

DIGITAL TRUE RMS MULTIMETER DT117

APPLICATION: This is a 3½ Digits True RMS Multimeter with Backlight. This instrument can be used to measure AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency, Diode, Continuity Test, Non-Contact Voltage detection and other parameters. It is an ideal tool for the Electricians, Engineers & Factories, Industries, Laboratories, Students, Household.

FEATURES:

- Display: 3½ Digits with 5999 Counts with Backlight.
- Over Range Indication
- Overload Protection in all range.
- Data Hold Function
- Auto/Manual Range Selection
- Non-Contact AC Voltage Detector.
- Sampling Time 0.4 Seconds
- Auto Power off
- Polarity indication: auto indication, '-' indicates negative polarity
- Operating Altitude: up to 2000m
- Operating Temperature & Humidity: 0°C To 40°C, <75%RH
- Storage Temperature & Humidity: -10°C To 50°C, <75%RH
- Power supply: 1 X 9 Volt Battery
- Display Size: 62 X 35 mm
- Dimension: 185x85x52mm
- Weight: 368gm Excluding Battery



SPECIFICATION:

DC VOLTAGE

RANGE	RESOLUTION	ACCURACY
600mV	0.1mV	±(0.8% + 3)
6V	0.001V	±(0.5% + 5)
60V	0.01V	
600V	0.1V	
1000V	1V	

-Input impedance: 10MΩ.

-Overload Protection: 600mV Range: 250V DC or AC (RMS). 6V-600V Range: 600VDC or 600V AC (valid value)
 Maximum input voltage: 1000V DC.

AC VOLTAGE True RMS (45Hz-1kHz) upto 600V

RANGE	RESOLUTION	ACCURACY
6V	0.001V	±(1.2% + 5)
60V	0.01V	
600V	0.1V	±(1.5% + 5)
750V	0.1V	

-Input impedance: 10MΩ.

- Overload Protection: 600mV Range: 250V DC or AC (RMS). 6V-600V Range: 600VDC or 600V AC (valid value)
 - Maximum input voltage:750mV AC(RMS)

DC CURRENT

RANGE	RESOLUTION	ACCURACY
600μA	0.1μA	±(1.0% + 5)
6000μA	1μA	
60mA	10μA	
600mA	100μA	
10A	10mA	±(2% + 5)

Over load Protection: μA /mA Range: FF600mA/700V
 A: F10A/700V,

AC CURRENT

RANGE	RESOLUTION	ACCURACY
600μA	0.1μA	±(1.5% + 5)
6000μA	1μA	
60mA	10μA	
600mA	100μA	
10A	10mA	±(3% + 5)

Over load Protection: μA /mA Range: FF600mA/700V
 A: F10A/700V,
 -Frequency Range:50 ~ 60Hz

RESISTANCE

RANGE	RESOLUTION	ACCURACY
600Ω	0.1Ω	±(0.8% of reading + 5)
6kΩ	0.001kΩ	
60kΩ	0.01kΩ	
600kΩ	0.1kΩ	
6MΩ	0.001MkΩ	
60MΩ	0.1MΩ	±(1.5% of reading + 5)


Open-circuit voltage: about 0.4V
Overload protection: 250V DC or AC (RMS)

CAPACITANCE

RANGE	RESOLUTION	ACCURACY
6nF	0.001nF	±(4.0% of reading + 5)
60nF	0.01nF	±(3.0% of reading + 3)
600nF	0.1nF	
6μF	0.01μF	
60μF	0.01μF	
600μF	0.1μF	
6mF	0.001mF	±(4.0% of reading + 5digits)
60mF	0.01mF	


Overload protection: 36V DC or AC (RMS)

DIODE

RANGE	RESOLUTION	FUNCTION
	0.001V	Display diode forward voltage approximation.

- Forward DC Current is around 1mA
- Reverse DC Voltage is around 3.3V
- **Overload protection:** 250V DC or AC (RMS)

CONTINUITY TEST

RANGE	RESOLUTION	DESCRIPTION
	0.1	If the measured resistance is less that 30Ω, buzzer will sound.

- Open circuit Voltage is about 1.2V.
- **Overload protection:** 250V DC or AC (RMS)

FREQUENCY : V/C

RANGE	RESOLUTION	ACCURACY
60Hz	0.01Hz	±(1.5% of reading + 5)
600Hz	0.1Hz	
6kHz	0.001kHz	
10kHz	0.01kHz	

- Measuring Range :** 10Hz ~10kHz
- Input voltage range: ≥ 0.2V AC (RMS) (The input voltage increases with the measured frequency increasing)

FREQUENCY : Hz

RANGE	RESOLUTION	ACCURACY
60Hz	0.01Hz	±(1.5% of reading + 5)
600Hz	0.1Hz	
6kHz	0.001kHz	
60kHz	0.01kHz	
600kHz	0.1kHz	
6MHz	1kHz	
60MHz	10kHz	

- Over load Protection:** 250V DC or AC (RMS)
- Measuring signal: Vpp 3V AC signal.

DUTY CYCLE:

RANGE	RESOLUTION	ACCURACY
10-95%	0.1%	±2%

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, 1Set Test lead, 1 pc 9V Battery, Multi-function Socket (PNP, NPN).

