





# **DT-3391**

# **DIGITAL AC T-RMS CLAMP METER**

The CEM DT-3391 Digital AC T-RMS Clamp meter is designed with ergonomic concepts, shaped to fit your hand and to access tight spots as well as wide bus bars. This is a rugged, heavy-duty clamp meter that measures AC Currents accurately irrespective of the type of waveform of current. It also can measure AC/DC Voltage, Resistance, Capacitance, Frequency, Duty Cycle and Temperature. It has Diode and Continuity Test as well.

The large backlit LCD makes it easy to use in dark areas. The Non Contact Voltage Detector shows the presence of live wires while taking measurements. The Data Hold and Relative measurement facilities add versatility to the meter making it useful for wide range of applications. The meter confirms to IEC1010-1 (2001): EN61010-1 (2001) Overvoltage Category III 1000V and Category IV 600V, Pollution Degree 2.

#### **FEATURES**

- 3-3/4 Digits 3999 Counts Backlit LCD Display
- Has AC Voltage Measuring Bandwidth of 50 400Hz
- The AC Current measuring frequency is 50 60Hz
- Data Hold and Relative Measurement
- Low Battery and Over-Range Indication
- Auto Power Off after approx. 30 mins.
- Measures Capacitance up to 100uF
- Frequency measurement up to 10MHz
- Current Measurement up to 1000A AC T-RMS
- AC T-RMS/DC Voltage up to 600V
- Temperature measurement using K type Thermocouple
- Clamp Jaw Dia of 52mm
- Operating Temperature: 5 to 40°C (41°F to 104°F)
- Storage Temperature: -20 to 60°C (-4°F to 140°F)
- Operating Humidity: Max 80% up to 31°C Decreasing Linearly to 50% at 40°C
- Storage Humidity < 80% RH
- Operating Altitude 7000 ft
- 9V Battery Operated
- Size: 270 x 100 x 47 mm / Weight: 452g.
- Safety: IEC 61010-1, CAT IV 600V, CAT III 600V, CE

### **SPECIFICATIONS**

Function	Range	Resolution	Accuracy
AC Current	40A	0.01A	± (2.2 % ± 12 Digits)
True RMS 400A	0.1A	. (2 E 0/ . E Digita)	
	1000A	1A	± (2.5 % ± 5 Digits)

Function	Range	Resolution	Accuracy
	400mV	0.1mV	± (0.8 % ± 2 Digits)
	4V	0.001V	
DC Voltage	40V	0.01V	± (1.5 % ± 2 Digits)
	400V	0.1V	
	600V	1V	± (2.0 % ± 4 Digits)

**Input Protection:** 1000V DC.

Function	Range	Resolution	Accuracy
AC Voltage True RMS (50Hz to 400Hz)	4V	0.001V	
	40V	0.01V	± (1.5 % ± 8 Digits)
	400V	0.1V	
	600V	1V	± (2.0 % ± 4 Digits)

Input Protection: 1000V AC RMS.

Function	Range	Resolution	Accuracy
	400Ω	0.1Ω	± (1.0 % ± 4 Digits)
Resistance	4 ΚΩ	0.001 ΚΩ	
	40 ΚΩ	0.01 ΚΩ	± (1.5 % ± 2 Digits)
	400 ΚΩ	0.1 ΚΩ	
	4 ΜΩ	1 ΚΩ	± (2.5 % ± 3 Digits)
	40 MΩ	10 ΚΩ	± (3.5 % ± 5 Digits)

Input Protection: 600V DC or 600V AC RMS

Function	Range	Resolution	Accuracy
	40.00nF	10pF	± (5 % ± 30 Digits)
	400.0nF	0.1nF	
Capacitance	4.000uF	1nF	± (3 % ± 5 Digits)
	40.00uF	10nF	
	100.0uF	0.1uF	± (5 % ± 5 Digits)

Input Protection: 600V DC or 600V AC RMS

Function	Range	Resolution	Accuracy
	9.999Hz	0.001Hz	
	99.99Hz	0.01Hz	
	999.9Hz	0.1Hz	
Frequency	9.999kHz	1Hz	± (1.5 % ± 5 Digits)
	99.99kHz	10Hz	
	999.9kHz	100Hz	
	9.99MHz	10kHz	

**Sensitivity:** >5V RMS (5Hz to 10MHz)

Function	Range	Resolution	Accuracy
<b>Duty Cyle</b>	0.1% - 99.9%	0.1%	± (1.2 % ± 2 Digits)

Function	Range	Resolution	Accuracy
Temperature	-20 to 760°C	1°C	
(type-K) (probe accuracy not included)	-4 to 1400°C	1°F	± (3 % ± 5 Digits)

**Input Protection:** 600V DC or 600V AC RMS.

Function	Testing Condition	Reading
Diode	Forward DCA is approx.1mA, open circuit Voltage MAX. 1.5V	Forward voltage drop of Diode
Continuity	Test current MAX. 1.5mA	Buzzer makes a long sound, While resistance is less than $(150\Omega)$

**Input Protection:** 600V DC or 600V AC RMS.

## **INCLUDED ACCESSORIES**

Carrying Case, Testing Leads, Temperature Probe Instruction Manual, Battery, Test Report