



Product Datasheet

English

Stock No: 2003702

# 50000 count TRMS heavy Duty AC/DC clamp meter with dual Type K inputs

EN



## Introduction

Congratulations on your purchase of the True RMS Clamp Meter. This meter measures AC Current, DC Current, AC/DC Voltage, Resistance, Capacitance, Frequency, Diode Test, Duty Cycle and Continuity. Special features include Dual Input Thermocouple Temperature and Non-Contact Voltage detector. The double molded case is designed for heavy duty use. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

## Specification

Function	Range & Resolution	Accuracy (% of reading)
DC Current	50.00 ADC	$\pm(2.5\% \pm 5 \text{ digits})$
	1000.0ADC	
AC Current True RMS (50 to 60Hz)	50.00 AAC	$\pm(2.5\% \pm 5 \text{ digits})$
	1000.0AAC	
All AC Current ranges are specified from 5% of range to 100% of range		
uA Current	500.00uA	DC: $\pm(1.0\% \pm 6 \text{ digits})$
		AC: $\pm(1.5\% \pm 30 \text{ digits})$
	5000.0uA	DC: $\pm(1.0\% \pm 6 \text{ digits})$
		AC: $\pm(1.5\% \pm 30 \text{ digits})$
DC Voltage	500.00 mVDC	$\pm(1.0\% \pm 8 \text{ digits})$
	5.0000VDC	$\pm(0.1\% \pm 4 \text{ digits})$
	50.000 VDC	
	500.00 VDC	
	600.0 VDC	
AC Voltage True RMS (50 Hz to 1000Hz)	500.00 mVAC	$\pm(1.0\% \pm 30 \text{ digits})$
	5.0000 VAC	
	50.000 VAC	
	500.00 VAC	
	0600.0 VAC	
	All AC voltage ranges are specified from 5% of range to 100% of range	

Function	Range & Resolution	Accuracy (% of reading)
Resistance	500.00Ω	± (1.0% + 9 digits)
	5.0000KΩ	± (1.0% + 5 digits)
	50.000KΩ	
	500.00KΩ	
	5.0000MΩ	± (2.0% + 10 digits)
	50.000MΩ	± (3.0% + 10 digits)
Capacitance	500.00nF	±(3.5% reading + 40 digits)
	5000.0nF	±(3.5% reading + 10 digits)
	50.00.μF	
	500.0.μF	
	5.000mF	±(5% reading + 10 digits)
Frequency	50Hz	± (0.3% reading + 2 digits)
	500Hz	
	5KHz	
	50KHz	
	500KHz	
	5MHz	
	10MHz	
Duty Cycle	5.0 to 95.0%	± (1.0% reading + 2 digits)
	Pulse width: 100μs - 100ms, Frequency: 10Hz to 10kHz	
Temp(type-K) (probe accuracy not included)	-100.0 to 1000.0 °C	±(1.0% reading + 2.5 °C)
	-148.0 to 1832.0 °F	±(1.0% reading + 4.5 °F)
	(probe accuracy not included)	

## General Specifications

Clamp jaw opening	1.9" (48mm) approx.
Display	Dual 50,000/50,000 count backlit LCD
Continuity check	Threshold 50Ω; Test current < 0.5mA
Diode test	Test current of 0.3mA typical; Open circuit voltage 2.8VDC typical
Low Battery indication	Battery symbol is displayed
Over-range indication	'OL' display
Measurement rate	2 readings per second, nominal
Peak detector	> 1ms
Thermocouple sensor	Type K thermocouple required
Fuse	500mA, ceramic fast blow
Input Impedance	10MΩ (VDC and VAC)
AC bandwidth	50 to 400Hz (AAC and VAC)
AC response	True rms (AAC and VAC)
Crest Factor	3.0 in 40A and 400A ranges, 1.4 in 1000A range (50/60Hz and 5% to 100% of range)
Operating Temperature	5°C to 40°C (41°F to 104°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Operating Humidity	Max 80% up to 31°C (87°F) decreasing linearly to 50% at 40°C (104°F)
Storage Humidity	< 80%
Operating Altitude	7000ft. (2000meters) maximum.
Battery	One (1) 9V Battery (NEDA 1604)
Auto power OFF	After approx. 30 minutes, with disable
Dimensions & Weight	9.1x3.0x1.6" (230x76x40mm); 11.1 oz. (315g)
Safety	For indoor use and in accordance with the requirements for double insulation to IEC1010-1 (2001): EN61010-1 (2001) Overvoltage Category III 600V and Category II 1000V, Pollution Degree 2.
Approvals	CE

Accessories:

Test leads, gift box with carrying case, temperature probe and 9V battery