

DIGITAL TRUE RMS MULTIMETER DT450TRMS

APPLICATION: This is a 4 ½ Digits True RMS Auto Ranging Multimeter. It has a 21mm character height super Large LCD Screen with Backlight This instrument can be used to measure AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Temperature, Frequency, Diode, Continuity, Duty cycle, NCV Test and other parameters. It is an ideal tool for the Electricians, Engineers, Laptop & Mobiles & Electronics appliances Repairing Centre, Factories, Industries, Laboratories, Students, Household.

FEATURES:

- Display: 4 ½ digits 20000 Count LCD Display
- Low battery Indication
- Diode and Continuity test
- Data hold & Back Light
- NCV
- Fuse Protection
- APO: After 15 Min From last key operation.
- Operating Temperature & Humidity: 0°C to 40°C, 45% to 80% RH
- Storage Temperature & Humidity: -20°C to 60°C, 45% to 80% RH
- **1000V CAT II/ 600V CAT III**
- Power Supply :9V Battery.
- Unit Size 195 X 92 X 55 mm
- Display Size: 61 X 35 mm
- Weight: 380 gms including battery.



SPECIFICATION:

DC VOLTAGE

RANGE	RESOLUTION	ACCURACY
200mV	0.01mV	±(0.8% + 5)
2V	0.0001V	
20V	0.001V	
200V	0.01V	
1000V	1V	±(0.1% + 5)

-Input impedance: 10MΩ.

Maximum input voltage: 200mV Range of 250V DC or AC Peak, other Range of 1000V.

AC VOLTAGE True RMS (50Hz-1000Hz)

RANGE	RESOLUTION	ACCURACY
200mV	0.01mV	±(1% + 25)
2V	0.0001V	±(0.8% + 25)
20V	0.001V	
200V	0.01V	
750V	1V	±(1.2% + 25)

-Input impedance: 10MΩ.

-Response: True RMS

- Maximum input voltage: 750mV AC(RMS)

-Frequency Response: 40Hz~1kHz (for standard sine wave and triangle wave)

-Display: True RMS (other waveform size 200Hz for reference only)

DC CURRENT

RANGE	RESOLUTION	ACCURACY
200μA	0.01μA	±(0.5% + 5)
2000μA	0.1μA	
20mA	0.001mA	
200mA	0.01mA	
20A	0.001A	±(0.8% + 15)

Over load Protection: μA /mA Range: F200mA fuse(fast bow),
 20A Range :F20A fuse (fast blow)
 Maximum input: μA /mA jack: 200mA, 20A jack: 20A

AC CURRENT(50Hz-1000Hz)

RANGE	RESOLUTION	ACCURACY
200μA	0.01μA	±(0.5% + 5)
2000μA	0.1μA	
20mA	0.001mA	
200mA	0.01mA	
20A	0.001A	±(0.8% + 15)

Over load Protection: μA /mA Range: F 200mA fuse(fast bow),
 20A Range :F20A fuse (fast blow)
 Maximum input: μA /mA jack: 200mA, 20A jack: 20A
 Frequency Response: 50Hz~1kHz (for standard sine wave and triangle wave)

RESISTANCE

RANGE	RESOLUTION	ACCURACY
200Ω	0.01Ω	±(1.2% of reading + 15)
2kΩ	0.0001kΩ	
20kΩ	0.001kΩ	
200kΩ	0.01kΩ	
2MΩ	0.0001MΩ	±(2.0% of reading + 25)
20MΩ	0.001MΩ	

Open-circuit voltage: about 0.8V

Overload protection: 250V DC or AC (RMS)

Warning: Input Voltage is forbidden in the resistance range for safety

DIODE

RANGE	RESOLUTION	FUNCTION
	0.0001V	Display diode forward voltage approximation.

-Forward DC Current is around 1mA

-Reverse DC Current is around 3.2V

CAPACITANCE

RANGE	RESOLUTION	ACCURACY
2nF	0.0001nF	±(4.0% of reading + 50digits)
20nF	0.001nF	
200nF	0.01nF	
2μF	0.0001μF	
20μF	0.001μF	
200μF	0.01μF	
2mF	0.0001mF	
20mF	0.001mF	

Overload protection: 36V DC or AC (RMS)

FREQUENCY :

RANGE	RESOLUTION	ACCURACY
200Hz	0.01Hz	±(1% of reading + 30)
2kHz	0.0001KHz	
20kHz	0.001kHz	
200kHz	0.01kHz	
2MHz	0.0001MHz	±(3% of reading + 30)
10MHz	0.001MHz	

Over load Protection: 250V DC or AC (RMS)- Measuring signal: Vpp 30mV AC signal.

Note: As the measurement frequency increase, the VPP input signal also increase.

DUTY CYCLE:

RANGE	RESOLUTION	ACCURACY
1-99%	0.1%	±(3% of reading + 30)

TEMPERATURE:

RANGE	RESOLUTION	ACCURACY
-20~1000°C	0.1°C (2°F)	<400°C ±(1% of reading + 4)
		≥400°C ±(1.5% of reading + 5)
-4°F ~1832°F		≥752°F ±(1.5% of reading + 6)
		≥752°C ±(1.5% of reading + 10)

Temperature specification do not include thermocouple error.

CONTINUITY TEST

RANGE	DESCRIPTION
	If the measured line resistance is less that 50Ω, the buzzer inside the instrument will sound.

Open circuit Voltage is about 1V.

SAFETY INFORMATION:

This Multimeter meets the GB/T 13978-92 standards for digital multimeter general technical requirement, the GB4793.1-1995 Standards for digital testing equipment safety requirement and the standards in a pollution degree 2 environment. Safety rating **1000V CAT II/ 600V CAT III**. For longer product lifetime and better product performance, please use it with caution and maintain it properly.

Accessories: Instruction Manual, Test Leads, 9V Battery, K Type Temperature Probe.

