

Information

NEW

HIOKI

CLAMP ON POWER LOGGER PW3360-20

Power Meter



Identify Your Power Condition

To Reveal Energy Saving Ideas



Now with
QUICK SET
Convenience

CE

The Best Choice Available

Reliable measurements start with proper wiring.

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



- 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



www.hioki.com

ISO 9001
JMI-0216

ISO14001
JQA-E-90091

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

Begin with QUICK SET Convenience

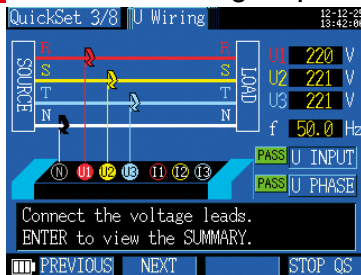
Select wiring type (example: 3P4W) and connect

Connect the leads to the PW3360-20.



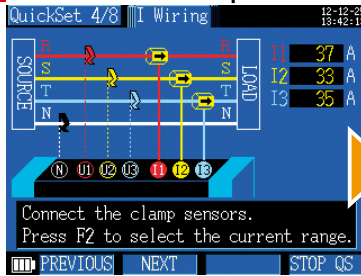
Make proper connections simply by observing the colors of the displayed leads.

Connect the voltage clips.



Proceed to the next step when PASS appears.

Connect the clamp sensors.



Check wire connection status and judgment indicators.

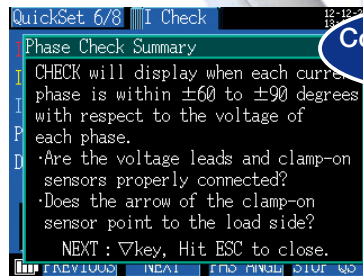
Select the current range



FAIL

If FAIL appears, move the cursor to the indicator and press the [ENTER] key.

Corrective action tips appear



Meeting a variety of worksites

■ 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.



■ In severe temperature environments

The Operating temperature range extends from -10°C (14°F) to 50°C (122°F). Even under battery operation, measurements can be performed from 0°C (32°F) to 40°C (104°F) (0°C (32°F) to 50°C (122°F) when using LAN communication).



■ To reduce energy usage in factories

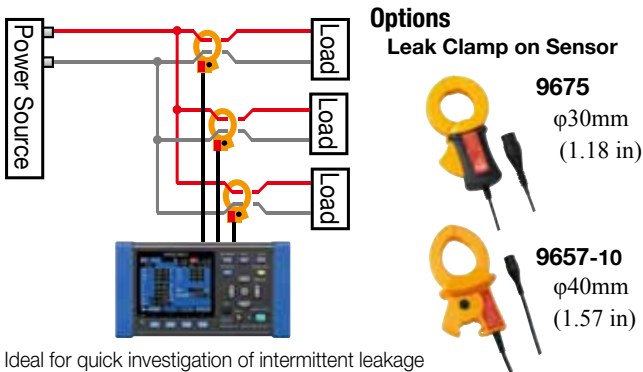
The pulse input function can be used to record power data and production volume counts simultaneously. The power data and pulse volume (production volume) information are useful for unit cost production management.



Expansion Capabilities

■ As a 3-channel Leakage Current Logger

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



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.)

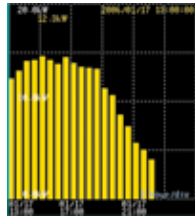
■ Pulse Input/Output

Store the pulse input count during each interval. During integrated power measurement, pulse is output at a rate proportional to the active power level.



■ Demand/Time Series Graph Displays

Demand graphs at specified times and power time series graphs can be displayed on the color LCD. Observing on-site power fluctuations is useful for confirming energy saving and related effects.



(Demand Graph Display Example)

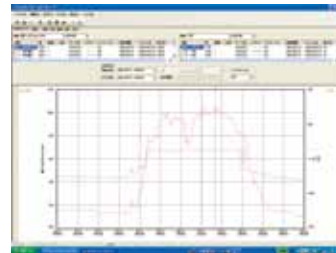
This function will be supported from version 2.00.

