

DIGITAL TRUE RMS MULTIMETER DT603A

APPLICATION: This is a 3½ 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: 3½ digits 6000 Count LCD Display
- Low battery Indication
- Diode and Continuity test
- Data hold & Back Light
- Fuse Protection
- NCV
- **CAT III 600V**
- 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
- 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

Ranges	Resolution	Accuracy
600mV	0.1mV	± (0.05% of reading + 2words)
6V	0.001V	
60V	0.01V	
600V	0.1V	
2000V	1V	± (2% of reading + 5words)

-Input impedance: 10MΩ.

Maximum input voltage: 600mV Range of 250V DC or AC Peak, 6V, 60V, 600V Range of 2000V DC, 2000V Range of 2000V DC (RMS).

AC Voltage

Ranges	Resolution	Accuracy
6V	0.001V	± (1% of reading + 3words)
60V	0.01V	
600V	0.1V	
2000V	1V	± (3% of reading + 5words)

-Input impedance: 10MΩ.

-Response: True RMS

- Maximum input voltage: 600mV Range of 250V DC or AC Peak, 6V, 60V, 600V Range of 2000V DC, 2000V Range of 2000V DC (RMS).

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

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

-In AC 2000V file, press the SELECT button, you can test AC380V, 220V main frequency.

DC CURRENT

RANGE	RESOLUTION	ACCURACY
600μA	0.1μA	±(0.8% + 10)
6mA	1μA	
60mA	10μA	±(1% + 10)
600mA	100μA	
20A	10mA	±(2% + 5)

Over load Protection: μA /mA Range: F600mA fuse(fast bow),

20A Range :F20A fuse (fast blow)

Maximum input: μA /mA jack: 600mA, 20A jack: 20A

AC CURRENT(50Hz-1000Hz)

RANGE	RESOLUTION	ACCURACY
6mA	1μA	±(1% + 10)
60mA	10μA	±(1.5% + 10)
600mA	100μA	
20A	10mA	±(3% + 5)

Over load Protection: mA Range: F600mA fuse(fast bow),

20A Range :F20A fuse (fast blow)

Maximum input: mA jack: 600mA, 20A jack: 20A

Frequency Response: 50Hz~1kHz (for standard sine wave and triangle wave)

RESISTANCE

RANGE	RESOLUTION	ACCURACY
600Ω	0.1Ω	±(0.8% of reading + 3)
6kΩ	0.001kΩ	
60kΩ	0.01kΩ	
600kΩ	0.1kΩ	
6MΩ	0.001MΩ	
60MΩ	0.01MΩ	±(2.0% of reading + 5)

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
	0.001V	Display diode forward voltage approximation.

-Forward DC Current is around 1mA

-Reverse DC Current is around 3.8V

CAPACITANCE



RANGE	RESOLUTION	ACCURACY
9.999nF	0.001nF	Press REL key to clear ±(4.0% of reading + 20)
99.99nF	0.01nF	±(3.0% of reading + 5)
999.9nF	0.1nF	
9.999μF	0.001μF	
99.99μF	0.01μF	
999.9μF	0.1μF	
9.999mF	0.001mF	±(5.0% of reading + 10digits)
99.99mF	0.01mF	

Overload protection: 36V DC or AC (RMS)

FREQUENCY :

RANGE	RESOLUTION	ACCURACY
9.999Hz	0.01Hz	±(2% of reading + 5)
99.99Hz	0.0001kHz	
999.9Hz	0.001kHz	
9.999kHz	0.01kHz	
99.99kHz	0.0001MHz	
999.9kHz	0.001MHz	
9.999MHz	1kHz	

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%	1%	For reference only

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% 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 100Ω, the buzzer inside the instrument will sound.

Open circuit Voltage is about 2.1V.

TRANSISTOR TEST

RANGE	RESOLUTION	FUNCTION
hFE	The display reads the approximate value of Hfe, (0-1000)	Base current is about 10 μ A Vce is about 2.8V

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.

