



CT-317

PHOTOVOLTAIC (PV) CURRENT CLAMP 1000 V, 2000 A

FOR SELF-CONSUMPTION INSTALLATIONS

FEATURES IMPEDANCE, CAPACITANCE,
TEMPERATURE & FREQUENCY MEASUREMENTS,
DIODE TEST AND USB DATA TRANSFER

Thanks to its specifications (1000 V, 2000 A), the CT-317 current clamp is perfect to work in self-consumption PV (photovoltaic) installations, both in private residential environments, buildings and other locations.

Just insert a microSD card in the memory slot to store measurement records with an user-definable time between samples of 2 to 7200 seconds. The system accepts cards of up to 32 GB (an 8 GB card is included).

The CT-317 current clamp has a built-in real-time clock to attach the day and time to the measurements, transfer them to the computer and process them with any compatible application.



MEASUREMENTS INCLUDED IN THE CT-317 CURRENT CLAMP

- ✓ DC/AC voltage: Up to 1000 V
- ✓ DC/AC current: Up to 2000 A
- ✓ Continuity test: Audible tone
- ✓ Diode test: Audible tone
- ✓ Impedance: Up to 60 MΩ
- ✓ Frequency: Up to 999.9 Hz
- ✓ Capacitance: Up to 600 μF
- ✓ Temperature: From -100 °C to 1300 °C (optional)

SPECIFICATIONS

- ✓ Display: Backlighted LCD screen, 128x64 pixels
- ✓ Polarity: Automatic, on-screen indication
- ✓ Datalogger: Up to 32 GB of data (microSD storage)
- ✓ Dimensions: 108 (W.) x 280 (H.) x 47 (D.) mm
- ✓ Functions: HOLD, relative measurement, PK-PK
- ✓ Overrange: On-screen indication and statement in datalogger
- ✓ PC software: Included, to convert data to MS Excel
- ✓ Power supply: Batteries (2x1.5 V AA-size) or AC adapter

| SPECIFICATIONS | CT-317 SELF-CONSUMPTION PHOTOVOLTAIC (PV) INSTALLATIONS CURRENT CLAMP 1000 V, 2000 A |
|---|--|
| Display | Dot matrix backlighted LCD screen (128x64 pixels) |
| Display functions | HOLD, relative measurement, peak-to-peak measurement |
| Polarity | Automatic: Positive by default and on-screen negative polarity indication |
| Overrange | (OL) or (-OL) is displayed, and "999" or "9999" is recorded the datalogger (overlooking the decimal point) |
| Analogue to Digital Conversor | 6000 counts |
| Protection class | IEC1010 CAT III 1000 V, CAT IV 600 V |
| Max conductor diameter | 50 mm |
| Clamps frequency response | From 40 Hz to 1 kHz |
| Datalogger | Measurements are stored in the microSD card (up to 32 GB) Measurements are associated to its timestamp (MM/DD/YYYY HH:MM:SS) Measurements can be exported to Microsoft Excel Time between measurements from 2 to 7200 seconds Supplying the instrument from its AC 9 V adaptor is recommended |
| DC voltage Scales Resolution Accuracy Overload protection | 600mV / 6V / 60V / 600V / 1000V 0.1 mV / 0.001V / 0.01V / 0.1V / 1V 600 mV scale: $\pm(0.8\% \text{ rdg.} + 2 \text{ digits})$ / Other scales: $\pm(0.8\% + 1 \text{ digit})$ / PK-PK: $\pm(5\% + 30 \text{ digits})$ 1000 V |
| AC TRMS voltage Scales Resolution Accuracy Input impedance Overload protection | 600mV / 6V / 60V / 600V / 1000V 0.1 mV / 0.001V / 0.01V / 0.1V / 1V $\pm(1\% \text{ rdg.} + 2 \text{ digits})$ / PK-PK: $\pm(5\% + 30 \text{ digits})$ 10 M Ω 1000 V RMS |
| DC/AC TRMS current Scales Resolution Accuracy Overload protection | From 0.5 to 2000 A 0.1A / 1A 600 A scale: $\pm(1\% \text{ rdg.} + 12 \text{ digits})$ / 2000 A scale: $\pm(1\% + 8 \text{ digits})$ / PK-PK: $\pm(5\% + 30 \text{ digits})$ 2100 A with clamps |
| Impedance Scales Resolution Accuracy | 600 Ω / 6k Ω / 60k Ω / 600k Ω / 6M Ω / 60M Ω 0.1 Ω / 0.001k Ω / 0.01k Ω / 0.1k Ω / 0.001M Ω / 0.01M Ω 600 Ω scale: $\pm(1\% \text{ rdg.} + 2 \text{ digits})$ / Other scales: $\pm(1.5\% + 2 \text{ digits})$ |
| Diode test | Short/open circuit, pass/fail test |
| Continuity test | Audible tone when the impedance value is below 5 Ω |
| Capacitance Scales Resolution Accuracy | 6nF / 60nF / 600nF / 6 μ F / 60 μ F / 600 μ F 0.001nF / 0.01nF / 0.1nF / 0.001 μ F / 0.01 μ F / 0.1 μ F $\pm(3\% \text{ rdg.} + 5 \text{ digits})$ |
| Frequency | From 40 to 999.9 Hz (0.1 Hz resolution). Accuracy $\pm(0.5\% \text{ rdg.} + 2 \text{ digits})$. |
| Temperature Scales Resolution Accuracy | Optional -100 to 199.9 $^{\circ}$ C / 200 to 1300 $^{\circ}$ C 0.1 $^{\circ}$ C / 1 $^{\circ}$ C $\pm(1\% \text{ rdg.} + 1^{\circ}\text{C})$ / $\pm(1\% \text{ rdgt.} + 2^{\circ}\text{C})$ |
| Power supply | 2 AA-size 1,5 V batteries or 9 V AC adapter |
| Mechanical features | 108 (W.) x 280 (H.) x 47 (H.) mm / 640 g, including batteries |
| Included accessories | Test leads, Crocodile clamps, USB cable, RS-232 cable, Measurement acquisition software, Temperature probe (optional), 8 GB microSD card, carrying pouch, AC adapter |