










■ CLAMP SENSOR Specifications



CLAMP ON SENSOR

	9694	9660	9661	9669	9695-02	9695-03
Appearance	 Cord length: 3 m (9.84ft)	 Cord length: 3 m (9.84ft)	 Cord length: 3 m (9.84ft)	 Cord length: 3 m (9.84ft)	 Insulated conductor Not CE marked Connect with the 9695-02/-03, Output BNC terminal	 Insulated conductor Not CE marked Cord length: 3 m (9.84ft)
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. ±0.01% 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 ±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		 Cord length : Sensor - circuit: 2 m (6.56ft) Circuit - connector: 1 m (3.28ft)		
Measurable conductor diameter		φ100 mm (3.94")	φ180 mm (7.09")	φ254 mm (10.00")
Primary current rating		500 AAC / 5000 AAC		
Accuracy (45 to 66Hz)	Amplitude	±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	35W (1.38") × 120H (4.74") × 34D (1.34") mm		
	Sensor cable diameter	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 x 2 (continuous operation max. 7 days) or ACADAPTER 9445-02/9445-03 (optional)		




CLAMP ON LEAK SENSOR (Leakage Current Measurement Only)



	9657-10	9675
Appearance	 Cord length: 3 m (9.84ft)	 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)	±1.0% rdg. ±0.05% f.s.
	Phase angle (@50 or 60 Hz)	Within ±3°
Frequency characteristic 40 Hz to 5 kHz (deviation from accuracy)	Within ±5%	Within ±5%
Effect of external magnetic field (with a magnetic field of 400 A/ m AC)	7.5 mA max.	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	

Options

Model	AC CURRENT SENSOR CT7126	AC CURRENT SENSOR CT7131	AC CURRENT SENSOR CT7136
Appearance			
Rated measured current	60 A AC	100 A AC	600 A AC
Measurable wire diameter	15 mm (0.59 in.) or less		46 mm (1.81 in.) or less
Current range and combined amplitude accuracy (45 to 66 Hz) *Accuracy guaranteed up to 120% of range.	Current range Combined accuracy 50.000 A 0.4% rdg. + 0.112% f.s. 5.0000 A 0.4% rdg. + 0.22% f.s. 500.00 mA 0.4% rdg. + 1.3% f.s. [*2]	Current range Combined accuracy 100.00 A 0.4% rdg. + 0.12% f.s. 50.000 A 0.4% rdg. + 0.14% f.s. 5.0000 A 0.4% rdg. + 0.50% f.s. [*2]	Current range Combined accuracy 500.00 A 0.4% rdg. + 0.112% f.s. 50.000 A 0.4% rdg. + 0.22% f.s. 5.0000 A 0.4% rdg. + 1.3% f.s. [*2]
Phase accuracy (45 to 66 Hz)	Within $\pm 2^\circ$	Within $\pm 1^\circ$	Within $\pm 0.5^\circ$
Maximum allowable input (45 to 66 Hz)	60 A continuous	130 A continuous	600 A continuous
Maximum rated terminal-to-ground voltage	CAT III (300 V)		CAT III (1000 V), CAT IV (600 V)
Frequency band	Accuracy defined up to 20 kHz		
Dimensions / weight / cord length	46 mm (1.81 in.) (W) \times 135 mm (5.31 in.) (H) \times 21 mm (0.83 in.) (D) / 190 g / 2.5 m (8.20 ft.)		78 mm (3.07 in.) (W) \times 152 mm (5.98 in.) (H) \times 42 mm (1.65 in.) (D) / 350 g / 2.5 m (8.20 ft.)

Model	AC FLEXIBLE CURRENT SENSOR CT7044	AC FLEXIBLE CURRENT SENSOR CT7045	AC FLEXIBLE CURRENT SENSOR CT7046
Appearance			
Rated measured current	6000 A AC		
Measurable wire diameter	100 mm (3.94 in.) or less	180 mm (7.09 in.) or less	254 mm (10.00 in.) or less
Current range and combined amplitude accuracy (45 to 66 Hz) *Accuracy guaranteed up to 120% of range.	Current range 5000.0 A/500.00 A 50.000 A		Combined amplitude accuracy 1.6% rdg. + 0.4% f.s. 1.6% rdg. + 3.1% f.s.
Phase accuracy (45 to 66 Hz)	Within $\pm 1.0^\circ$		
Maximum allowable input (45 to 66 Hz)	10,000 A continuous		
Maximum rated terminal-to-ground voltage	1000 V AC (CAT III), 600 V AC (CAT IV)		
Frequency band	10 Hz to 50 kHz (within ± 3 dB)		
Dimensions / cord length	Flexible loop cross-sectional diameter: 7.4 mm (0.29 in.) / 2.5 m (8.20 ft.)		
Weight	160 g	180 g	190 g

