

## PW3360-20, PW3360-21 Specifications

Specifications in orange available in Model PW3360-21 only

(Accuracy guaranteed for 1 year)

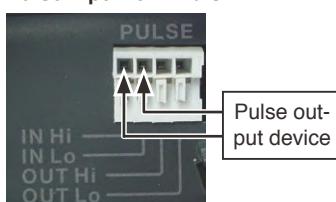
### Input specifications

Measurement line type	Single-phase 2-wire, single-phase 3-wire, three-phase 3-wire, three-phase 4-wire
Measurement line Frequency	50/ 60 Hz
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) <b>When RMS voltage is zero, zero is displayed for all orders of harmonic voltage.</b>  Effective measurement range: 90 V to 780 V, peak: $\pm 1400\text{V}$  [OVER] indicates over-range warning
Current ranges	<b>Load current</b> CLAMP ON SENSOR 9694 : 500 m/1/5/10/50 A CLAMP ON SENSOR 9695-02 : 500 m/1/5/10/50 A CLAMP ON SENSOR 9660 : 5/10/50/100 A CLAMP ON SENSOR 9695-03 : 5/10/50/100 A CLAMP ON SENSOR 9661 : 5/10/50/100/500 A CLAMP ON SENSOR 9669 : 100/200/1 k A AC FLEXIBLE CURRENT SENSOR CT9667-01 : 50/100/500/1 k/5 k A AC FLEXIBLE CURRENT SENSOR CT9667-02 : 50/100/500/1 k/5 k A AC FLEXIBLE CURRENT SENSOR CT9667-03 : 50/100/500/1 k/5 k A  <b>Leakage current</b> LEAK CLAMP ON SENSOR 9657-10 : 50 m/100 m/500 m/1/5 A LEAK CLAMP ON SENSOR 9675 : 50 m/100 m/500 m/1/5 A  Total display range: Within 0.4 to 130% of the range (zero is suppressed for less than 0.4%) <b>When RMS current is zero, zero is displayed for all orders of harmonic current.</b>  Effective measurement range: Within 5 to 110% of the range peak: $\pm 400\%$ of range, however, maximum range is 200%. [OVER] indicates over-range warning
Power ranges	300.00 W to 9.0000 MW Depends on voltage/current combination and measured line type (see Measurement Range Configuration Tables)  Total display range: Within 0 to 130% of the range ("0W" display indicates zero rms voltage and/or current) <b>When RMS voltage and current are zero, zero is displayed for all orders of harmonic active power and harmonic reactive power.</b>  Effective measurement area: Within 5 to 110% of the range
VT ratio settings	Any (0.01 to 9999.99) Selections (1/60/100/200/300/600/700/1000/2000/2500/5000)
CT ratio settings	Any (0.01 to 9999.99) Selections (1/40/60/80/120/160/200/240/300/400/600/800/1200)
Input methods	Voltage: Isolated inputs (except between U1, U2, U3 and N) Current: Isolated input using a clamp-on sensor
Input resistance	Voltage input part: $3 \text{ M}\Omega \pm 20\%$ (50/ 60 Hz)
Maximum rated voltage between terminals	Voltage input section: 1000 VAC, 1400 Vpeak Current input section: 1.7 VAC, 2.4 Vpeak
Maximum rated voltage to earth	Voltage input section: 600V Measurement Category III 300V Measurement Category IV Current input section: Depends on clamp sensor in use.

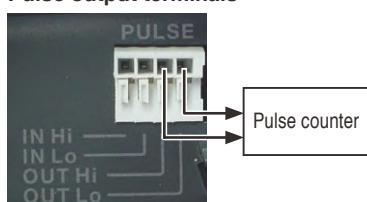
### Pulse input

Input specifications	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) Maximum rated input between terminals: 45 V DC Maximum rated input to ground: not isolated (GND is equipment common)
Measurement range	0 to 9999 (maximum pulse count per save 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 $\mu\text{s}$ 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 terminals



### Measurement items

Voltage	RMS value, fundamental wave value, waveform peak (absolute value), fundamental wave phase angle, frequency (1)
Current	RMS value, fundamental wave value, waveform peak (absolute value), fundamental wave phase angle
Power	Active power, reactive power (with lag/lead display), apparent power, power factor, (with lag/lead display) or displacement power factor (with lag/lead display), active energy (consumption, regeneration, regeneration), reactive energy (lag, lead) Energy cost display (per-kWh price $\times$ power consumption)
Demand	Active power demand value (consumption, regeneration), reactive power demand value (lag, lead), active power demand quantity *(consumption, regeneration), reactive power demand quantity *(lag, lead), power factor demand value, pulse input * Only data output to SD card
Harmonic	Harmonic voltage, current, power level, content, phase angle Total harmonic distortion factor (THD-F or THD-R)

