

Multifunction Digital Multimeter



Description

A Multifunction Digital Multimeter with NCV Detection & USB out for data logging on to PC.

Features

- 4 Digit, 20mm height, 4000 count LCD display with backlight
- AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency and Duty Cycle measurements
- Diode test
- Audible continuity
- NCV Detection
- Auto/Manual Ranging
- Relative measurement
- Data hold
- Low battery indication and overload protection
- Win XP & 7 Compatible software
- Safety: CAT IV 600V

Specifications

Operating Power Supply	: 9V, 6F22 battery.
Battery low voltage indication	: LCD displays "E+" symbol
Auto off time	: 30 min.
Temperature Coefficient	: less than $0.1 \times \text{accuracy}/^{\circ}\text{C}$
Operating Temperature	: 0°C to $+40^{\circ}\text{C}$
Storage Temperature	: -10°C to $+50^{\circ}\text{C}$
Dimension	: 175mm×86mm×52mm
Weight	: 372g

Technical Indicators

Environment temperature: $23\pm 5^{\circ}\text{C}$, relative humidity (RH) : <75%

DC Voltage

Range	Resolution	Accuracy
400mV	0.1mV	$\pm(0.8\% \text{ reading} + 3 \text{ digits})$
4V	0.001V	$\pm(0.5\% \text{ reading} + 5 \text{ digits})$
40V	0.01V	
400V	0.1V	
600V	1V	

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Input impedance: 10M Ω

Overload protection: 400mV measuring range: 250V DC or AC (RMS),

4V-600V measuring range: 600V DC or 600V AC (RMS)

Maximum input voltage: 600V DC

AC Voltage

Range	Resolution	Accuracy
400mV	0.1mV	$\pm(1\% \text{ reading} + 5 \text{ digits})$
4V	0.001V	$\pm(0.8\% \text{ reading} + 5 \text{ digits})$
40V	0.01V	
400V	0.1V	
600V	1V	$\pm(1.2\% \text{ reading} + 3 \text{ digits})$

Input impedance: 10M Ω

Overload protection: 400mV measuring range: 250V DC or AC (RMS),

4.0V-600V measuring range: 600V DC or 600V AC (RMS)

Maximum input voltage: 600V AC (RMS)

Frequency range: 50- 60Hz

Resistance

Range	Resolution	Accuracy
400 Ω	0.1 Ω	$\pm(1\% \text{ reading} + 5 \text{ digits})$
4k Ω	0.001k Ω	
40k Ω	0.01k Ω	
400k Ω	0.1k Ω	
4M Ω	0.001M Ω	
40M Ω	0.01M Ω	$\pm(1.2\% \text{ reading} + 15 \text{ digits})$

Open circuit voltage: about 0.4V

Overload protection: 250V DC or AC (RMS)

Capacitance

Range	Resolution	Accuracy
50nF	0.01nF	$\pm(3\% \text{ reading} + 5 \text{ digits})$
500nF	0.1nF	
5 μ F	0.001 μ F	
50 μ F	0.01 μ F	
100 μ F	0.1 μ F	

Overload protection: 250V DC or AC (RMS)

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Diode Test

Range	Resolution	Function
→+	0.001V	Display approximate diode forward voltage value

Forward DC current is about 1mA
 Backward DC voltage is about 1.5V
 Overload protection: 250V DC or AC (RMS)

Circuit Continuity Test

Range	Resolution	Function
•)	0.1Ω	If the resistance of circuit to be measured is less than 50Ω ±20Ω. the meter's built-in buzzer will sound.

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

Frequency

Pass Hz grade

Range	Resolution	Accuracy
5Hz	0.001Hz	±(0.5% reading + 2 digits)
50Hz	0.01Hz	
500Hz	0.1Hz	
5kHz	0.001kHz	
50kHz	0.01kHz	
500kHz	0.1kHz	
5MHz	1kHz	

Overload protection: 250V DC or AC (RMS)
 Measurement signal: Vpp=3V AC signal

Duty Ratio

Range	Resolution	Accuracy
0.1% ~ 99.9%	0.1%	±2% +5

DC Current

Range	Resolution	Accuracy
400μA	0.1μA	±(0.8% reading+ 2 digits)
4000μA	1μA	
40mA	10μA	

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Range	Resolution	Accuracy
400mA	100µA	±(0.8% reading+ 2 digits)
10A	10mA	±(2.0% reading+ 5 digits)

Overload protection: µA and mA grade: F1 :FF 400mA H 1 000V,

A grade: F2:FF 10A H 600V.

When measuring current is greater than SA, the continuous measurement time should not be more than 10 seconds. After measuring, disconnect the current.

AC Current

Range	Resolution	Accuracy
400µA	0.1µA	±(1.5% reading+ 2 digits)
4000µA	1µA	
40mA	10µA	
400mA	100µA	
10A	10mA	±(3% reading+ 5 digits)

Overload protection: µA and mA grade: F1 :FF 400mA H 1 000V,

A grade: F2:FF 10A H 600V.

Frequency range: 50 - 60Hz

When measuring current is greater than SA, the continuous measurement time should not be more than 10 seconds. After measuring, disconnect the current.

Part Number Table

Description	Part Number
Digital Multimeter, Auto, Manual, 66MΩ	D03041

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