CLAMP ON POWER LOGGER
PW3360-20, PW3360-21

Handy and Easy to Use
– Power Management Support

NEW
Harmonic Measurement Model
PW3360-21

Reliable measurements start with proper wiring.

The QUICK SET function guides you in making the right connections.

Function Enhancement Included from version 2.00

- See demand and trend graphs on site
- Supports single to three-phase, 4-wire circuits
  - Simultaneously measure up to three single-phase, 2-wire circuits (in the same power system).
- Measure up to 780V with a 1000V display range
- Broadly applicable for many jobs, including leakage current measurement
  - An optional clamp-on leakage sensor supports measurements as low as 50 mA.
- Store months of data on SD cards
Begin with QUICK SET Convenience

Select your Wiring Type, Clamp and Destination, and Connect

Select wiring type (example: 3P4W) and connect

1. Connect the leads to the PW3360-20.
   - Make proper connections simply by observing the colors of the displayed leads.
   - Connect the voltage leads and clamp sensors using the color guides.
   - Connect the voltage clips.
   - Double checks your voltage input and phase.
   - Proceed to the next step when PASS appears.

2. Connect the clamp sensors.
   - Select the current range.
   - Corrective action tips appear.
   - If FAIL appears, move the cursor to the indicator and press the [ENTER] key.

3. Connect the leads to the PW3360-20. (Pass)

Miswiring Example (Clamp Orientation)

Correct Orientation

Power supply side

Load side

Point the arrow toward the load side

Wiring Screen Display Examples

FAIL: The I vector’s phase direction is opposite the determination area.

PASS: The I vector’s phase direction is within the determination area.

Affected measurement values:

Examples: P (Power) displayed value is too low

P: 6.5kW

P: 20.6kW

Statement: Connect the leads to the PW3360-20. (Pass)
Reveal Power Consumption State! Graph Display Functions

**Demand Graph Display**
Shows the demand value transitions useful for managing power consumption. Check maximum demand values and times while recording.

**Trend Graph Display**
From all measurement items, select one for display. Check states such as power fluctuations of devices in on-site operating conditions.
* Except for demand and harmonics

**Capture and record all fluctuations**
To conveniently record fluctuations even over long periods, select “All” saving items to record maximum, minimum and average values within each recording interval.

**Create a Graph to Clearly Grasp Power Consumption**
Record power consumption on an SD Card* at specific intervals. Load the data into the PC.

Use Excel graph processing for before and after comparisons.

* Store up to one year’s data acquired at one minute intervals. Performance cannot be guaranteed on storage media other than Hioki-specified SD card options.
Accommodates All Worksites

- **Tight spaces**

  Compact

  In dim environments
  Easy-to-see color LCD

  - 48 mm (1.89”)
  - 100 mm (3.94”)
  - 180 mm (7.09”)

- **Where no AC power is available**

  Battery* power provides about eight hours of continuous operation. In addition, a Voltage Line Power Adapter* is available to power the PW3360-20 from the measurement lines.

  * Battery Set PW9002 and Voltage Line Power Adapter PW9003 options are sold separately.

  - Battery installation
  - 8-Hour operation

- **In severe temperature environments**

  The operating temperature range extends from \(-10^\circ\text{C} (14^\circ\text{F})\) to \(50^\circ\text{C} (122^\circ\text{F})\).

  Even under battery operation, measurements can be performed from \(0^\circ\text{C} (32^\circ\text{F})\) to \(40^\circ\text{C} (104^\circ\text{F})\) (\(0^\circ\text{C} (32^\circ\text{F})\) to \(50^\circ\text{C} (122^\circ\text{F})\) when using LAN communication).

- **Magnetic voltage adapters for hard-to-clip terminals**

  Magnetic voltage adapters convertible with the Voltage Cords L9438-53 let you accurately detect voltage when the circuit terminals are too shallow for alligator clips to latch on.

  * Magnetic Adapter 9804 option sold separately.