### Measurement screen

List	Voltage RMS value, current RMS value, frequency, total active power, total reactive power, apparent power, power factor or displacement power factor, active energy (consumption), elapsed time
U/I	Voltage RMS value, voltage fundamental wave value, voltage waveform peak, voltage fundamental wave phase angle, current RMS value, current fundamental wave value, current waveform peak, current fundamental wave phase angle
Power	Per-channel and total active power, apparent power, reactive power, power factor or displacement power factor
Integ	Active energy (consumption, regeneration), reactive energy (lag, lead), recording start time, recording stop time, elapsed time, energy cost
Demand	Active power demand value (consumption, regeneration), reactive power demand value (lag, lead), power factor demand value, or pulse input Displays the maximum active power demand value and the time at which it occurred (this information is not saved). (data from up to 48 intervals is internally stored, then refreshed oldest-first).
Harmonic	Graph (voltage, current and power levels, content percentage and phase angle) List (voltage, current and power levels, content percentage and phase angle)
Waveform	Displays voltage and current waveform, voltage and current RMS values, and frequency. With a 3P3W3M connection, displays the phase voltage waveform from the virtual neutral point.
Zoom	Enlarged view of 4 user-selected parameters
Trend	For one selected measurement item (except demand and harmonics), displays maximum, average and minimum values, with cursor calculations available (Note: with Trend display, there is no power-off backup function).

### External interfaces Specifications

SD card Interface	Settings data, measurement data, screen data, waveform data
LAN interface	100BASE-TX IEEE802.3 Compliance - HTTP server function - FTP server function
USB interface	USB Ver 2.0, Windows 10 (32/64bit)/ Windows 8 (32/64bit)/ Windows 7 (32/64bit) / Vista (32bit) /XP - When connected to a computer, the SD Card and internal memory are recognized as removable storage devices.

### Pulse output

Function	Output pulse rate is proportional to active power consumption (WP+) when measuring integral power consumption
Pulse rate	OFF/ 1 Wh/ 10 Wh/ 100 Wh/ 1 kWh/ 10 kWh/ 100 kWh/ 1000 kWh (Default: 1 kWh)
Pulse width	approx. 100 ms
Output signal	Open-collector 30 V, 5 mA max (photocoupler isolated) Active Low

### WIRE SPECIFICATIONS

Electric wires that conform with:

single line:  $\phi 0.65 \text{ mm}$  (AWG22)

twisted wire:  $0.32 \text{ mm}^2$  (AWG22)

strand diameter:  $\phi 0.12 \text{ mm}$  or more

Supported electric wires:

single line:  $\phi 0.32 \text{ mm}$  to  $\phi 0.65 \text{ mm}$  (AWG28 to AWG22)

twisted wire:  $0.08 \text{ mm}^2$  to  $0.32 \text{ mm}^2$  (AWG28 to AWG22)

strand diameter:  $\phi 0.12 \text{ mm}$  or more

exposed wire length: 8 mm

Specifications in orange available in Model PW3360-21 only

### General Specifications

Display device	3.5 inch TFT color LCD (320 × 240 pixel) Japanese, English, Chinese, Korean, German, Italian, French, Spanish, Turkish 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 (-4°F to 140°F), 80% RH or less However, the battery's storage temperature range is -20°C to 30°C (-4°F to 86°F), 80% RH or less
Dielectric strength	4.29 kVrms AC (1 mA sense current) between voltage input terminals and external terminals, 50/ 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: 40 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 (@73.4°F)
Dimensions	Approx. 180W(7.09") × 100H(3.94") × 48D (1.89") mm (without PW9002) Approx. 180W(7.09") × 100H(3.94") × 68D (2.68") mm (with PW9002)
Mass	Approx. 550g (19.4 oz) (without PW9002), Approx. 830g (29.3 oz) (with PW9002)
Accessories	Voltage Cord L9438-53(1 set), AC Adapter Z1006 (1), USB cable(1), instruction manual (1), measurement guide (1), Color clip × 1 set: red, yellow, blue, white/two each, for color-coding clamp sensors, Spiral tubes for grouping clamp sensor cords × 5

