



# **DIGITAL TRUE RMS MULTIMETER DT801**

**APPLICATION:** This is a 3% Digits True RMS Multimeter with Backlight. This instrument can be used to measure AC/DC voltage, AC/DC current, Resistance, Capacitance, Frequency, Temperature, Non-Contact Voltage detection 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: 3¾ Digits with 3999 Counts with Backlight.
- Polarity: Automatic negative polarity indication.
- Zero adjustment: Automatic.
- Over Range Indication "OL",
- Torch & Black light
- Overload Protection
- Fuse Protection
- Wall Mount & Table Type
- Data Hold Function
- Auto/Manual Ranging
- Non-Contact AC Voltage Detector. (NCV)
- Sampling Time 0.4 Seconds
- Auto Power off: 15 mins.
- Operating Temperature & Humidity: 0°C To 40°C, <80%RH
- Storage Temperature & Humidity: -20°C To 60°C, 90%RH
- CAT II 600V
- Power supply: 2 X AAA Batteries.
- Display Size: 47 X 30 mm
- Unit Size: 148×69×44mm
- Weight: 180gm Excluding Battery

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# **SPECIFICATION:**

#### DC VOLTAGE

RANGE	RESOLUTION	ACCURACY
400mV*	0.1mV	±(1.0% of rdg + 5 digits)
4V*	0.001V	
40V	0.01V	±(0.8% of rdg + 3 digits)
400V	0.1V	
600V	1V	±(1.0% of rdg + 5 digits)

<sup>-</sup>Input impedance:  $10M\Omega$ 

#### **AC VOLTAGE**

RANGE	RESOLUTION	ACCURACY
400mV*	0.1mV	1/1 F0/ of rd - 1 0 dicito)
4V*	0.001V	±(1.5% of rdg + 8 digits)
40V	0.01V	±/1 20/ of rdg   E digits)
400V	0.1V	±(1.2% of rdg + 5 digits)
600V	1V	±(1.5% of rdg + 8 digits)

<sup>-</sup>Input impedance: 10MΩ

- -True RMS frequency response: 45Hz-1KHz.
- -Max input voltage: 600V AC (RMS)

<sup>\*</sup>The readings displayed on screen would be unstable when the circuit is open. The readings would be stable (≤1 digit) when loads are connected to the circuit.

<sup>-</sup>Max input voltage: 600V DC

<sup>\*</sup> The readings displayed on screen would be unstable when the circuit is open. The readings would be stable (≤1 digit) when loads are connected to the circuit.





### **RESISTANCE**

RANGE	RESOLUTION	ACCURACY
400Ω	0.1Ω	
4kΩ	0.001kΩ	
40kΩ	0.01kΩ	±(0.8% of reading + 5 digits)
400kΩ	0.1kΩ	
4ΜΩ	0.001MkΩ	
40ΜΩ	0.1ΜΩ	±(1.5% of reading + 5 digits)

Open-circuit voltage: around 0.4 V

Overload protection: 250V DC or AC (RMS)

#### **CAPACITANCE**

5, 11, 7, 10, 17, 11, 10, 1		
RANGE	RESOLUTIO	ACCURACY
	N	
4nF	0.001nF	±(5.0% of reading + 15digits)
40nF	0.01nF	
400nF	0.1nF	
4μF	0.001μF	±(3.0% of reading + 3 digits)
40μF	0.01μF	
400μF	0.1μF	
4mF	0.001mF	±(4.0% of reading + 5 digits)
40mF	0.01mF	

Overload protection: 250V DC or AC (RMS)

#### **DC CURRENT**

RANGE	RESOLUTION	ACCURACY
40mA	0.01mA	±(1% of reading + 5 digits)
400mA	0.1mA	±(1% of reading + 5 digits)
10A	0.1A	±(2% of reading + 5 digits

Over load Protection: µA and mA mode: fuse F400mA

A mode: fuse F10A

-When the measuring current is above 5A, the continuous measuring time should not be longer than 10 seconds. After that, you need to stop measuring current for 1 minutes.

#### **AC CURRENT**

RANGE	RESOLUTION	ACCURACY
40mA	0.01mA	1/10/ of roading L C digits)
400mA	0.1mA	±(1% of reading + 5 digits)
10A	0.1A	±(2% of reading + 5 digits

Over load Protection:  $\mu A$  and mA mode: fuse FF600mA

A mode: fuse F10A

-When the measuring current is above 5A, the continuous measuring time should not be longer than 10 seconds. After that, you need to stop measuring current for 1 minutes.

# **FREQUENCY**

AC Current or AC Voltage mode

Note: This chart refer to the specifications of frequency mode that positioned together with the AC current/voltage modes.

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RANGE	RESOLUTION	ACCURACY	
60Hz	0.01Hz		
600Hz	0.1Hz	±/20/ of roading . E digits	
6kHz	0.001kHz	±(2% of reading + 5 digits	
10kHz	0.01kHz		

-Measuring Range: 10Hz - 10kHz

-Input voltage range: ≥0.2V AC (RMS) (Input voltage increases along with the increase of tested frequency.)

# **FREQUENCY MODE:**

R	ANGE	RESOLUTION	ACCURACY
	100Hz	0.01Hz	
	1kHz	0.1Hz	
	10kHz	0.001kHz	±(0.5% of reading + 15
	100kHz	0.01kHz	digits
	1MkHz	0.1kHz	
	10MHz	1kHz	

Over load Protection: 250V DC or AC (RMS)

#### DIODE

RANGE	RESOLUTION	FUNCTION
<b>→</b>	0.001	Show the approx. diode forward voltage.
		Tor ward vortage.

-Forward DC Current is around 1mA

-Reverse DC Current is around 3V

-Overload Protection: 250V DC or AC (RMS)

## **CONTINUITY TEST**

RANGE	RESOLUTION	DESCRIPTION
· <b>沙</b> )		If continuity of tested circuit is lower than 30Ω, the built-in buzzer would beep

-Overload Protection: 250V DC or AC (RMS)

-Open- circuit voltage: 2.1

#### **DUTY CYCLE:**

RANGE	RESOLUTION	ACCURACY
10-95%	0.1%	±2.0%

-Input voltage range: ≥1V AC (RMS)





#### **TEMPERATURE:**

RANGE	RESOLUTION	ACCURACY
-30~0°C (-22 ~32°F)		±(5% of reading + 3 digits)
0~400°C (32 ~752°F)	1°C (1°F)	±(1% of reading + 3 digits)
400~1000°C (752 ~1832°F)		±(2% of reading + 2 digits)

This chart only refers to the range, resolution and accuracy of the multimeter.

The influence posed by the k-type thermocouple is not taken into consideration.

#### **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 CAT II 600V. For longer product lifetime and better product performance, please use it with caution and maintain it properly.

**ACCESSORIES**: Instruction Manual, 2 X AAA Batteries, 1Set Test lead, Temperature Probe.