  9804-01 Magnetic Adapter (red) usage example

Generally compatible with M6 pan screws
Loaded with More Useful Functions

Simultaneous Measurements
Simultaneously measures three single-phase 2-wire circuits in the same system.

Pulse Input
The pulse input function can be used to record power data and production volume counts simultaneously. The power data and pulse volume (production volume) information are useful for unit cost production management.

Pulse Output
Use the Pulse Output function to acquire temperature and pulse (electrical energy) data simultaneously with a data logger. Evaluate the relationship between air conditioner temperature control settings and power consumption.

Leakage Current Measurement
With the optional leakage current clamp on sensors, turn the instrument into a 3-channel leakage current logger to help identify trouble spots.

Options
Leak Clamp on Sensor

- φ30mm (1.18 in)
- φ40mm (1.57 in)

Ideal for quick investigation of intermittent leakage by continuous calculation processing every 200 ms. (Select to save the average, maximum and/or minimum at every interval.)
**Harmonic Measurement Model**

**PW3360-21**

- Analyze voltage and current harmonics on a 50/60 Hz power line from the fundamental waveform to the 40th order.
  - Displays the RMS value, content, and phase angle (numerical list or graph display) for each harmonic order.
  - Vector display of power phase angle

**Maximum, average, and minimum values can be saved in binary format to SD card at each interval.**

Power Logger Viewer SF1001 is required to display the data on a PC.

**SF1001 Display Example**

- **Harmonic Graph Screen**
- **Harmonic power phase angle graph screen**

- Vector display of power phase angle

- **Harmonic Time Series Display**

Select and display a time series graph of fundamental, third- and fifth-order current harmonics.

**HTTP Server Function**

- Use a LAN cable to connect the PW3360-20 or PW3360-21 to a personal computer for real-time remote monitoring and measurement display in a web browser.

- Enter the IP address in the browser.

Files recorded in the Clamp On Power Logger’s internal memory or SD card are accessible via a LAN or USB connection, and are downloadable using the free **PW3360 Setup and Download Software**.

- Click the on-screen keys to operate remotely.
Data saved to an SD card or internal memory can be loaded into a PC for expanded display, aggregation and analysis.

**PC Processing**

Data saved to an SD card or internal memory can be loaded into a PC for expanded display, aggregation and analysis.

**Power Logger Viewer SF1001** (option, sold separately)

Data saved to an SD card or internal memory can be loaded into a PC for expanded display, aggregation and analysis.

Freeware for Model PW3360-20, PW3360-21 (free download from the Hioki website)

**PW3360 Setup and Download Software**

Use with a LAN or USB connection to download data recorded in the PW3360's internal memory or SD Card to a PC, and to change instrument settings from the PC.

**PW3360 Excel Graph Auto-Creation Software**

Install the PW3360 Excel Graph Auto-Creation Software to create graphs in Excel automatically using recorded measurement data.

Simple Operation and Easy Graph Creation

Simultaneously measure and record separate loads using three PW3360-20s

Use the [Stacked Display] to confirm at a glance comparative power consumption at multiple locations simultaneously.
### PW3360-20, PW3360-21 Specifications
(product guaranteed for one year)