Model		AC/DC AUTO-ZERO CURRENT SENSOR CT7731	AC/DC AUTO-ZERO CURRENT SENSOR CT7736	AC/DC AUTO-ZERO CURRENT SENSOR CT7742
Appearance				
Rated measured current		100 A AC/DC	600 A AC/DC	2000 A AC/DC
Measurable wire diameter		33 mm (1.30 in.) or less		55 mm (2.17 in.) or less
Current range and combined amplitude accuracy *Accuracy guaranteed up to 120% of range.	DC	Current range Combined accuracy 100.00 A 1.5% rdg. + 1.0% f.s. 50.000 A 1.5% rdg. + 1.5% f.s. [*1] 10.000 A 1.5% rdg. + 5.5% f.s. [*2]	Current range Combined accuracy 500.00 A 2.5% rdg. + 1.1% f.s. 50.000 A 2.5% rdg. + 6.5% f.s.	Current range Combined accuracy 5000.0 A 2.0% rdg. + 0.7% f.s. [*1] 2000.0 A 2.0% rdg. + 1.75% f.s. [*2] 1000.0 A 2.0% rdg. + 1.5% f.s. [*2] 500.00 A 2.0% rdg. + 2.5% f.s.
	45 to 66 Hz	100.00 A 1.1% rdg. + 0.6% f.s. 50.000 A 1.1% rdg. + 1.1% f.s. [*1] 10.000 A 1.1% rdg. + 5.1% f.s. [*2]	500.00 A 2.1% rdg. + 0.7% f.s. 50.000 A 2.1% rdg. + 6.1% f.s.	5000.0 A [*1] I > 1800 A: 2.1% rdg. + 0.3% f.s. I ≤ 1800 A: 1.6% rdg. + 0.3% f.s. 2000.0 A 1.6% rdg. + 0.75% f.s. [*2] 1000.0 A 1.6% rdg. + 1.1% f.s. [*2] 500.00 A 1.6% rdg. + 2.1% f.s.
Phase accuracy (45 to 66 Hz)		Within ±1.8°		Within ±2.3°
Offset drift		Within ±0.5% f.s.	Within ±0.1% f.s.	Within ±0.1% f.s.
Maximum allowable input (45 to 66 Hz)		100 A continuous	600 A continuous	2000 A continuous
Maximum rated terminal-to-ground voltage		600 V AC/DC (CAT IV)	1000 V AC/DC (CAT III), 600 V AC/DC (CAT IV)	
Frequency band		DC to 5 kHz (-3 dB)		
Dimensions / weight / cord length		58 mm (2.28 in.) (W) × 132 mm (5.20 in.) (H) × 18 mm (0.51 in.) (D) / 250 g / 2.5 m (8.20 ft.)	64 mm (2.52 in.) (W) × 160 mm (6.30 in.) (H) × 34 mm (1.34 in.) (D) / 320 g / 2.5 m (8.20 ft.)	64 mm (2.52 in.) (W) × 195 mm (7.68 in.) (H) × 34 mm (1.34 in.) (D) / 510 g / 2.5 m (8.20 ft.)

Model	AC LEAK CURRENT SENSOR CT7116	
Appearance	Designed specifically for leak current measurement  	
Rated measured current	6 A AC	
Measurable conductor diameter	40 mm or less (insulated conductor)	
Current range and combined amplitude accuracy (45 to 66 Hz)	Current range 5.0000 A 500.00 mA 50.000 mA	Combined accuracy 1.1% rdg. + 0.16% f.s. 1.1% rdg. + 0.7% f.s. 1.1% rdg. + 6.1% f.s. [*2]
Phase accuracy (45 to 66 Hz)	Within $\pm 3^\circ$	
Frequency band	40 Hz to 5 kHz ($\pm 3.0\%$ rdg. $\pm 0.1\%$ f.s.)	
Residual current characteristics	5 mA or less (for a pair of round-trip wires carrying 100 A)	
External magnetic field effects	5 mA equivalent, max. 7.5 mA (400 A/m, 50/60 Hz)	
Dimensions / weight / cord length	74 mm (2.91 in.) (W) \times 145 mm (5.71 in.) (H) \times 42 mm (1.65 in.) (D) / 340 g / 2.5 m (8.20 ft.)	

Option for connecting legacy current sensor models



CONVERSION CABLE L9910

Output connector conversion:
BNC \rightarrow PL 14

Use by connecting to one of the following legacy sensor models:

CLAMP ON SENSOR 9694/9660/9661/9669

AC FLEXIBLE CURRENT SENSOR CT9667-01/CT9667-02/CT9667-03

*Conversion cable does not supply power to the sensor.

CLAMP ON LEAK SENSOR 9657-10/9675

Current sensor options



EXTENSION CABLE L0220-01
2 m (6.56 ft.)

