Clamp-type Portable Power Monitor

ZN-CTC11

CSM_ZN-CTC11_DS_E_1_1

Power Logger Built into the Clamp. All-in-one Construction for Ultimate Simplicity.

- A 200-A CT integrated into a clamp for immediate use with one-touch mounting.
- Just press the REC/STOP Key to start logging.
- Transfer logged data to your computer via USB.
- Display accumulated power consumption with enclosed software.

Refer to *Safety Precautions* on page 2.

Ordering Information

Power Monitor

Appearance	Product name	Model	Power supply
	Clamp-type Portable Power Monitor	**ZN-CTC11**	Secondary lithium battery (charged via USB)

Ratings/Characteristics

Power Monitor Ratings

Item / Model	ZN-CTC11
Rated primary current	200 A
Applicable frequency	50 Hz/60 Hz
Maximum number of times clamped	5,000
Clamp core inner diameter	23
Applicable circuit voltage	480 VAC max.
Display	7-segment LCD with 4 digits on 1 row, supplemental information indicators, and CHARGE indicator
Logging interval	1 s, 2 s, 5 s, 10 s, 20 s, 30 s, or 1 min (Set with utility software.)
Conversions *1	Power Monitor: Instantaneous power, Computer software: Accumulated power consumption
Internal memory capacity	105 files max. *2 Approx. 1,700,000 data items (Data item size: Approx. 4 bytes) *3
Power supply	Lithium secondary battery (charged from PC USB port)
Current consumption	75 mA max. (maximum current flow when connected via USB)
Battery life *4	Approx. 1 week (logging interval: 1 s, ambient temperature: 23°C)
Charging time	Approx. 3 hr (at 23°C from a battery level of 0)
Operating temperature range	Battery powered: 0 to 50°C (with no condensation or icing) Charging via USB: 0 to 40°C (with no condensation or icing)
Operating humidity range	20% to 80% (with no condensation or icing)
Storage temperature and humidity	–10 to 60°C, 20% to 80% (with no condensation or icing)
Insulation resistance	With USB connector case: 50 MΩ min. (at 500 VDC)
Dialectic strength	With USB connector case: 1,000 VAC, 50/60 Hz for 1 min
Vibration resistance (destruction)	10 to 150 Hz with a 0.7-mm double amplitude or acceleration of 50 m/s^2 for 80 min each in X, Y, and Z directions
Shock resistance (destructive)	150 m/s^2 3 times each in six directions (up/down, left/right, forward/backward) *5
Material	ABS
Maximum number of USB connections	5,000
Degree of protection	IP30
Weight (packed state)	Approx. 300 g
Accessories	Instruction sheet, utility disc (CD-ROM),*6 USB cable (mini-B), and handstrap (packed connected to Power Monitor)

✻1. The instantaneous power is calculated from the measured current and the set voltage and set power factor. Set the suitable mode for the measured item.
✻2. One file is created each time logging is started. If the maximum number of files is exceeded, an E12 error is displayed and you will not be able to start logging.
✻3. If the number of data items exceeds the internal memory capacity, an E11 error occurs and logging stops.

✻4. The battery life depends on the measurement environment, logging interval, and operating mode.
✻5. Install the Power Monitor in a location in which it will not be subject to shock.
✻6. The utility disk contains the utility software, USB driver, Energy View, and PDF manual file.
System requirements for enclosed software: OS: Windows XP SP3, Windows Vista, or Windows 7 (64-bit edition supported only for Windows 7)
Processor: Intel-equivalent processor of 1.5 GHz min, Memory: 1 GB min. (2 GB min. recommended)

Power Monitor Measurement Specifications

Item / Model	ZN-CTC11
Rated primary current	1.2 to 200 A
Maximum primary input current	120% (continuous) of rated input current
Current accuracy	±2.0% FS ± 1 digit (ambient temperature of 23°C, rated input, and rated frequency)
Frequency of measured circuit	50 Hz/60 Hz
Logged values	Current, instantaneous power, and accumulated power consumption
Applicable circuit	Single-phase 2-wire circuit or 3-phase 3-wire circuit *

✻ For a 3-phase, 3-wire circuit, measurements are performed for balanced three-phase power. If phases R and T are not balanced, the error in the measured values will increase.

Safety Precautions

⚠ WARNING

Electrical shock may occasionally occur.
Always turn OFF the power supply to the measured conductors before clamping or unclamping the Power Monitor, and always wear insulating gloves.

Dispose of the Power Monitor as industrial waste.
A lithium battery is built into the Power Monitor and combustion or rupture may occasionally result in serious injury. Do not disassemble, deform under pressure, heat to 100°C or higher, or incinerate the battery.

⚠ CAUTION

Do not use the Power Monitor in locations where flammable or explosive gases are present.
Doing so may occasionally result in minor or moderate explosion, causing minor or moderate injury, or property damage.

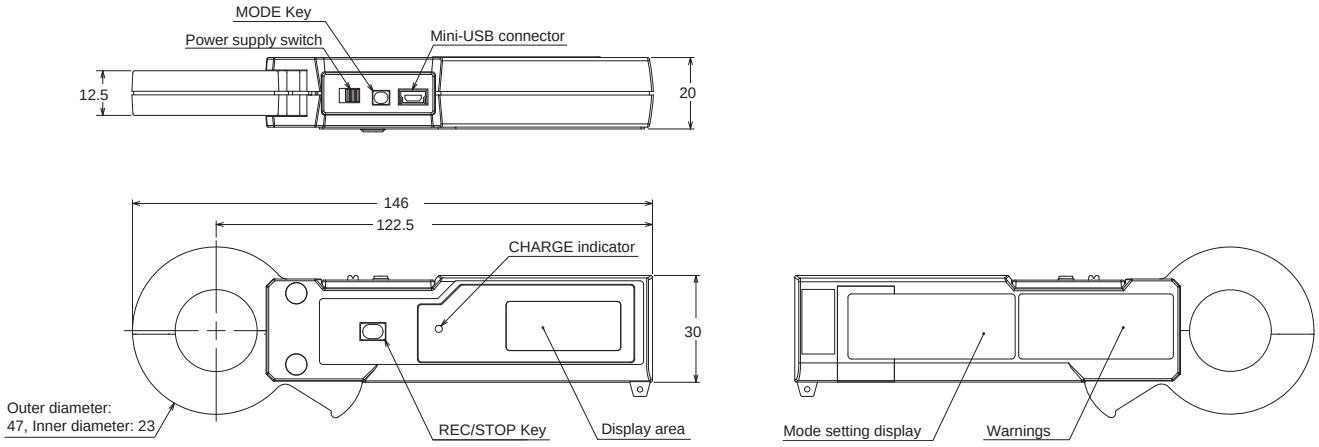
Do not disassemble, repair, or modify the Power Monitor.
Doing so may occasionally result in electric shock, minor injury, fire, or malfunction.

Refer to your OMRON website for FAQs and other technical information. Refer to the relevant Technical Guide on your OMRON website.

Dimensions

(Unit: mm)
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

ZN-CTC11



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