### Measurement Specifications

#### Accuracy guaranteed for 1 year

Connection	Single-phase 2-wire (1P2W, 1P2W × 2 circuits, 1P2W × 3 circuits) Single-phase 3-wire (1P3W, 1P3W+I, 1P3W1U, 1P3W1U+I) Three-phase 3-wire (3P3W2M, 3P3W2M+I, 3P3W3M) Three-phase 4-wire (3P4W), Current only: 1 to 3 channels
Simultaneous power/current measurement modes	1P3W+I: 1 power circuit and 1 current channel 3P3W2M+I: 1 power circuit and 1 current channel
Calculation selection	Power factor, reactive and apparent power: rms calculation/ fundamental wave calculation
Measurement accuracy (50/ 60Hz, 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 Clamp-On Sensor 9661 accuracy: ±0.3% rdg. ±0.01% f.s. (Accuracy depends on clamp sensor. See page 10 for the accuracy of each model, and page 11 for combined accuracy of Model PW3360-20 and each clamp sensor.)
Display update rate	Approx. 0.5 sec (except when accessing SD card or internal memory, or during LAN/USB communication) However, approx. 1 s for power-related values
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, 1/2/5/10/15/20/30/60 minutes * Available storage time is displayed on PW3360-20's setting screen
Save items	Measurement save: Average only / all (average, maximum, minimum) <b>Harmonic data save:</b> Binary format (average, maximum and 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	Interval time, manual, specified time, repeat: Record period(00:00 to 24:00) ·Segment folder(off/day/week/month)
Recording stop methods	Manual, specified time, timer, repeat (up to one year)

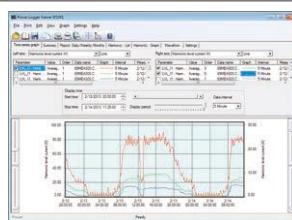
### Harmonic Specifications (PW3360-21 only)

Standard	IEC61000-4-7:2002 compliant, but without interharmonics
Window width	10 cycles at 50 Hz, and 12 cycles at 60 Hz (with interpolation)
Points per window	Rectangular, 2048 points
Analysis orders	Up to the 40th order
THD calculation selection	THD-F/THD-R
Analysis items	Harmonic level: Voltage, current and power levels for each harmonic (U12 and I12 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)
Measurement accuracy	Harmonic level 1st to 15th orders : ±5% rdg. ±0.2% f.s. 16th to 20th orders : ±10% rdg. ±0.2% f.s. 21st to 40th orders : ±20% rdg. ±0.3% f.s. For voltage and current, add accuracy of clamp sensor. Harmonic power phase angle 1st to 3rd orders : ±3°+clamp sensor accuracy 4th to 40th orders : ±0.1°×k±3°+clamp sensor accuracy For each harmonic order at 6 V, harmonic current level is regulated at 1% f.s. Total harmonic distortion factor: Accuracy unspecified

### POWER LOGGER VIEWER SF1001 Specifications

#### General Specifications

Supported models	PW3360-20, PW3360-21, PW3365, 3169-20, 3169-21 LR5000 series; Data previously loaded by the LR5000 Utility (.hrp2 format) using a PC
Supported computer operating systems	Windows 8/8.1 (32/64bit), Windows 7 SP1 or later (32/64bit) Windows Vista SP2 or later (32bit), Windows XP SP3 or later (32bit)



#### Functions Specifications

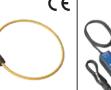
Trend graph display function	Display items: Voltage, current, active power, reactive power, apparent power, power factor, frequency, integrated active power, integrated reactive power, demand volume, demand value, voltage disequilibrium factor, pulse, harmonics (level, content, phase angle, total value, THD) 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 as 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 CO2 equivalent display: Uses the specified conversion rate to display CO2 equivalent values (reference values).
Waveform display	Displays waveform data at specified date and time List display: Displays a list of harmonic 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	Preview and print content shown on the trend graph, report, harmonic graph and settings displays. Comment entry (Text comments can be entered in any printout) Header/Footer settings: Sets the header and footer for each printout Printing support: Any color or monochrome printing supported by the operating system
Report printing	Print (static) contents over a specific time period Output contents: Standard or selected output items Available output items: Trend graph, summary, daily report, harmonic list, harmonic graph, waveform Report creation method: Standard print Report output settings: Save/load report output settings