#### Input specifications

<table>
<thead>
<tr>
<th>Measurement line type</th>
<th>Single-phase 2-wire, single-phase 3-wire, three-phase 3-wire, three-phase 4-wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement line Frequency</td>
<td>50/ 60 Hz</td>
</tr>
</tbody>
</table>
| Number of input channels | Voltage: 3 channels U1 to U3  
Current: 3 channels I1 to I3 |
| Voltage range | 600 V AC  
Total display area: 5V to 1000 V (less than 5 V displays as 0 V)  
Within 0 to 130% of the range  
Effective measurement area: Within 5 to 110% of the range |
| Current ranges | Load current  
CLAMP ON SENSOR 9694 : 500mA/1.5A/50 A  
CLAMP ON SENSOR 9695-02 : 500mA/1.5A/50 A  
CLAMP ON SENSOR 9696 : 5/10/50/100 A  
CLAMP ON SENSOR 9697-05 : 5/10/50/100/500 A |
| Power ranges | 0.00 W to 9.000 MW  
Depends on voltage/current combination and measured line type (see Measurement Range Configuration Tables) |
| VT ratio settings | Any (0.01 to 9999.99)  
Selections (1/5/10/20/30/60/200/300/600/700/1000/2000/2500/5000) |
| CT ratio settings | Any (0.01 to 9999.99)  
Selections (1/4/6/8/10/12/16/20/24/30/60/100/200/300/600/800/1200) |
| Input methods | Voltage: Insolated inputs (except between U1, U2, U3 and N)  
Current: Isolated input using a clamp-on sensor |
| Maximum rated voltage between terminals | Voltage input section: 600 V  
Current input section: 300 V |
| Maximum rated voltage to earth | Voltage input section: 600 V Measurement Category III  
360 V Measurement Category IV  
Current input section: Depends on clamp sensor in use,  
Voltage input part: 3 MΩ ±20% (50/ 60 Hz)  
Strand diameter: 0.65 mm (AWG28 to AWG22)  
Exposed wire length: 8 mm |
| Pulse input | No-voltage contact input (counts when shorted terminals open)  
Voltage input (Hi: 2 V to 45 V, Lo: 0 V to 0.5 V, counts at Lo to Hi) |
| Measurement range | 0 to 9999 (maximum pulse count per second interval) |
| Filter | Filter On (for mechanical contacts) 25 Hz or less, and at least 20 ms Hi and Lo pulse width  
Filter Off (for solid-state contacts) 5 kHz or less, and at least 100 ms Hi and Lo pulse width |
| Scaling | Displays product of pulse count and scaling factor setting  
Setting ranges: 0.001 to 1,000, and 1,000 to 100.00 |

#### Pulse input terminals

- **Pulse output device**
- **Pulse counter**

#### WIRE SPECIFICATIONS

Electric wires that conform with:
- single line: 40.65 mm (AWG22)
- twisted wire: 0.32 mm² (AWG22)
- strand diameter: 0.12 mm or more

Supported electric wires:
- single line: 40.12 mm to 60.65 mm (AWG28 to AWG22)
- twisted wire: 0.08 mm² to 0.32 mm² (AWG28 to AWG22)
- strand diameter: 0.12 mm or more
- exposed wire length: 8 mm
**Specifications in green available from version 2.00**

### General Specifications

**Display device**
3.5 inch TFT color LCD (320 × 240 pixel)
- Japanese, English, Chinese (Simplified, supported from version 2.00)
- Backlight auto-off function (after 2 minutes)
- When AUTO OFF is active, the Power LED blinks

**Operating environment**
Indoors, Pollution degree 2, altitude up to 2000 m (6562 ft.)

**Operating temperature and humidity (no condensation)**
- 10°C to 50°C (14°F to 122°F), 80% RH or less
- During LAN communication: 0°C to 50°C (32°F to 122°F), 80% RH or less
- During battery operation: 0°C to 40°C (32°F to 104°F), 80% RH or less
- During battery charging: 10°C to 40°C (50°F to 104°F), 80% RH or less

**Storage temperature and humidity (no condensation)**
- 20°C to 60°C (68°F to 140°F), 80% RH or less
- However, the battery's storage temperature range is -20°C to 70°C (-4°F to 158°F), 80% RH or less

**Dielectric strength**
4.29 kVrms AC (1 mA sensor current) between voltage input terminals and external terminals, 50 Hz/60 Hz for 60 sec.

