

GENERAL SPECIFICATIONS

540 is one type of **METRAVI** brand Multimeter with 4 1/2 digits, which has special and steady function and is a highly reliable hand-held measuring instrument. The highlight of the Meter is the use of CMOS technology with large scale of integrated circuit using double integrated A/D transducer as its core and has full ranges overload protection. The Meter can measure DC current, AC current, DC Voltage, AC Voltage, Resistance, Capacitance, Diode, Frequency and Continuity Beeper. AC Voltage and Current measurement is TRMS and has the function of AC+DC/AC which is an ideal tool for users.

Meter's Features

- 21 ranges.
- Liquid Crystal Display, digit's height is 21mm .
- Overload display "1".
- Maximum display "19999".
- Full range symbol display.
- Full range overload protection.
- Auto-Power Off.
- Operating Temperature: 0°C to 40°C (32°F to 104°F) .
- Storing Temperature: -10°C to 50°C (14°F to 122°F) .
- Altitude: Operation:2000m.
Storage:10000m.
- Relative humidity:Max.relative humidity 80% for temperature up to 31°C decreasing. linearly to 50% relative humidity at 40°C.
- Low Battery display "bat"
- Battery type:9V Zinc,NEDA1604 or 6F22 or 006P.
- Fuse: F.0.3A/250Vf5x20mm.
F.10A/250Vf6x25mm.
- Strap for easy carry.
- Dimension: 190 x 88 x 34mm.
- Weight: about 270gram (excluding test leads).

TECHNICAL SPECIFICATIONS

Accuracy is specified for one year after calibration, at operating temperatures 23°C - 5°C, with relative humidity at<75%.Accuracy specifications take the form of: (a% readings +n digits)

DC Voltage

Range	Resolution	Accuracy
200mV	10μV	±(0.05% +3)
2V	100μV	
20V	1mV	
200V	10mV	
1000V	100mV	±(0.1% +5)

▲ **Input impedance:** All ranges are 10MΩ

Overload protection: 200mV is 230VDC or AC RMS. All other ranges are 750 Vrms or 1000Vp-p.

AC Voltage T-RMS

Range	Resolution	Accuracy
200mV	10μV	±(0.8% +20)
2V	100μV	
20V	1mV	
200V	10mV	
1000V	100mV	±(0.1% +50)

▲ **Input impedance:** All ranges are 10MΩ

Frequency: 40Hz-400Hz

Overload protection: 200mV is 230VDC or AC RMS. All other ranges are 750 Vrms or 1000Vp-p.

Display: TRMS (True Root Mean Square of Sine Wave).

DC Current

Range	Resolution	Accuracy
20mA	1μA	±(0.5% +2)
200mA	100μA	±(0.8% +5)
10A	1mA	±(2% +10)

▲ **Overload protection:** Below 200mA with F. 0.3A/250V Fused. 10A with F. 10A/250V Fused.

Max current input: For 10A range, measuring time <10 seconds, interval time > 15 Minutes.

Measuring voltage drop: Full ranges are 200mV.

AC Current T-RMS

Range	Resolution	Accuracy
20mA	1mA	±(1.0% +20)
200mA	100mA	
10A	1mA	±(2.0% +20)

▲ **Overload protection:** Below 200mA with F. 0.3A/250V Fused. 10A with F. 10A/250V Fused.

Max current input: For 10A range, measuring time <10 seconds, interval time > 15 Minutes.

Measuring voltage drop: Full ranges are 200mV.

Display: TRMS (Crest factor reach five)



Resistance

Range	Resolution	Accuracy
200Ω	0.01Ω	±(0.1% +2)
2KΩ	0.1Ω	
20KΩ	1Ω	
200KΩ	10Ω	
2MΩ	100Ω	
20MΩ	1KΩ	±(0.3% +10)

▲ **Overload protection:** All ranges are 230VDC or AC RMS. Voltage at Open Circuit: About 3V.

Capacitance

Range	Resolution	Accuracy
20nF	1pF	±(2.0% +10)
200nF	10pF	
2μF	0.1nF	
20μF	1nF	
		±(2.5% +30)

Testing Signals: About 400Hz, 40mVrms.

Frequency

Range	Resolution	Accuracy
20kHz	1Hz	±(1.0% +20)
200kHz	10Hz	

▲ Input sensitivity: <200mV rms, Max Input Scope: <30V rms. Overload protection: 230V rms

Diode and Continuity Beeper

Range	Remark	Measuring Condition
→	Display Diode Forward Voltage Value, unit is "V"	Forward DC Current abt 1mA, Backward DC Voltage abt 2.8V
)))	Beeper sounds when Resistance <30Ω. Display the nearest value, unit is "kΩ"	Voltage at open Circuit abt 3.0V

▲ Overload protection: 230V DC or AC RMS.

*Technical Specifications & Appearance are subject to change without prior notice