## CLAMP SENSOR Specifications

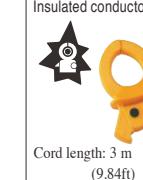
### CLAMP ON SENSOR

	9694	9660	9661	9669	9695-02	9695-03
Appearance	 CE Cord length: 3 m (9.84ft)	 CE Cord length: 3 m (9.84ft)	 CE Cord length: 3 m (9.84ft)	 CE Cord length: 3 m (9.84ft)	 Insulated conductor Not CE marked	 Insulated conductor Not CE marked
Measurable conductor diameter	φ15 mm (0.59")	φ15 mm (0.59")	φ46 mm (0.81")	φ55 mm (2.17"), 80 (3.15")×20 (0.79") mm	φ15 mm (0.59")	φ15 mm (0.59")
Primary current rating	5 A AC	100 A AC	500 A AC	1000 A AC	50 A AC	100 A AC
Accuracy	Amplitude (45 to 66 Hz) ±0.3% rdg. ±0.02% f.s.	±0.3% rdg. ±0.02% f.s.	±0.3% rdg. ±0.01% f.s.	±1.0% rdg. ±0.01% f.s.	±0.3% rdg. ±0.02% f.s.	±0.3% rdg. ±0.02% f.s.
Phase (45 Hz to 5 kHz)	Within ±2°	Within ±1°	Within ±0.5°	Within ±1°	Within ±2°	Within ±1°
Frequency characteristic 40Hz to 5kHz (deviation from accuracy)	Within ±1.0%			Within ±2.0%	Within ±1.0%	
Effect of external magnetic field (with a magnetic field of 400 A/m AC)	Equivalent to 0.1 A or less			Equivalent to 1 A or less	Equivalent to 0.1 A or less	
Effect of conductor position	Within ±0.5%			Within ±1.5%	Within ±0.5%	
Maximum rated voltage to earth	CAT III 300 Vrms	CAT III 300 Vrms	CAT III 600 Vrms	CAT III 600 Vrms	CAT III 300 Vrms	
Maximum input (45 to 66Hz)	50 A continuous	130 A continuous	550 A continuous	1000 A continuous	60 A continuous	130 A continuous
Dimensions	46W (1.81")×135H (5.31") ×21D (0.83") mm	46W (1.81")×135H (5.31") ×21D (0.83") mm	77W (3.03")×151H (5.94") ×42D (1.65") mm	99.5W (3.92")×188H (7.40") ×42D (1.65") mm	50.5W (2.28")×58H (2.28") ×18.7D (0.74") mm	
Mass	230 g (8.1 oz)	230 g (8.1 oz)	380 g (13.4 oz)	590 g (20.8 oz)	50 g (1.8 oz)	

### AC FLEXIBLE CURRENT SENSOR

	CT9667-01	CT9667-02	CT9667-03
Appearance	 CE Cord length : Sensor - circuit: 2 m (6.56ft) Circuit - connector: 1 m (3.28ft)	 CE	 CE
Measurable conductor diameter	φ100 mm (3.94")	φ180 mm (7.09")	φ254 mm (10.00")
Primary current rating	500 A AC / 5000 A AC		
Accuracy	Amplitude (45 to 66Hz)	±2.0% rdg. ±0.3% f.s.	Phase
		Within ±1°	
Frequency characteristic 10Hz to 20kHz (deviation from accuracy)	Within ±3 dB		
Effect of external magnetic field (with a magnetic field of 400 A/m AC)	1.5% / f.s. or less.		
Effect of conductor position	Within ±3.0%		
Maximum rated voltage to earth	CAT III 1000 Vrms, CAT IV 600 Vrms		
Maximum input (45 to 66Hz)	10000 A continuous		
Dimensions	Circuit box Sensor cable diameter	35W (1.38")×120H (4.74")×34D (1.34") mm φ7.4 mm (0.29")	φ13 mm (0.51")
	Mass	280 g (9.9 oz.)	470 g (16.6 oz.)
Power supply	LR06 alkaline battery × 2 (continuous operation max. 7 days) or AC ADAPTER 9445-02/9445-03 (optional)		