■ Accuracy Guaranteed for 1 Year 23 ± 5°C (73°F±41°F), 80% RH or less (no condensation)

Measurement line type	Single-phase 2-wire (1P2W: 1 circuit/2 circuits/3 circuits) Single-phase 3-wire (1P3W, 1P3W1U)
Number of circuits that can be measured (for systems that share the same voltage)	Three-phase 3-wire (3P3W2M, 3P3W3M) Three-phase 4-wire (3P4W) Leak current/load current only: 1 to 3 channels
Simultaneous power and current measurement	1P3W : 1 power circuit and 1 current channel 3P3W2M : 1 power circuit and 1 current channel
Measurement items	Voltage, current, frequency, active power (for consumption and regeneration), reactive power, apparent power, power factor, integrated value, demand value
Voltage ranges	AC600V (Max. display range : AC1000 V)
Current ranges	500.00mA to AC5000A AC (depends on current sensor in use) 50.000mA to 5.0000A AC (leak current measurement only)
Power ranges	300.00W to 9.0000MW (depends on the combination of the voltage range, current range, and measurement line)
Basic accuracy	AC Voltage: ±0.3% rdg. ±0.1% f.s. AC Current: ±0.3% rdg. ±0.1% f.s. + current sensor accuracy Active power: ±0.3% rdg. ±0.1% f.s. + current sensor accuracy (at power factor = 1) CLAMP ON SENSOR 9661: ±0.3 % rdg. ±0.01 % f.s. (other sensors may have different accuracy specifications)
Measurement method	Digital sampling with zero-crossing synchronization Arithmetic processing: 2048 points 10 cycles continuous measurements without gap (@50 Hz) 12 cycles continuous measurements without gap (@60Hz)
Display update rate	Approx. 0.5 sec (except when accessing SD card or internal memory, or during LAN/USB communication)
Data save interval	1 sec to 30 sec, 1 minute to 60 minutes, 14 selections
Functions	Quick Set, Display Hold, Backup, Auto Resume, Key Lock, Pulse Input, Pulse Output, Multiple Language Display, Time Series Graph Display, Demand Graph Display, Energy Cost Display (this function will be supported from version 2.00)

■ Efficient Power Management using a PC

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



(Power Logger Viewer SF1001 Display Example)

Data is stored in CSV files. Free software is available for download from the HIOKI website to facilitate graph creation. Use the optional Power Logger Viewer SF1001 application program for detailed data analysis, graph processing and printing.

Remote Measurement

LAN Connectivity

Connect the Power Logger to a PC via LAN. The http server function displays measurement values in the browser on a PC. Free software supports transfer of setting configurations and data downloading.

Data Acquisition

USB Connectivity

When connected to a PC via the USB terminal, SD cards and internal memory are recognized as removable storage devices. Free software supports transfer of setting configurations and data downloading.

CSV Data

SD Card








Store setting configurations, measurements and screen data.



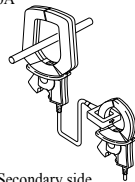








* Store up to one year's data acquired at one minute intervals. Performance cannot be guaranteed on storage media other than Hioki-issued SD card options.


