

CEM



DT-381/DT-383 DIGITAL COMPACT AC & AC/DC CLAMP METER

The CEM DT-380 series comes with all the rugged, reliable and accurate features you trust, in a small, ergonomic design. The innovative body design offers a more compact tool to meet your needs. With features of AC current measurements up to 400 A, DC Current measurements up to 400A (DT-383 only), a large 30 mm jaw opening and CAT III 600 V safety rating, you get an easy-to-use tool that handles your everyday electrical maintenance needs.

The meter confirms to EN-61010-1, EN-61326. The instrument houses a Non-Contact Voltage Detector to show the presence of live wire. The Flashlight in the clamp jaw and the backlit display helps easy access in dark and tight areas.

FEATURES

- 3-3/4 Digits 3999 Counts Backlit LCD Display
- Non Contact Voltage Detector Built-in
- Flashlight in the clamp to access dark areas
- Single Hand Easy Operation
- Full Overload Protection
- Data Hold Function to Freeze the display
- AC Voltage & Current Bandwidth 50 to 60Hz
- Diode Test and Audible Continuity Test
- Low Battery and Overload Indication
- Temperature Measuring Facility with K type thermocouple
- AC/DC Voltage and AC Current measuring facility
- DC Current Measurement up to 400A (**DT-383 Only**)
- Resistance, Capacitance & Frequency measurement
- Clamp Jaw Dia of 30mm
- 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
- 2 x 1.5V AAA Battery Operated
- Size: 230 x 82 x 40 mm / Weight: 230g.
- Safety: IEC 61010-1, CAT III 600V, CE

SPECIFICATIONS

Function	Range	Resolution	Accuracy
AC Current (50 to 60Hz)	4A (DT-381 only)	0.001A	$\pm (3.0 \% \pm 5 \text{ Digits})$
	40A	0.01A	
	400A	1A	

Function	Range	Resolution	Accuracy
DC Current (DT-383 Only)	40A	0.01A	$\pm (2.5 \% \pm 5 \text{ Digits})$
	400A	1A	

Function	Range	Resolution	Accuracy
DC Voltage	400mV	0.1mV	$\pm (1.5 \% \pm 2 \text{ Digits})$
	4V	0.001V	
	40V	0.01V	
	400V	0.1V	$\pm (2.0 \% \pm 2 \text{ Digits})$
	600V	1V	

Input Protection: 600V DC.

Function	Range	Resolution	Accuracy
AC Voltage (50Hz to 60Hz)	400mV (DT-383 only)	0.1mV	$\pm (1.5 \% \pm 10 \text{ Digits})$
	4V	0.001V	
	40V	0.01V	
	400V	0.1V	$\pm (1.5 \% \pm 8 \text{ Digits})$
	600V	1V	

Input Protection: 600V AC RMS.

Function	Range	Resolution	Accuracy
Resistance	400Ω	0.1Ω	$\pm (1.0 \% \pm 4 \text{ Digits})$
	4 KΩ	0.001 KΩ	
	40 KΩ	0.01 KΩ	
	400 KΩ	0.1 KΩ	$\pm (1.5 \% \pm 4 \text{ Digits})$
	4 MΩ	1 KΩ	
	40 MΩ	10 KΩ	

Input Protection: 250V DC or 250V AC RMS.

Function	Range	Resolution	Accuracy
Temperature (type-K) (probe accuracy not included)	-20 to 760°C	1°C	$\pm (3 \% \pm 5 \text{ Digits})$
	-4 to 1400°F	1°F	

Input Protection: 250V DC or 250V AC RMS.

Function	Range	Resolution	Accuracy
Capacitance	4.000nF	0.001nF	$\pm (5 \% \pm 20 \text{ Digits})$
	40.00nF	0.01nF	
	400.0nF	0.1nF	
	4.000uF	1nF	$\pm (3.0 \% \pm 5 \text{ Digits})$
	40.00uF	0.01uF	
	100.0uF	0.1uF	

Input Protection: 250V DC or 250V AC RMS.

Function	Range	Accuracy (% of reading + digits)	Resolution
Frequency	10Hz	$\pm (1.5 \% + 2d)$	0.01Hz
	400Hz		0.1Hz
	4KHz		1Hz
	10KHz		10Hz

Sensitivity: 100V (<50Hz); 50V (50 to 400Hz); 15V (401Hz to 10kHz).

Function	Testing Condition	Reading
Diode	Forward DCA is approx.0.3mA, open circuit Voltage MAX . 1.5V	Forward voltage drop of Diode
Continuity	Open Voltage is approx 0.5V	Buzzer makes a long sound, While resistance is less than (50Ω)

Input Protection: 250V DC or 250V AC RMS.

INCLUDED ACCESSORIES:

- Carrying Case
- Testing Leads
- Temperature Probe
- Battery
- Instruction Manual
- Test Certificate



• DT-381