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

	9657-10	9675
Appearance	 Insulated conductor Cord length: 3 m (9.84ft)	 Insulated conductor Cord length: 3 m (9.84ft)
Measurable conductor diameter	φ40 mm (1.57")	φ30 mm (1.18")
Primary current rating	10 A AC*	10 A AC*
Accuracy	Amplitude (45 to 66 Hz) Phase angle (@50 or 60 Hz)	±1.0% rdg. ±0.05% f.s. ±1.0% rdg. ±0.005% f.s. Within ±3° Within ±5°
Frequency characteristic 40 Hz to 5 kHz (deviation from accuracy)	Within ±5%	
Effect of external magnetic field (with a magnetic field of 400 A/m AC)	7.5 mA max.	
Effect of conductor position	Within ±0.1%	Within ±0.1%
Measurable conductor	Insulated conductor	Insulated conductor
Maximum input (45 to 66Hz)	30 A continuous	10 A continuous
Dimensions	74W (2.91")×145H (5.71") ×42D (1.65")	60W (2.36")×112.5H (4.43") ×23.6D (0.95")
Mass	380 g (13.4 oz)	160 g (5.6 oz)
Notes	Not used for power measurements	

\* Maximum AC measurement range with PW3360-20 is 5 A.

### Available Recording Time

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

Saved Items: ALL data (Saves all data: average, maximum, and minimum values)

Screen save: OFF Waveform save: OFF

Interval time	Save Time		Interval time	Save Time	
	PW3360-20	PW3360-21		PW3360-20	PW3360-21
1 seconds	15.9 days	24.7 hours	30s	1 year	30.8 days
2 seconds	31.9 days	2.1 days	1 minutes	1 year	61.7 days
5 seconds	79.7 days	5.1 days	2 minutes	1 year	123 days
10 seconds	159 days	10.3 days	5 minutes	1 year	308 days
15 seconds	242 days	15.4 days	More than 10 minutes	1 year	1 year

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

Current		CLAMP ON SENSOR 9694 (CAT III 300 V) *1				
		CLAMP ON SENSOR 9695-02 (CAT III 300 V)				
Voltage	Connection	500.00 mA	1.0000 A	5.0000 A	10.000 A	50.000 A
	1P2W	300.00 W	600.00 W	3.0000 kW	6.0000 kW	30.000 kW
600.00 V	1P3W	600.00 W	1.2000 kW	6.0000 kW	12.000 kW	60.000 kW
	1P3W1U					
	3P3W2M					
	3P3W3M					
	3P4W	900.00 W	1.8000 kW	9.0000 kW	18.000 kW	90.000 kW

\*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.

Current		CLAMP ON SENSOR 9660, 9695-03 (CAT III 300 V) *2				
		CLAMP ON SENSOR 9661				
Voltage	Connection	5.0000 A	10.000 A	50.000 A	100.00 A	500.00 A
	1P2W	3.0000 kW	6.0000 kW	30.000 kW	60.000 kW	300.00 kW
600.00 V	1P3W					
	1P3W1U	6.0000 kW	12.000 kW	60.000 kW	120.00 kW	600.00 kW
	3P3W2M					
	3P3W3M					
	3P4W	9.0000 kW	18.000 kW	90.000 kW	180.00 kW	900.00 kW

\*2. For the 9660 and 9695-03 sensors, the range of guaranteed accuracy is from 5 A to 100 A, and for the 9661, from 5 A to 500 A.

Current		CLAMP ON SENSOR 9669		
		100.00 A	200.00 A	1.0000 kA
600.00 V	1P2W	60.000 kW	120.00 kW	600.00 kW
	1P3W			
600.00 V	1P3W1U	120.00 kW	240.00 kW	1.2000 MW
	3P3W2M			
600.00 V	3P3W3M			
	3P4W	180.00 kW	360.00 kW	1.8000 MW

Current		AC FLEXIBLE CURRENT SENSOR CT9667-01, -02, -03		
Voltage	Connection	500 A range	500/5000 A range	5000 A range
	1P2W	50.000 A	100.00 A	500.00 A
600.00 V	1P3W			
	1P3W1U	60.000 kW	120.00 kW	600.00 kW
	3P3W2M			
	3P3W3M			
	3P4W	90.000 kW	180.00 kW	900.00 kW
		1.8000 MW	3.6000 MW	9.0000 MW

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

Range 50.000 mA/100.00 mA/500.00 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

Range	9694	9695-02
50.000 A	—	±0.6% rdg. ±0.12% f.s.
10.000 A	—	±0.6% rdg. ±0.2% f.s.
5.0000 A	±0.6% rdg. ±0.12% f.s.	±0.6% rdg. ±0.3% f.s.
1.0000 A	±0.6% rdg. ±0.2% f.s.	±0.6% rdg. ±1.1% f.s.
500.00 mA	±0.6% rdg. ±0.3% f.s.	±0.6% rdg. ±2.1% f.s.