### Applicable standards
- Safety: EN61010, EMC: EN61326, EN61000-3-2, EN61000-3-3

### Power supply
- Z1006 AC Adapter (12 V, 1.25 A), Rated supply voltage 100 VAC to 240 VAC, Rated power supply frequency 50/60 Hz
- Model 9459 Battery Pack (Ni-MH DC7.2 V 2700 mAh)

**Charge function**
Charges the battery regardless of whether the instrument is on or off.
- Charge time: Max. 6 hr. 10 min. (reference value at 23°C)

**Maximum rated power**
- When the Z1006 AC Adapter is used: 60 VA (including AC adapter)
- 13 VA (PW3360-20 instrument only)
- When the 9459 Battery Pack is used: 3 VA

**Continuous battery operation time**
Approx. 8 hr. (Continuous, backlight off)
- (when using the battery pack)

**Backup battery life**
Clock and settings (Lithium battery), Approx. 10 years (23°C (73°F))

**Dimensions**
- Approx. 180(W)✕179(H)✕48(D) mm (with PW9002)
- Approx. 180(W)✕179(H)✕48 (2.68") mm (without PW9002)

**Mass**
Approx. 550 (19 oz) (without PW9002), Approx. 585 (20.5 oz) (with PW9002)

**Accessories**
- Voltage Cord L9403-5W1 (AC Adapter Z1006 (1)), USB cable (1), instruction manual (1), measurement guide (1), color spiral tubes for grouping clamp sensor cords (5)

### Accuracy guarantee period
One year 23°C ±3°C, 80% RH or less, (no condensation)

### Measurement Specifications

**Connection**
- Single-phase 2-wire (1P2W, 1P5W × 2 circuits, 1P3W × 3 circuits)
- Single-phase 3-wire (1P3W, 1P3W1U, 1P3W1U+I), 1P3W2M, 1P3W2M-I, 1P3W3M)
- Three-phase 3-wire (3P4W), Current only: 1 to 3 channels

**Measurement accuracy (50/60 Hz, power factor = 1)**
- Voltage: ±0.3% rdg. ±0.1% f.s.
- Current: ±0.3% rdg. ±0.1% f.s. + clamp sensor accuracy
- Active power: ±0.3% rdg. ±0.1% f.s. + clamp sensor accuracy
- Reactive power: ±2% rdg. ±0.3% f.s.
- Apparent power: ±2% rdg. ±0.3% f.s.
- Power factor: ±1.5% (at 100 V, 50 Hz)
- Frequency: ±0.05% (at 50 Hz, 20°C)
- Harmonic phase angle: ±3°
- Total harmonic distortion factor: ±0.3% rdg. + harmonic sensor accuracy

**Display update rate**
Approx. 0.5 sec (except when accessing SD card or internal memory, or during LAN/USB communication)

**Measurement method**
Digital sampling and zero cross synchronization calculation method
- Sampling: 10.24 kHz (2048 points)
- Calculation processing: 50 Hz: Continuous, gapless measurement at 10 cycles
- 60 Hz: Continuous, gapless measurement at 12 cycles

**A/D converter resolution**
16bit

### Recording Specifications

**Save destination**
SD Card, internal memory (capacity: approx. 320 KB)

**Save interval time**
- 1/2/5/10/15/30 seconds, 1/2/5/10/20/30/60 minutes
- *Available storage time can be displayed on PW3360-20 setting screen*

**Save items**
- Measurement save: Average only / all (average, maximum, minimum)
- Harmonic data save: Binary format (average, maximum, minimum)
- Screen save: ON/OFF Saves the displayed screen as a BMP at a fixed interval. (The minimum interval time for saving screen copies is 5 min. If the setting is less than 5 min., screen copies will be saved every 5 min.)
- Waveform save: Stores binary waveform data (with shortest interval 1 minute). When set to less than 1 minute, waveforms are saved once every minute

**Recording start methods**
Manual, or at specified time (up to one year)

**Recording stop methods**
- Manual, or at specified time (up to one year)

### Harmonic Display Specifications (PW3360-21 only)

**Analysis orders**
Up to the 40th order

**Analysis items**
- Harmonic level: Voltage, current and power levels for each harmonic (UI2 and UI1 obtained by calculation of the third channel in 3P3W2M wiring are not displayed. Phase voltage is used for 3P3W3M wiring.)
- Harmonic content: Voltage, current and power contents for each harmonic
- Harmonic phase angle: Voltage, current and power phase angles for each harmonic
- Total harmonic distortion factor: Voltage and current (THD-F or THD-R)

