



DIGITAL POWER CLAMP

SAFETY INFORMATION

Digital power clamp meter has been designed according to IEC1010-1 and IEC1010-2-032 concerning safety requirements for electrical measuring instruments and handheld clamps with over voltage category (600V CAT III).

GENERAL DESCRIPTION

Digital power clamp meter is a handheld meter with power measurement, it is incorporated current meter and power measurement instrument. The meter is composed of three channels: voltage, current, power and single chip Microcontroller. It has powerful measuring and data processing software, and complete to measure, calculate and display of the 9 parameters: VOLTAGE, CURRENT, ACTIVE POWER, POWER FACTOR, APPARENT POWER, REACTIVE POWER, ACTIVE ENERGY, FREQUENCY, TEMPERATURE. It has stable capability, easy operation. it is especially suitable for measurement and overhaul of the electric power equipment and the power-supply circuit on the spot. The structure of the instrument is pincers, it pincers, it is very small, berry light and portable, make measurement easy and fast. To the power measurement user, the digital power clamp meter is one of the best instruments.

Feature

1. The instrument can complete the true RMS value measurement. If there is no sinusoidal AC current input signal, it can accurately measure the active current.
2. Using auto range switch circuit and modulus transducer which has 13 bits and high resolution, the instrument has high accuracy and easy operation.
3. Adopting the power measurement system that is made of American new special chip for high accuracy power measurement and the new single chip microprocessor which has high capability and large content and is for special meter, the instrument software can complete multicontrol, complex calculation and measuring display for the power measurement system.
4. Minimum current of active energy measurement is 0.02A; it can measure expending energy per hour of general electrical equipment. Measurement

- and display five parameters of power: **ACTIVE POWER, APPARENT POWER, POWER FACTOR, REACTIVE POWER, ACTIVE ENERGY.**
- There are double scales analogue bar graph to display fluctuation of voltage and current.
 - The instrument is portable and clamp meter. It is very light and convenient to carrying.

SPECIFICATIONS

AC VOLTAGE

RMS

RANGE	ACCURACY	RESOLUTION	INPUT IMPEDANCE
100V	$\pm(1.2\%+5)$	0.1V	10 M Ω (100Pf SHUNT)
300V	$\pm(1.2\%+5)$	0.1V	
600V	$\pm(1.2\%+5)$	0.1V	

Max. Overload Voltage: 750V (RMS)

AC CURRENT

RMS

RANGE	ACCURACY	RESOLUTION
40A	$\pm(2\%+5)$	0.1A
100A	$\pm(2\%+5)$	0.1A
400A	$\pm(2\%+5)$	0.1A
1000A	$\pm(2\%+5)$	0.1A

Max. Overload Current: 1500A

ACITVE POWER RANGE	ACCURACY	W=(VXAX COSΦ) RESOLUTION
4kW	$\pm(3\%+5)$	0.01kW
10kW	$\pm(3\%+5)$	0.01kW
40kW	$\pm(3\%+5)$	0.01kW
100kW	$\pm(3\%+5)$	0.01kW
600kW	$\pm(3\%+5)$	0.1kW

Minimum measurement current: 0.2A

Minimum measurement voltage: 20V

APPARENT POWER RANGE	ACCURACY	(VA=VXA) RESOLUTION
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4kVA	$\pm(3\%+5)$	0.01kVA
10kVA	$\pm(3\%+5)$	0.01kVA
40kVA	$\pm(3\%+5)$	0.01kVA
100kVA	$\pm(3\%+5)$	0.01kVA
600kVA	$\pm(3\%+5)$	0.1kVA

Minimum measurement current: 5A

Minimum measurement voltage: 20V

POWER FACTOR RANGE	ACCURACY	(PF=W/VA) RESOLUTION
0.3~1 Capacitive	$\pm(0.02+2)$	0.001
0.3~1 Inductive	$\pm(0.02+2)$	0.001

Minimum measurement current: 5A

Minimum measurement voltage: 20V

REACTIVE POWER RANGE	ACCURACY	(Var)²=(VA)²+W² RESOLUTION
4kVAr	$\pm(4\%+5)$	0.01kVAr
10kVAr	$\pm(4\%+5)$	0.01kVAr
40kVAr	$\pm(4\%+5)$	0.01kVAr
100kVAr	$\pm(4\%+5)$	0.01kVAr
600kVAr	$\pm(4\%+5)$	0.1kVAr

Minimum input current: 5A

Minimum input voltage: 20V

Recording Voltage value current value active power value to calculate reactive power value, The calculating accuracy is 0.01% the range.

ACTIVE ENERGY RANGE	ACCURACY	(kWh) RESOLUTION
1~9999kWh	$\pm(3\%+2)$	0.001kWh

Minimum measurement current: 0.2A

Minimum measurement voltage: 10V

FREQUENCY RANGE	ACCURACY	(Hz) RESOLUTION
20Hz~1kHz	0.5%	0.1Hz

Minimum measurement voltage : 20V.

TEMPERATURE RANGE	ACCURACY	(TEMP) RESOLUTION
-50 ~ 300°C	±3°C	1°C
300 ~ 1300°C	±1%	1°C
-58 ~ 572 °F	±5.5°F	2°F
572 ~ 2372°F	±1%	2°F

Accuracy: % of reading + number of digits The specification given assume an operating temperature: 18 °C~28°C, himidity up to: 80% , the frequency of voltage and current is 45Hz~65Hz

Maximum common made voltage: 600V AC

Display : LCD 9999

Range : auto range

Overage indication: Figure “OL” on the display

Reading Holding: Figure “H” on the display

Power supply : 4X 1.5V AA

Power consume: 250mW

Storage temperature : -20°C ~ 70°C

Dimension size: 300mm x 103mmx x 51mm

Weight : approx. 500g (include battery)

Made in China