EXTENSION CABLE L0220-02
5 m (16.50 ft.)

EXTENSION CABLE L0220-03
10 m (32.81 ft.)

Voltage measurement options

HIOKI provides quotations for voltage cord extensions, terminal connector conversions, and other options on a case-by-case basis. Please contact your HIOKI distributor for details.



MAGNETIC ADAPTER 9804-01

Alternative tip for the L1000 series voltage cords, red $\times 1$, $\phi 11$ mm (0.43 in)



MAGNETIC ADAPTER 9804-02

Alternative tip for the L1000 series voltage cords, black $\times 1$, $\phi 11$ mm (0.43 in)



GRABBER CLIP L9243

Alternative tips for the L1000 series voltage cords



OUTLET TEST LEAD L1020

For Japan (3-prong, P/N/E), 2 m (6.56 ft) length,

*Please contact HIOKI for cords for use in countries other than Japan.



PATCH CORD L1021-01

Banana branch-banana, Red: 1, 0.5 m (1.64 ft) length, for branching from the L9438s or L1000s, CAT IV 600 V, CAT III 1000 V



PATCH CORD L1021-02

Banana branch-banana, Black: 1, 0.5 m (1.64 ft) length, for branching from the L9438s or L1000s, CAT IV 600 V, CAT III 1000 V

Magnetic straps



MAGNETIC STRAP Z5004

MAGNETIC STRAP Z5020
Extra strength

Interfaces



SD MEMORY CARD
2GB Z4001
2 GB capacity



SD MEMORY CARD
Z4003
8 GB capacity



RS-232C CABLE
9637
9 pin - 9 pin, cross,
1.8 m (5.91 ft) length



LAN CABLE 9642
Straight Ethernet cable,
supplied with straight to
cross conversion adapter,
5 m (16.41 ft) length

About SD memory cards

Be sure to use genuine HIOKI SD memory cards with HIOKI instruments. Use of other SD memory cards may prevent data from being properly saved or loaded as proper operation is not guaranteed.

Carrying cases and waterproof boxes



CARRYING CASE
C1009
Bag type, Includes
compartment for options



CARRYING CASE
C1001
Soft type, Includes
compartment for options



CARRYING CASE
C1002
Hard trunk type, Includes
compartment for options



Waterproof box
For outdoor
installation, IP65

PQ3198 options



WIRING ADAPTER PW9000

When three-phase 3-wire connection, the voltage cord to be connected can be reduced from 6 to 3



WIRING ADAPTER PW9001

When three-phase 4-wire connection, the voltage cord to be connected can be reduced from 6 to 4



GPS BOX PW9005

To synchronize the PQ3198 / PW3198 clock to UTC

Standard accessories (also available for separate purchase)



Comes with the PQ3198

VOLTAGE CORD L1000

Red/ Yellow/ Blue/ Gray each 1,
Black 4, 3m (9.84ft) length,
Alligator clip $\times 8$



AC ADAPTER Z1002
For main unit, 100 to 240
V AC



Comes with the PQ3100

VOLTAGE CORD L1000-05

Red/ Yellow/ Blue/ Gray/ Black
each 1, 3 m (9.84 ft) length,
Alligator clip $\times 5$



BATTERY PACK Z1003

NiMH, Charges while
installed in the main unit



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

Z4001



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.

SD MEMORY CARD 8GB

Z4003



VOLTAGE LINE POWER ADAPTER

PW9003

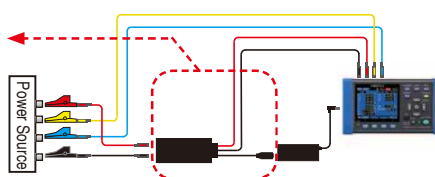
(supplies power from measurement lines)



CAT III 300V

Rated voltage: 240 V AC

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



BATTERY SET

Battery Case and Battery Pack Set

PW9002



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

CARRYING CASE

C1005



Dimension:

Approx. 390W (15.4") x 275H (10.8") x 110D (4.3") mm

MAGNET ADAPTER

9804-01 Red



9804-02 Black

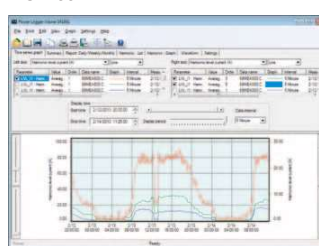
φ11 mm (0.43 in)
(generally compatible with M6 pan screws)

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



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

Bundled Accessories

AC ADAPTER Z1006



100 to 240 V AC

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

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

DISTRIBUTED BY

HIOKI

HIOKI E. E. CORPORATION

HEADQUARTERS

81 Koizumi,
Ueda, Nagano 386-1192 Japan
<https://www.hioki.com/>



Scan for all
regional contact
information