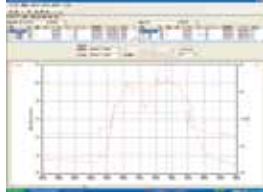

Pulse input	No-voltage contact input (counts when shorted terminals open) Voltage input (Hi = 2 to 45 V, Lo = 0 to 0.5 V, counts at Hi) Measurement range: 0 to 9999 (maximum pulses per storage interval)
Pulse output	Open-collector 30V, 5mA max (photocoupler isolated) Active Low, Object: active power amount, Pulse width: approx. 100 ms
External interfaces	[LAN] 10BASE-T/100BASE-TX IEEE802.3 Compliance [USB] USB Ver 2.0, Windows 7 (32/64bit)/Vista (32bit)/XP
Operating temperature and humidity	-10°C(14°F) to 50°C(122°F), 80% RH or less (non-condensating) BATTERY PACK 9459: 0°C(32°F) to 40°C(104°F) (operating) BATTERY PACK 9459: 10°C(50°F) to 40°C(104°F) (charging) During LAN communication: 0°C(32°F) to 50°C(122°F)
Storage temperature and humidity	-20°C(-4°F) to 60°C(140°F), 80% RH or less (non-condensating) BATTERY PACK 9459: -20°C (-4°F) to 30°C(86°F)
Compliance standard	Safety : EN61010 EMC : EN61326, EN61000-3-2, EN61000-3-3
Power supply	(1) AC Adapter Z1006: 100 to 240V AC (50/60Hz), Power consumption: 40VA (2) battery pack 9459: 7.2V DC, Continuous operating time: Approx. 8 hours with backlight off, Power consumption: 3VA
Charging functions	Charging time : Max. 6 h, 10 min. (at 23°C / 73°F) (can be charged by connecting the AC adapter while the 9459 battery pack is attached) (charges whether instrument is on or off)
Dimensions	180 mm (7.09 in)W × 100 mm (3.94in) H × 48 mm (1.89in) D (without battery set) 180 mm (7.09 in)W × 100 mm (3.94in) H × 68 mm (2.68in) D (with battery set)
Weight	550g (19.4 oz)(without battery set) 830g (29.3 oz) (with battery set)
Accessories	Voltage cord set L9438-53 (1) (1 cord each of black, red, yellow, and blue), AC Adapter Z1006 (1), USB cable(1), operating manuals(1), measurement guide (1), spiral clamp tube: 5 cable wraps, 6 colored

Options

CLAMP ON SENSOR				CLAMP ON SENSOR	
AC5 A φ15mm (0.59 in)	AC100 A φ15mm (0.59 in)	AC500 A φ46mm (1.81 in)	AC1000 A φ55mm (2.17 in) •80mm (3.15 in) × 20mm (0.79 in)	AC50A φ15mm (0.59in)	AC100A φ15mm (0.59in)
					
CAT III 300V Cord length: 3m (9.84 ft) 9694	CAT III 300V Cord length: 3m (9.84 ft) 9660	CAT III 600V Cord length: 3m (9.84 ft) 9661	CAT III 600V Cord length: 3m (9.84 ft) 9669	CAT III 300V 9695-02	CAT III 300V 9695-03
				CONNECTION CORD 9219  Connect with the 9695-02/-03, Output BNC terminal	

Flexible Clamp on Sensor	Clamp on Adapter	Leak Clamp on Sensor	Leak current measurement only
AC5000A φ254mm (10 in)	AC1000A φ55mm (2.17 in) •80mm (3.15 in) × 20mm (0.79 in)	AC10A φ30mm (1.18 in)	AC10A φ40mm (1.57 in)
	 Primary side 1000A  Secondary side 100A (CT ratio 10:1)		
CT9667 Cord length: Sensor-circuit: 2m (6.56 ft) Circuit-connector: 1m (3.28 ft) CAT III 1000V CAT IV 600V	9290-10 CAT III 600V Cord length: 3m (9.84 ft)	9675 CAT III 300V Cord length: 3m (9.84 ft) Insulated conductor	9657-10 CAT III 300V Cord length: 3m (9.84 ft) Insulated conductor

SD Memory Card 2GB	Battery Set	Voltage Line Power Adapter	Carrying Case
Z4001	PW9002 Battery Case and Battery Pack Set	PW9003 (supplies power from measurement lines) CAT III 300V	C1005
			
Performance cannot be guaranteed on storage media other than Hioki-issued SD card options.	Battery Pack 9459 For purchase as replacement battery pack	Rated voltage: 240 V AC Operating temperature and humidity: -10 (14°F) to 50°C (122°F), 80% rh or less (no condensation)	

Magnet Adapter	Power Logger Viewer	LAN Cable
9804-01 Red	SF1001	9642
		
9804-02 Black	Operating environment Computer running under Windows 7 SP1 (32-bit/ 64-bit) Windows Vista SP2 or later (32-bit) Windows XP SP3 or later (32-bit)	
Magnetic tip for use with the standard Voltage Cord L9438-53 (generally compatible with M6 pan screws)	<ul style="list-style-type: none"> • Time Series Graph Display Function • Summary Display Function • Daily, Weekly and Monthly Report Display Function • Print Function, Copy Function 	
Red and black adapters sold separately. Purchase the quantity and color appropriate for your application. (Example: 3P3W - 3 adapters; 3P4W - 4 adapters)		

CLAMP ON POWER LOGGER PW3360-20

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

Note: Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.

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