### POWER LOGGER VIEWER SF1001 Specifications

**Specifications in green available from version 2.00**

### General Specifications

**Supported models**
PW3360-20, PW3360-21

**Supported computer operating systems**
Windows XP SP3 or later (32/64bit)
Windows Vista SP2 or later (32/64bit)
Windows XP SP3 or later (32bit)

### Functions Specifications

**Display items**
- Voltage, current, active power, reactive power, apparent power, power factor, frequency, Integrated active power, integrated reactive power, demand volume, demand value, voltage disequilibrium factor, pulse, harmonics (level, content, phase angle, total value, THD)

**Trend graph display function**
- Stacked bar graph display: Up to 16 types of data series can be displayed in an overlay graph
- Cursor measurements: Measurement values can be displayed by the cursor

**Summary display function**
- Displayed items are the same for the trend Graph Display
- Daily, weekly and monthly report displays: Accumulates and displays daily, weekly and monthly reports over specified period.
- Load factor calculation display: Calculates and displays load factor and demand factor results with daily, weekly and monthly reports
- Time span aggregation: Aggregates data into up to four specified time spans

**Wavelength display**
- Displays waveform data at specified date and time

**Harmonic display**
- Graph display: Displays a bar graph of harmonic data at specified date and time
- Cursor calculation: Calculates measurement data at cursors in waveform and graph displays

**Copy function**
- Captures any display image to the clipboard

**Print function**
- Previews and print content shown on the trend graph, report, harmonic graph and settings displays.
- Comment entry (Text comments can be entered in any printout)
- Report creation method: Standard print

**Report printing**
- Output contents: Standard or selected output items
- Available output items: Trend graph, summary, daily report, harmonic, harmonic graph, waveform.
### CLAMP SENSOR Specifications

#### CLAMP ON SENSOR

<table>
<thead>
<tr>
<th></th>
<th>9694</th>
<th>9660</th>
<th>9661</th>
<th>9669</th>
<th>9695-02</th>
<th>9695-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable conductor diameter</td>
<td>φ15mm (0.59&quot;)</td>
<td>φ15mm (0.59&quot;)</td>
<td>φ46mm (0.81&quot;)</td>
<td>φ55mm (2.17&quot;)</td>
<td>80 (3.15&quot;)×20 (0.79&quot;)mm</td>
<td>φ15mm (0.59&quot;)</td>
</tr>
<tr>
<td>Primary current rating</td>
<td>5A AC</td>
<td>100A AC</td>
<td>500A AC</td>
<td>1000A AC</td>
<td>50A AC</td>
<td>1000A AC</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.3% rdg.</td>
<td>±0.3% rdg.</td>
<td>±0.3% rdg.</td>
<td>±1.0% rdg.</td>
<td>±0.3% rdg.</td>
<td>±0.3% rdg.</td>
</tr>
<tr>
<td>Phases (45 Hz to 66 Hz)</td>
<td>±0.02% f.s.</td>
<td>±0.02% f.s.</td>
<td>±0.01% f.s.</td>
<td>±0.01% f.s.</td>
<td>±0.02 f.s.</td>
<td>±0.02 f.s.</td>
</tr>
<tr>
<td>Frequency characteristic</td>
<td>Within ±2°</td>
<td>Within ±1°</td>
<td>Within ±0.5°</td>
<td>Within ±1°</td>
<td>Within ±2°</td>
<td>Within ±1°</td>
</tr>
<tr>
<td>Effect of external magnetic field</td>
<td>Equivalent to 0.1 A or less</td>
<td>Equivalent to 0.1 A or less</td>
<td>Equivalent to 0.1 A or less</td>
<td>Within ±0.5%</td>
<td>Within ±0.5%</td>
<td>Within ±0.5%</td>
</tr>
<tr>
<td>Maximum rated voltage to earth</td>
<td>CAT III 300Vrms</td>
<td>CAT III 300Vrms</td>
<td>CAT III 600Vrms</td>
<td>CAT III 600Vrms</td>
<td>CAT III 300Vrms</td>
<td>CAT III 600Vrms</td>
</tr>
<tr>
<td>Maximum input (45 to 68 Hz)</td>
<td>50 A continuous</td>
<td>130 A continuous</td>
<td>550 A continuous</td>
<td>1000 A continuous</td>
<td>60 A continuous</td>
<td>130 A continuous</td>
</tr>
<tr>
<td>Dimensions</td>
<td>40W (1.81&quot;)×135H (5.31&quot;)mm</td>
<td>60W (1.81&quot;)×135H (5.31&quot;)mm</td>
<td>77W (3.03&quot;)×151H (5.94&quot;)mm</td>
<td>99.5W (3.92&quot;)×180H (7.1&quot;)mm</td>
<td>50.5W (2.28&quot;)×58H (2.28&quot;)mm</td>
<td>188H (7.40&quot;)mm</td>
</tr>
<tr>
<td>Mass</td>
<td>230g (8.1 oz.)</td>
<td>230g (8.1 oz.)</td>
<td>380g (13.4 oz.)</td>
<td>380g (13.4 oz.)</td>
<td>590g (20.8 oz.)</td>
<td>50g (1.8 oz.)</td>
</tr>
</tbody>
</table>

