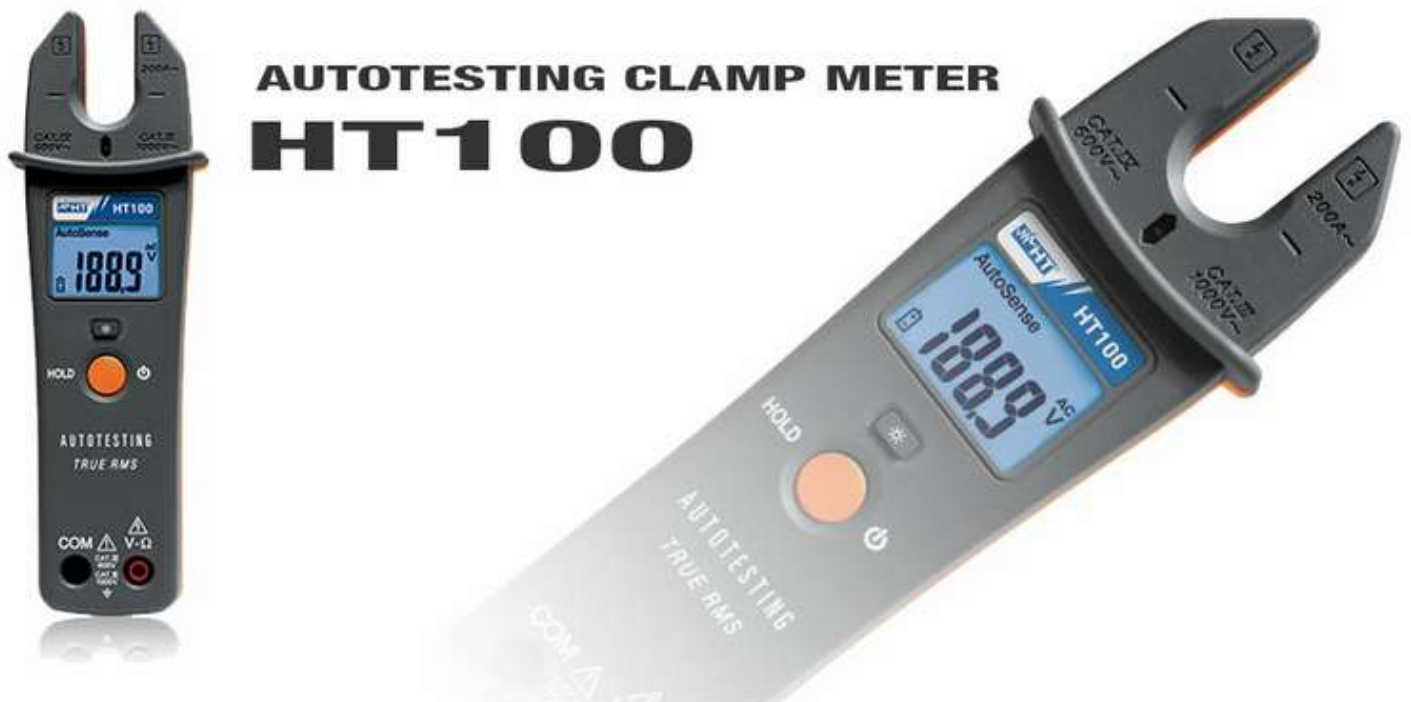


HT100

AC TRMS clamp meter with automatic detection of functions



Professional clamp meter **HT100** is designed for **AC TRMS current measurement up to 200A** in compliance with CAT IV 600V, CAT III 1000V according to IEC/EN61010-1 standards. It is provided with “open” jaws and a wide display with 9999 reading digits, “Voltsense” function, Data HOLD and back lighting to make reading easier in poorly lit environments. It carries out also AC/DC voltage measurements, resistance, continuity test and diode test. Auto power off function permits to save internal battery life.

