

INTRODUCTION


The Metravi DT-8250 & DT-9250 are Digital AC/DC clamp meters with big jaw dia which can be used anywhere that high current and voltage measurements are needed.

DT-9250 is a T-RMS AC/DC Clamp Meter.

The unique feature of the DT-8250 & DT-9250 is that they can measure Frequency through the Clamp Jaw, so they can measure frequency at high current as well. It becomes very safe to take frequency measurements as you do not need to need to touch high current lines with probes to get frequency measurements. They can also measure high frequency through the terminals.

With the DT-8250 & DT-9250 you can safely and accurately measure AC/DC current up-to 1000V, AC/DC Current up-to 2000A, Resistance, Frequency (both through the clap jaw and terminal), Temperature, Capacitance, Duty Cycle, Peak of AC Current, Diode and Continuity. With features like Data Hold, Peak Hold, Auto Power Off and Backlit LCD Display of 4000 Counts.

GENERAL SPECIFICATIONS

- Clamp Jaw Opening** : 2" (52mm) approx
- Display** : 3-3/4 digits (4000 counts) Backlit LCD
- Continuity Check** : Buzzer sound at less than $(60 \pm 30)\Omega$
- Diode Test** : Test current of 0.5mA typical;
Open circuit voltage <2VDC typical
- Low Battery Indication** :  is displayed
- Over-Range Indication** : 'OL' display
- Measurement Rate** : 2 readings per second, nominal
- PEAK** : Captures peaks > 1ms
- Temperature Sensor** : Type K thermocouple
- Input Impedance** : 10M Ω (VDC and VAC)
- Operating Temperature** : 41°F to 104°F (5°C to 40°C)
- Storage Temperature** : -4°F to 104°F (-20°C to 60°C)
- Operating Humidity** : Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F (40°C)
- Storage Humidity** : <80%
- Operating Altitude** : 7000ft. (2000meters) maximum
- Battery** : One (1) 9V Battery
- Auto Range** : Auto/Manual
- Auto Power OFF** : After approx. 15 minutes
- Dimensions & Weight** : 27cm (H) x 10cm (W) x 4cm (D), 600 Grams Approx
- Safety** : For indoor use and in accordance with the requirements for double insulation to IEC 1010-1 (2001) : EN61010-1 (2001) Over Voltage Category III 1000V and Category IV 600V, Pollution Degree



SPECIFICATIONS

DC Voltage

Range	Accuracy (% of reading + digits)	Resolution
400mV	± (1% + 3 digit)	0.1mV
4V		1mV
40V		10mV
400V		100mV
1000V		1V

Input Impedance : 10MΩ

Over Range Protection : 1000V DC

AC Voltage (T-RMS for DT-9250 Only)

Range	Accuracy (% of reading + digits)	Resolution
4V	± (1.2% + 5 digit)	1mV
40V		10mV
400V		100mV
1000V		1V

Input Impedance : 10MΩ

Over Range Protection : 1000V AC

Frequency Response : 50Hz ~ 400Hz

AC Current (T-RMS for DT-9250 Only)

Range	Accuracy (% of reading + digits)	Resolution
400A	± (3.0% +2A)	100mA
2000A	± (3.5% + 5 digit)	1A

Over Range Protection : Maximum input 2000A

Frequency Response : 50Hz ~ 60Hz

DC Current

Range	Accuracy (% of reading + digits)	Resolution
400A	± (3.0% + 1A)	100mA
2000A	± (3.5% + 5 digit)	1A

Over Range Protection : Maximum input 2000A

Resistance

Range	Accuracy (% of reading + digits)	Resolution
400Ω	± (1.5% + 4 digit)	0.1Ω
4kΩ		1Ω
40kΩ		10Ω
400kΩ		100Ω
4MΩ		1kΩ
40MΩ	± (2.0% + 4 digit)	10kΩ

Over Range Protection : 600V RMS

Frequency (Auto-Ranging) Frequency through test leads when meter is set to AC voltage

Range	Accuracy (% of reading + digits)
10Hz to 100kHz	± 1.0% ±5 digit

Input Impedance : 1000V AC

Sensitivity : >2.7V AC

Frequency (Auto-Ranging) Frequency through jaws when meter is set to AC Current

Range	Accuracy (% of reading + digits)
40Hz to 1kHz	± 1.0% ±5 digit

Input Impedance : 2000V AC

Sensitivity : >150A

Duty Cycle

Range	Accuracy (% of reading + digits)	Resolution
(0.1% to 99.9%)	± (1.2% + 5 digit)	0.1%

Over Range Protection : 600V RMS

Temperature

Range	Accuracy (% of reading + digits)	Resolution
(-20 to 1000°C)	± (2.0% + 5°C)	0.1°C
(-4 to 1832°F)	± (3.0% + 9°C)	0.1°F

Sensor : K Type banana plug

Over Range Protection : 600V RMS

Peak of AC Current

Range	Accuracy (% of reading + digits)	Resolution
400A	± (4.0% + 5 digit)	100mA
2000A	± (4.0% + 5 digit)	1A

Frequency Response : 50Hz ~ 60Hz

Capacitance

Range	Accuracy (% of reading + digits)	Resolution
4nF	± (5.0% + 30 digit)	0.1nF
40nF	± (5.0% + 20 digit)	1nF
400nF	± (3.5% + 10 digit)	10nF
4µF	± (5.0% + 10 digit)	100nF
40µF		1µF
400µF		10µF

Over Range Protection : 600V RMS

Diode

Testing Condition	Reading
Forward DCA is approx. 0.5mA, backward Voltage is approx. 2V	Forward voltage drop of Diode

Over Range Protection : 600V RMS

Continuity

Testing Condition	Reading
Open voltage is approx. 0.5V	Buzzer makes a long sound, While resistance is less than (60±30Ω)

Over Range Protection : 600V RMS