#### FLEXIBLE CLAMP ON SENSOR

<table>
<thead>
<tr>
<th>Appearance</th>
<th>CT9667</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable conductor diameter</td>
<td>φ254mm</td>
</tr>
<tr>
<td>Primary current rating</td>
<td>500A AC/5,000A AC</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±2.0% rdg. or ±0.3% f.s.</td>
</tr>
<tr>
<td>Frequency characteristic</td>
<td>Within ±3 dB</td>
</tr>
<tr>
<td>Effect of external magnetic field</td>
<td>1.5% / f.s. or less.</td>
</tr>
<tr>
<td>Effect of conductor position</td>
<td>Within ±3.0%</td>
</tr>
<tr>
<td>Maximum rated voltage to earth</td>
<td>CAT III 1000Vrms, CAT IV 600Vrms</td>
</tr>
<tr>
<td>Maximum input (45 to 68 Hz)</td>
<td>10000 A continuous</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Circuit box: 35W (1.38&quot;)×120H (4.74&quot;)×34D (1.34&quot;)mm</td>
</tr>
<tr>
<td>Mass</td>
<td>470g (16.6 oz.) (Sensor + Circuit Box, w/battery)</td>
</tr>
<tr>
<td>Power supply</td>
<td>1.86 alkaline battery + (2 continuous operation max. 7 days) or AC ADAPTER 9445-02/9445-03 (optional)</td>
</tr>
</tbody>
</table>

#### CLAMP ON LEAK SENSOR (Leakage Current Measurement Only)

<table>
<thead>
<tr>
<th>Appearance</th>
<th>9697-10</th>
<th>9675</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable conductor diameter</td>
<td>φ40mm (1.57&quot;)</td>
<td>φ30mm (1.18&quot;)</td>
</tr>
<tr>
<td>Primary current rating</td>
<td>10A AC*</td>
<td>10A AC*</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±1.0% rdg. or ±0.05% f.s.</td>
<td>±1.0% rdg. or ±0.005% f.s.</td>
</tr>
<tr>
<td>Frequency characteristic</td>
<td>Within ±5°</td>
<td>Within ±5°</td>
</tr>
<tr>
<td>Effect of external magnetic field</td>
<td>7.5 mA max.</td>
<td>7.5 mA max.</td>
</tr>
<tr>
<td>Effect of conductor position</td>
<td>Within ±0.1°</td>
<td>Within ±0.1°</td>
</tr>
<tr>
<td>Maximum rated voltage to earth</td>
<td>CAT III 300Vrms</td>
<td>CAT III 300Vrms</td>
</tr>
<tr>
<td>Maximum input (45 to 68 Hz)</td>
<td>30 A continuous</td>
<td>10 A continuous</td>
</tr>
<tr>
<td>Dimensions</td>
<td>74W (2.91&quot;)×145H (5.71&quot;)mm + 42D (1.6&quot;)mm</td>
<td>60W (2.36&quot;)×112H (4.43&quot;)mm + 23D (0.9&quot;)mm</td>
</tr>
<tr>
<td>Mass</td>
<td>380g (13.4 oz)</td>
<td>160g (5.6 oz)</td>
</tr>
<tr>
<td>Notes</td>
<td>Not used for power measurements</td>
<td></td>
</tr>
</tbody>
</table>

