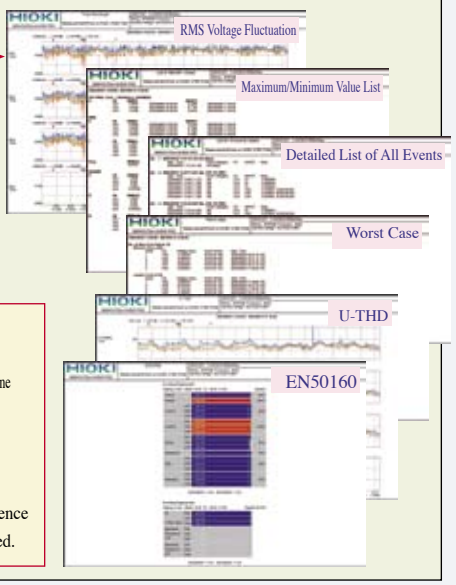
Time plot active power data from the Model **3196** can be used to calculate and display demand and energy consumption values.

■ **Detailed setting:**
Select details of the required report data for batch output





Printing example of [Auto] report generation with data from Model 3196



● **Specify page layout for printing**

Single : All channels are plotted on one graph, and output on one page.
Division : A graph is generated for each channel, and all channel graphs are output on one page
Separate: A graph is generated for each channel, and each graph is output on one page

● **Print threshold values**
Specified threshold values can be displayed on a graph as a reference trace together with recorded data. Specified values can be changed.

Model 9624-50 Specifications

-1. General Specifications

Provided media : One CD
Operating environment : PC/AT-compatible computer
Operating system : Microsoft Windows 2000/XP English or Japanese Edition
RAM : At least 128 MB

-2. Functional Specifications

DATA LOADING OF RECORDED BINARY DATA *From Model 3196: up to 528 MB; From Model 3197: up to 4 MB*				
File Contents		**File Extension**	**3196**	**3197**
Settings data		.SET	•	•
Time plot data		.ITV	•	•
Event data	List	.EVT	•	•
	Current waveform data		•	•
	Numerical data		•	-
Flicker data (Δ V10, IEC)		.FLC	•	-
Transient waveform data		.TRN	•	-
Event voltage fluctuation data		.WDU	•	•
EN50160 data		EN50160.EN	•	-
EN50160 event data		EVENT.EN	•	-
Inrush current graph data		.INR	-	•
Demand graph		.DEM	-	•

DATA DISPLAY	3196	3197
■ **System Settings**	•	•
■ **Time Plot Window**		
RMS	•	•
Voltage	•	•
Harmonic	•	-
Inter-harmonic fluctuations	•	-
Cursor function*	•	•
■ **Event List Window**		
Chronological sequence	•	•
Priority sequence	•	-
■ **Event Data Windows:** *Display the event data selected in the Event List window or for the event marker selected in the Time Plot window*		
Event details	•	•
Voltage/current waveform	•	•
Voltage/transient over-voltage waveform	•	-
Vector Window: Harmonic RMS, harmonic phase angle	•	-
DMM Window: Power, voltage or current	•	-
Harmonic Windows: Harmonic bar graph or harmonic list	•	-
Cursor function*	•	•
Zero-, positive- and negative-phase calculations display for voltage and current *(For 3P4W wiring data analysis in a Vector window)*	•	-
■ **Event Voltage Fluctuation Graph Display**	•	•
WDU event data selected in an Event List window	•	•
Data for the selected WDU event marker in a Time Plot window	•	•
Cursor function*	•	•
■ **Event Inrush Current Graph Window**	-	•
Inrush Event data selected in an Event List window	-	•
Inrush Event marker data selected in a Time Plot window	-	•
Cursor function*	-	•
■ **Flicker Graph Window for IEC flicker graph or ΔV10 flicker**	•	-
Cursor function*	•	-
■ **Energy Consumption (Integrated Power)**	-	•
Window: Energy consumption graph [active (consumption or regeneration value) and reactive (lag/lead)]	-	•
Numerical: *Maximum energy consumption within the measurement period*	-	•
Cursor function**	-	•
■ **Demand**	-	•
Window: *Demand graph [active (consumption or regeneration value) and reactive (lag/lead)]*	-	•
Numerical: *Maximum and average demand values within the demand period*	-	•
Cursor function**	-	•
COPY: *Capture windows as bitmap image (BMP) files*	•	•
PRINT: *Print screen image on A4 or Letter size paper*	•	•
Print preview	•	•

CURSOR FUNCTIONS:
*Define a time span using the A/B cursors for calculation
**Display data at cursor position

	3196	3197
CSV FORMAT CONVERSION		
Time Plot	•	•
Event waveforms	•	•
Transient waveforms	•	-
Event voltage fluctuation	•	•
Event inrush current	-	•
Flicker graph	•	-
Demand and energy consumption	•	•
Conversion span, etc.: *Specify time span and parameters for conversion*	•	•
TEXT SELECTION: *Save selected span as tab-separated text*	•	-
DMM display	•	-
Harmonic List windows	•	-

REPORT GENERATION: Content selected for output is printed or saved as a file in rich text format	3196	3197
■ **Auto output**		
RMS voltage fluctuation graph	•	•
Worst case	•	•
Maximum/minimum value list	•	•
Voltage total harmonic distortion percentage graph	•	•
Overview and signaling data per EN50160	•	-
All event waveforms	•	•
Detailed list of all events	•	•
■ **Custom output** *(in addition to Auto Output)*		
RMS current fluctuation graph	•	•
Transient waveform	•	-
Current total harmonic distortion percentage graph	•	-
Harmonic and result classification data per EN50160	•	-
Settings list	•	•
■ **Detailed output**		
Voltage	•	•
RMS	•	•
Harmonic	•	-
Inter-harmonic fluctuations	•	-
Flicker	•	-
Energy consumption and demand graphs	•	•
SAVING SETTINGS		
Report settings	•	•
User-defined ITIC curves	•	-
Classification settings for measurement results	•	-
DATA DOWNLOAD	LAN	USB*

*Using 3197Applications software bundled with the 3197

For Model 3196 Only:

Energy Consumption (Integrated Power) Calculation	
Settings	Analysis start time (year, month, day, hour, minute and second), and period (1 to 31 days)
Calculated items	Energy consumption graph, energy consumption (consumption/ regeneration value and cursor measurement functions available), Maximum energy consumption (the last energy consumption value in the analysis period)
Demand Calculation	
Settings	Analysis start time (year, month, day, hour, minute and second), and period (1 to 31 days)
Demand period	5, 10, 15 or 30 minutes, or 1, 2, 3, 6 or 12 hours
Calculated items	Demand graph (consumption value only), average demand (average value within analysis period), peak demand (maximum value within analysis period), load ratio (average/peak values)
ITIC Window	
Display function	Event points are plotted on a tolerance curve (event duration versus swell, dip or interruption voltage percentage)
Voltage percentage	Percentage of the maximum swell or residual voltage to the nominal voltage
Violation count display	Upper limit, lower limit and total number of events
Tolerance curve selection	ITIC curve, user-defined curve (optional setting)
EN50160 Screen	Classification by overview, harmonic, signaling detail or measurement results

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