Function

- TRMS measurement
- AC current up to 200A
- DC/AC voltage up to 1000V
- “Voltsense” feature for AC voltage detection
- Resistance
- Continuity test with buzzer
- Diode test
- Autorange
- Automatic detection of functions
- Data HOLD
- Backlight
- Auto Power OFF

STANDARD

- Couple of test leads
- Carrying bag
- Batteries
- User manual



1. ELECTRICAL SPECIFICATIONS

Accuracy is indicated as [% rdg + (number of dgt * resolution)] referred to 23°C ± 5°C, <80%RH

DC Voltage (Autorange)

Range	Resolution	Accuracy	Input impedance	Overload protection
2.2V ÷ 1000.0V	0.1V	±(0.3%rdg + 2dgt)	>6kΩ approx.420kΩ (@1000V)	1000VDC/ACrms
-0.7V ÷ -1000.0V				

AC TRMS Voltage (Autorange)

Range	Resolution	Accuracy (*)	Input impedance	Overload protection
1.3V ÷ 1000.0V	0.1V	±(0.9%rdg.+3dgt) (50Hz ÷ 60Hz) ±(1.5%rdg.+3dgt) (61Hz ÷ 500Hz)	>6kΩ approx.420kΩ (@1000V)	1000VDC/ACrms

"Voltsense" function: measurement range 80V ÷ 1000V AC, 50 ÷ 60Hz

(*) Accuracy referred to sinusoidal waveform. For not sinusoidal waveforms consider as follows::

- > Add 3.0%rdg for 1.0 ≤ CF <2.0
- > Add 5.0%rdg for 2.0 ≤ CF <2.5
- > Add 3.0%rdg for 2.5 ≤ CF <3.0

CF = Crest factor

AC TRMS Current (Autorange)

Range	Resolution	Accuracy (*)	Bandwidth	Overload protection
1.5A ÷ 200.0A	0.1A	±(3.0%rdg + 5dgt)	50 ÷ 60Hz	200Arms

Influence of adjacent conductors: <0.08A/A

(*) Accuracy referred to sinusoidal waveform. For not sinusoidal waveforms consider as follows::

- > Add 3.0%rdg for 1.0 ≤ CF <2.0
- > Add 5.0%rdg for 2.0 ≤ CF <2.5
- > Add 3.0%rdg for 2.5 ≤ CF <3.0

CF = Crest factor

Resistance and Continuity test (Autorange)

Range	Resolution	Accuracy	Buzzer	Overload protection
0 ÷ 9999Ω	1Ω	±(0.9%rdg + 2dgt)	≤ 25Ω	1000VDC/ACrms

Max open circuit voltage: 1.6V

Diode test

Range	Resolution	Accuracy	Overload protection
0.4 ÷ 0.8V	0.1V	±(1.0%rdg + 3dgt)	1000VDC/ACrms



2. GENERAL SPECIFICATIONS

Mechanical characteristics

Dimensions (L x W x H):	193 x 54 x 31mm
Weight (including battery):	280g
Max conductor size:	16mm

Supply

Battery type:	2x1.5V batteries AAA LR03
Low battery indication:	“  ” is displayed
Battery life:	about 300 hours
Auto Power Off:	about 20 minutes of idleness

Display

Characteristics:	4 LCD (max 9999 counts), sign, decimal point and backlight
Sample rate:	2 times/sec
Conversion mode:	TRMS

Climatic conditions

Reference temperature:	23°C ± 5°C
Operating temperature:	0 ÷ 50°C
Operating humidity:	<80%RH
Storage temperature:	-20 ÷ 60 °C
Storage humidity:	<80%RH

Reference guidelines

Safety:	IEC/EN61010-1, IEC/EN61010-2-032/-2-033
EMC :	IEC/EN61326-1
Insulation:	double insulation
Pollution degree:	2
Max height of use:	2000m
Measurement category:	CAT IV 600V, CAT III 1000V to ground

This product conforms to the prescriptions of the European directive on low voltage 2006/95/EEC and to EMC directive 2004/108/EEC