

## INTRODUCTION

The Metravi DT-230 Digital TRMS AC/DC Clamp Meter is a multifunction, ergonomically-designed, battery-operated, robust and reliable device which is made of good quality material and will last long.

Used for measuring AC & DC Voltage, AC & DC Current, Resistance, Capacitance, Frequency, NCV detection, Continuity and Diode Test. Features a built-in LED Flashlight and HD display along with Data Hold function, Auto power-off and alarm functions.

## GENERAL SPECIFICATIONS

- 3999 Counts Backlit LCD Display
- MAX/MIN Record Function
- Flashlight to access dark areas
- Auto-Ranging
- Auto Power Off & Low Battery indication
- Data Hold
- Non-contact Voltage Detector (NCV)
- Live Wire indication
- Low Pass Filter (LPF)
- Low Z Voltage measurement
- Confirms to EN61010-1,-2-030, EN61010-2-033, EN6132601, CAT- III 600V
- Diode Test & Continuity Test



\*Technical Specifications & Appearance are subject to change without prior notice

**TECHNICAL SPECIFICATIONS**

The accuracy applies within one year after the calibration. Reference condition: the environment temperature 18°C to 28°C, the relative humidity is no more than 80% accuracy:  $\pm(\% \text{reading} + \text{word})$

**DC VOLTAGE**

Range	Resolution	Accuracy
400mV	0.01mV	$\pm (0.5\% \text{reading} + 5)$
4V	0.001V	
40V	0.01V	
400V	0.1V	
600V	1V	

Input impedance: 10M $\Omega$ (LowZ:300 k $\Omega$ ).  
Overload protection: 600V.  
Maximum input voltage: 600V.

**AC VOLTAGE (T-RMS)**

Range	Resolution	Accuracy
4V	0.001V	$\pm (0.8\% \text{reading} + 5)$
40V	0.01V	
400V	0.1V	
600V	1V	

Input impedance: 10M $\Omega$ (LowZ:300 k $\Omega$ )  
Overload protection: 600V;  
Maximum input voltage: 600V  
Frequency Response: 10Hz ~ 1kHz; TRMS

**DC CURRENT**

Range	Resolution	Accuracy
40A	0.01A	$\pm (2.5\% \text{reading} + 8)$
400A	0.1A	

MAX current : 400A

**AC CURRENT (T-RMS)**

Range	Resolution	Accuracy
40A	0.01A	40~400Hz: $\pm(2.5\% \text{reading} + 5)$ other: $\pm(3.0\% \text{reading} + 10)$
400A	0.1A	

MAX current : 400A Frequency Response: 10Hz ~ 1kHz; TRMS

**RESISTANCE**

Range	Resolution	Accuracy
400 $\Omega$	0.1 $\Omega$	$\pm (1.0\% \text{reading} + 5)$
4k $\Omega$	0.001k $\Omega$	
40k $\Omega$	0.01k $\Omega$	
400k $\Omega$	0.1k $\Omega$	
4M $\Omega$	0.001M $\Omega$	
40M $\Omega$	0.01M $\Omega$	

Overload protection: 250V

**CAPACITANCE**

Range	Resolution	Accuracy
10nF	0.001nF	$\pm (4.0\% \text{reading} + 5)$
100nF	0.01nF	
1000nF	0.1nF	
10 $\mu$ F	0.001 $\mu$ F	
100 $\mu$ F	0.01 $\mu$ F	
1000 $\mu$ F	0.1 $\mu$ F	
10mF	0.001mF	
100mF	0.01mF	

Overload protection: 250V

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**CONTINUITY**

	< 30Ω, the buzzer sounds and the orange back-light on.	Test Voltage Approx. 1V. Overload protection : 250V.
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**DIODE**

	It displays the approximate forward voltage value of the diode.	Forward DC current is about 2.5mA. Reverse DC voltage is about 3V. Overload protection:250V.
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**FREQUENCY/DUTY**

Range	Resolution	Accuracy
10Hz	0.001Hz	± (1.0%reading+3)
100Hz	0.01Hz	
1000Hz	0.1Hz	
10kHz	0.001kHz	
100kHz	0.01kHz	
1000kHz	0.1kHz	± (3.0%reading+3)
10MHz	0.001mHz	
1~99%	0.1%	

- Hz/duty: 1) Range: 0 ~ 10MHz  
 2) Voltage sensitivity: 0.2~10V AC  
 3) Overload protection: 250V;  
 V: 1) Range: 0 ~ 100 kHz  
 2) Voltage sensitivity: 0.5~600V ACV;  
 A: 1) Range: 0 ~ 100 kHz  
 2) Current sensitivity: ≥ 1/4 Full range



**TEMPERATURE**

	Resolution	Accuracy	
°C	1°C	-20°C ~ 0°C	± 3°C
		0°C ~ 400°C	± 1.0% or ± 2°C
		400°C ~ 1000°C	± 2.0%
°F	1°F	-4°F ~ 32°F	± 6°F
		32°F ~ 752°F	± 1.0% or ± 4°F
		752°F ~ 1832°F	± 2.0%

NOTE : The above accuracy does not include the error of thermocouple probe.

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