### AVAILABLE RECORDING TIME

PW3360-20 and PW3360-21 with Z4001 2-GB SD card, measuring 3P3W2M wiring

<table>
<thead>
<tr>
<th>Interval time</th>
<th>PW3360-20</th>
<th>PW3360-21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Saving of harmonic data: OFF</td>
<td>Saving of harmonic data: OFF</td>
</tr>
<tr>
<td>1 seconds</td>
<td>15.9 days</td>
<td>24.7 hours</td>
</tr>
<tr>
<td>2 seconds</td>
<td>31.9 days</td>
<td>2.1 days</td>
</tr>
<tr>
<td>5 seconds</td>
<td>79.7 days</td>
<td>5.1 days</td>
</tr>
<tr>
<td>10 seconds</td>
<td>159 days</td>
<td>10.3 days</td>
</tr>
<tr>
<td>15 seconds</td>
<td>242 days</td>
<td>15.4 days</td>
</tr>
<tr>
<td>30s</td>
<td>1 year</td>
<td>30.8 days</td>
</tr>
<tr>
<td>1 minute</td>
<td>1 year</td>
<td>61.7 days</td>
</tr>
<tr>
<td>2 minutes</td>
<td>1 year</td>
<td>123 days</td>
</tr>
<tr>
<td>5 minutes</td>
<td>1 year</td>
<td>308 days</td>
</tr>
<tr>
<td>More than 10 minutes</td>
<td>1 year</td>
<td>1 year</td>
</tr>
</tbody>
</table>

The maximum recording time based on the settings can be confirmed right on the Settings screen.

In any case, the maximum file size for measurement data is about 200 MB. When this is exceeded, a new file is created and saving continues.

<NOTE>

Regardless of the settings, the maximum save time of the PW3360-20, PW3360-21 is one year.
Measurement Range Configurations

<table>
<thead>
<tr>
<th>Current Connection</th>
<th>CLAMP ON SENSOR 9694 (CAT III 300V) *1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P2W</td>
<td>300.00 W</td>
</tr>
<tr>
<td>1P3W1U</td>
<td>600.00 W</td>
</tr>
<tr>
<td>3P3W2M</td>
<td>1.200 kW</td>
</tr>
<tr>
<td>3P3W3M</td>
<td>6.000 kW</td>
</tr>
<tr>
<td>3P4W</td>
<td>9.000 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Voltage Configuration</th>
<th>CLAMP ON SENSOR 9695-02 (CAT III 300V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.00 V</td>
<td>50.00 mA</td>
</tr>
<tr>
<td>100.00 A</td>
<td>1.0000 A</td>
</tr>
<tr>
<td>500.00 A</td>
<td>5.0000 A</td>
</tr>
</tbody>
</table>

*1. For the 9694 sensor, the range of guaranteed accuracy is from 500 mA to 5 A, and for the 9695-02, from 500 mA to 50 A.

Effective measurement range

- For voltage, 90 to 780 V, with max. 1400 V peak.
- For current, 5% to 110% of the selected range with peak ±400% of range, but maximum range is ±260%.
- For power, 5% to 110% of the selected range.
- For frequency, 45 to 66 Hz.

