



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

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Digital Compact AC & AC/DC Clamp Meter

SPECIFICATIONS

| Function | Range | Resolution | Accuracy |
|----------------------------|----------------------------|------------|----------------------|
| AC Current (50 to 60Hz) | 4A (DT-381 only) | 0.001A | ± (3.0 % ± 5 Digits) |
| | 40A | 0.01A | |
| | 400A | 1A | |

| Function | Range | Resolution | Accuracy |
|------------------------------------|-------|------------|----------------------|
| DC Current (DT-383 Only) | 40A | 0.01A | ± (2.5 % ± 5 Digits) |
| | 400A | 1A | |

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

Input Protection: 600V DC.

| Function | Range | Resolution | Accuracy |
|------------------------------|-------------------------------|------------|-----------------------|
| AC Voltage (50Hz to 60Hz) | 400mV (DT-383 only) | 0.1mV | ± (1.5 % ± 10 Digits) |
| | 4V | 0.001V | ± (1.5 % ± 8 Digits) |
| | 40V | 0.01V | |
| | 400V | 0.1V | |
| | 600V | 1V | ± (2 % ± 8 Digits) |

Input Protection: 600V AC RMS.

| Function | Range | Resolution | Accuracy |
|------------|--------|------------|----------------------|
| Resistance | 400Ω | 0.1Ω | ± (1.0 % ± 4 Digits) |
| | 4 KΩ | 0.001 KΩ | ± (1.5 % ± 4 Digits) |
| | 40 KΩ | 0.01 KΩ | |
| | 400 KΩ | 0.1 KΩ | |
| | 4 MΩ | 1 KΩ | ± (2.5 % ± 4 Digits) |
| | 40 MΩ | 10 KΩ | ± (3.5 % ± 4 Digits) |

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 | ± (3 % ± 5 Digits) |
| | -4 to 1400°C | 1°F | |

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

| Function | Range | Resolution | Accuracy |
|-------------|---------|------------|----------------------|
| Capacitance | 4.000nF | 0.001nF | ± (5 % ± 20 Digits) |
| | 40.00nF | 0.01nF | ± (3.0 % ± 5 Digits) |
| | 400.0nF | 0.1nF | |
| | 4.000uF | 1nF | |
| | 40.00uF | 0.01uF | |
| | 100.0uF | 0.1uF | ± (5 % ± 10 Digits) |

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

| Function | Range | Accuracy (% of reading + digits) | Resolution |
|-----------|-------|--|------------|
| Frequency | 10Hz | ± (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