Range	9660, 9695-03	9661
500.00 A	—	±0.6% rdg. ±0.11% f.s.
100.00 A	±0.6% rdg. ±0.12% f.s.	±0.6% rdg. ±0.15% f.s.
50.000 A	±0.6% rdg. ±0.14% f.s.	±0.6% rdg. ±0.2% f.s.
10.000 A	±0.6% rdg. ±0.3% f.s.	±0.6% rdg. ±0.6% f.s.
5.0000 A	±0.6% rdg. ±0.5% f.s.	±0.6% rdg. ±1.1% f.s.

Range	CT9667-01 5000A range	CT9667-02 500A range
5.0000kA	±2.3% rdg. ±0.4% f.s.	—
1.0000kA	±2.3% rdg. ±1.6% f.s.	—
500.00A	±2.3% rdg. ±3.1% f.s.	±2.3% rdg. ±0.4% f.s.
100.00A	—	±2.3% rdg. ±1.6% f.s.
50.000A	—	±2.3% rdg. ±3.1% f.s.

### 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).

### Effective measurement range

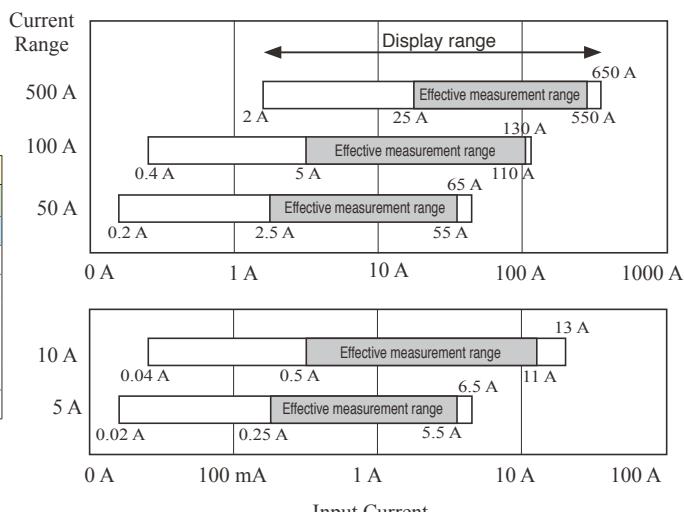
For voltage, 90 to 780 V, with max. 1400 V peak.

For current, 5% to 110% of the selected range with peak ±400% of range, but maximum range is ±200%.

For power, 5% to 110% of the selected range.

For frequency, 45 to 66 Hz.

## ■ Current Display and Effective Measurement Ranges (typical)



Conditions of guaranteed accuracy	After 30 minute warm-up, with 50/60 Hz sine wave input
Temperature and humidity for guaranteed accuracy	23°C ±5°C (73 ± 9°F), 80%RH or less (applies to all specifications unless otherwise noted)
Display area of guaranteed accuracy	Effective measurement range
Real-time clock accuracy	Within ±0.3 sec/day (at power ON, 0°C to 50 °C) Within ±0.5 sec/day (at power ON, -10°C to 0 °C)
Temperature characteristic	Within ±0.1% f.s./ °C (except 23 ±5°C)
Effect of common mode voltage	Within ±0.2% f.s. (600 V AC, 50/60 Hz, between voltage input terminal and case)
Effect of external magnetic field	Within ±1.5% f.s. (in a magnetic field of 400 A/m rms AC, 50/60 Hz)
Effect of phase	Phase accuracy ±1.3° equivalent (with 50/60 Hz f.s. input)
Apparent power	±1 dgt. for the calculation obtained from each measurement value
Reactive power	Fundamental waveform calculations ±0.3% rdg. ±0.1% f.s. + clamp-on sensor accuracy (w/power factor = 1)
Rms calculations	From each measurement applied to calculation ±1 dgt.
Energy	Active and reactive power measurement accuracies ±1 dgt.
Power factor	From each measurement applied to calculation ±1 dgt.
Frequency	±0.5% rdg. (with 90 to 780 V sine wave input)
Demand value	Active and reactive power measurement accuracies ±1 dgt.
Demand quantity	Active and reactive power measurement accuracies ±1 dgt.
Pulse input	±1 dgt. for the calculation obtained from each measurement value
Frequency characteristic	At 50/60 Hz fundamental waveform frequency, up to 1 kHz, ±3% rdg. ±0.2% f.s. up to 3 kHz, ±10% rdg. ±0.2% f.s. For current and active power, add clamp-on sensor accuracy. Note: only for 3P3W3M wiring, add ±0.5% rdg.