Current Display and Effective Measurement Ranges (typical)

- Total display range: Voltage is displayed from 5 V to 1000 V, with less than 5 V displayed as 0 V.
- Current is displayed from 0.4% to 130% of the selected range, with less than 0.4% displayed as 0 A.
- Power is displayed from 0 to 130% of full scale, with 0 W displayed when voltage or current is zero.

The range configurations for apparent power (S) and reactive power (Q) are the same, with units of [VA] and [var], respectively.

When VT and CT ratios are set, the range configuration is the product (VT ratio × CT ratio).

Leak current: CLAMP ON LEAK SENSOR 9657-10, 9675

Range: 50,000 mA/100,000 mA/500,000 mA/1,0000 A/5,0000 A

Measurement accuracy

- Voltage: ±0.3% rdg. ±0.1% f.s.
- Current: ±0.3% rdg. ±0.1% f.s. + clamp sensor accuracy
- Active power: ±0.3% rdg. ±0.1% f.s. + clamp sensor accuracy (power factor = 1)

Combined accuracy of PW3360-20 + clamp sensors

- Active power: ±0.3% rdg. ±0.1% f.s. + clamp sensor accuracy (power factor = 1)
- Rms calculations: ±0.3% rdg. ±0.1% f.s. + clamp-on sensor accuracy (w/power factor = 1)
- Pulse input: ±2.3% rdg. ±0.4% f.s.
CLAMP ON POWER LOGGER PW3360-20

Harmonic Measurement Model

CLAMP ON POWER LOGGER PW3360-21

Accessories

VOLTAGE CORD L9438-53 (1 set) , AC ADAPTER Z1006 (1) , USB cable (1) , instruction manual (1) , measurement guide (1) , color spiral tubes (1 set: red, yellow, blue/two each, for color-coding clamp sensors, spiral tubes for grouping clamp sensor cords (5)

Clamp-On Power Logger PW3360-20, PW3360-21 by itself does not support current and power measurements. Current and power measurements require clamp-on sensors, sold separately. Also, use only HIOKI-issued SD cards guaranteed to work for saving measurement data, (options, sold separately).

AC ADAPTER Z1006

VOLTAGE CORD L9438-53

cord length: 3m (9.84 ft)

1 cord each of black, red yellow, and blue, and five spiral tubes for bundling cords

Options

CLAMP ON SENSOR (for load current measurement)

CLAMP ON SENSOR 9694 (AC5A)
CLAMP ON SENSOR 9660 (AC100A)
CLAMP ON SENSOR 9661 (AC500A)
CLAMP ON SENSOR 9669 (AC1000A)
FLEXIBLE CLAMP ON SENSOR CT9667 (AC5000A)
CLAMP ON SENSOR 9695-02 (AC50A)
CLAMP ON SENSOR 9695-03 (AC100A)
CONNECTION CORD 9219 (for connection to 9695-02, 9695-03)

When purchasing the 9695-02 and 9695-03, we recommend also purchasing the separately sold 9219 Connection Cord.

CLAMP ON LEAK SENSOR (for leakage current measurement)

CLAMP ON LEAK SENSOR 9657-10
CLAMP ON LEAK SENSOR 9675

SD MEMORY CARD 2GB

Z4001

Stores up to one year’s data when acquired at one minute intervals. Performance cannot be guaranteed on storage media other than Hioki-specified SD card options.

VOLTAGE LINE POWER ADAPTER

PW9003

Rated voltage: 240 V AC
Operating temperature and humidity range: -30 to 50°C, 80% RH or less

BATTERY SET

PW9002

Battery Case and Battery Pack Set

CARRYING CASE

C1005

Dimension:
Approx. 190W (3.4”×278H (10.8”)×110D (4.3”) mm

MAGNET ADAPTER

9804-01 Red

φ11mm (0.43 in)
(generally compatible with M6 pan screws)

Magnetic tip for use with the standard VOLTAGE CORD L9438-53

Red and black adapters sold separately. Purchase the quantity and color appropriate for your application. (Example: 3P3W-3 adapters, 3P4W-4 adapters)

POWER LOGGER VIEWER

SF1001

LAN CABLE

9642