CE 3 year Warranty

Current sensors : Sold separately

**Model : CLAMP ON POWER LOGGER PW3360**

Model No. (Order Code) (Note)

PW3360-20 (English model, main unit only)

PW3360-21 (English model, with harmonic analysis function)

Accessories: Voltage cord L9438-53 x1 set, AC adapter Z1006 x1, USB cable x1, Instruction manual x1, Measurement guide x1, Color clip x1 set: red, yellow, blue, white/two each, for color-coding clamp sensors, Spiral tubes for grouping clamp sensor cords x5

Note: At least one optional current sensor is necessary to measure current or power parameters. To store measurement data, use only the guaranteed SD cards sold by HIOKI.

**Options****CLAMP ON SENSOR** (for load current measurement)

CLAMP ON SENSOR 9694 (5 A AC)

CLAMP ON SENSOR 9660 (100 A AC)

CLAMP ON SENSOR 9661 (500 A AC)

CLAMP ON SENSOR 9669 (1000 A AC)

AC FLEXIBLE CURRENT SENSOR CT9667-01 (5000 A AC)

AC FLEXIBLE CURRENT SENSOR CT9667-02 (5000 A AC)

AC FLEXIBLE CURRENT SENSOR CT9667-03 (5000 A AC)

CLAMP ON SENSOR (Not CE marked) 9695-02 (50 A AC)

CLAMP ON SENSOR (Not CE marked) 9695-03 (100 A AC)

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

**Storage media**SD MEMORY CARD 2GB  
Z4001SD MEMORY CARD 8GB  
Z4003

Stores up to one year's data when acquired at one minute intervals.

**SD Card Precaution**

Use only SD Cards sold by HIOKI. Compatibility and performance are not guaranteed for SD cards made by other manufacturers. You may be unable to read from or save data to such cards.

**CARRYING CASE**

C1005



Dimension:

Approx. 390W (15.4")x275H (10.8")x110D (4.3") mm

**VOLTAGE LINE POWER ADAPTER**

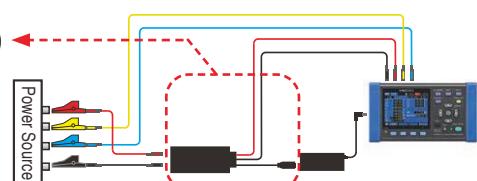
PW9003

(supplies power from measurement lines)



Rated voltage: 240 V AC

Operating temperature and humidity range: -10 to 50°C, 80% RH or less

**MAGNET ADAPTER**

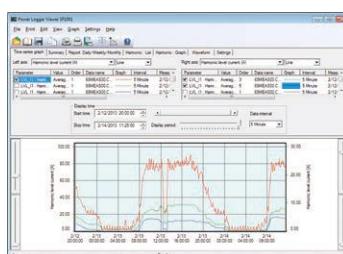
9804-01 Red

ø11mm (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

**BATTERY SET**

Battery Case and Battery Pack Set

PW9002

BATTERY PACK 9459  
NiMH, Charges while installed in the main unit**LAN CABLE**

9642



Straight Ethernet cable, supplied with straight to cross conversion adapter, 5 m (16.41 ft) length

**HIOKI**  
 HIOKI E.E. CORPORATION
**HEADQUARTERS**81 Koizumi,  
Ueda, Nagano 386-1192 Japan  
<https://www.hioiki.com/>

DISTRIBUTED BY

**Bundled Accessories**

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

**PATCH CORD**

L1021-01



Banana branch-banana, Red: 1, Cable length: 0.5 m, For branching from the L9438-50 or L1000, CAT IV 600 V, CAT III 1000 V

L1021-02



Banana branch-banana, Black: 1, Cable length: 0.5 m, For branching from the L9438-50 or L1000, CAT IV 600 V, CAT III 1000 V