

# MARTINDALE MM53 Digital Multimeter

● ● ● ELECTRIC

(IEC1010 CAT. III 600V)



CE


## SPECIFICATIONS

**Display:** 3½ digit liquid crystal display (LCD) with a maximum reading of 1999.

**Data Hold & Max Hold.**

**Polarity:** Automatic, (-) negative polarity indication.

**Overrange:** (OL) or (-OL) is displayed.

**Low battery indication:** The "  " is displayed when the battery voltage drops below the operating level.

**Measurement rate:** 2.5 times per second, nominal.

**Operating environment:** 0°C to 50°C at <70% R.H.

**Storage temperature:** -20°C to 60°C, 0 to 80% R.H. with battery removed from meter.

**Power:** Standard 9V battery, NEDA 1604, JIS 006P, IEC 6F22, PP3.

**Battery life:** 200 hours typical with carbon-zinc.

**Dimensions:** 189mm (H) x 87mm (W) x 37mm (D).

**Weight:** Approx. 8.29oz. (235g) including battery.

**Calibration:** £27

## DC VOLTS

**Ranges:** 200mV, 2V, 20V, 200V, 1000V

**Resolution:** 100µV

**Accuracy:** ± (0.25% rdg + 1 dgt)

**Input impedance:** 10MΩ

**Overload protection:**

500VDC/350VAC rms 15 sec on 200mV range

1000VDC/750VAC rms on all other ranges

## AC VOLTS:

**Ranges:** 200mV, 2V, 20V, 200V, 750V

**Resolution:** 100µV

**Accuracy:** ± (1.2% rdg + 3 dgts)

± (2.0% rdg + 3 dgts) on 750V range

**Frequency response:** 50Hz to 500Hz

**Input impedance:** 10MΩ

**Overload protection:**

500VDC/350VAC rms 15 sec on 200mV range

1000VDC/750VAC rms on all other ranges

## DC CURRENT

**Ranges:** 200µA, 2mA, 20mA, 200mA, 2A, 10A

**Resolution:** 0.1µA

**Accuracy:** ± (1.0% rdg + 1 dgt) on 200µA to 200mA ranges

± (1.5% rdg + 1 dgt) on 2A range

± (3.0% rdg + 3 dgts) on 10A range

**Voltage burden:**

250mV on 200µA to 200mA ranges, 600mV on 2A range and 300mV on 10A range

**Input protection:** 2A/600V fast blow fuse on mA input

10A/600V fast blow ceramic fuse on 10A input

## AC CURRENT:

**Ranges:** 200µA, 2mA, 20mA, 200mA, 2A, 10A

**Resolution:** 0.1µA

**Frequency response:** 50Hz to 500Hz

**Accuracy:** ± (1.2% rdg + 3dgts) on 200µA to 200mA ranges

± (2.0% rdg + 3 dgts) on 2A range

± (3.5% rdg + 4 dgts) on 10A range

**Voltage burden:** 250mV on 200µA to 200mA ranges,

600mV on 2A range and 300mV on 10A range

**Input protection:** 2A/600V fast blow fuse on mA input

10A/600V fast blow ceramic fuse on 10A input

## RESISTANCE

**Ranges:** 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ

**Resolution:** 100mΩ

**Accuracy:** ± (1.0% rdg + 4 dgts) on 200Ω range

± (0.8% rdg + 2 dgts) on 2kΩ to 2MΩ ranges

± (2.0% rdg + 5 dgts) on 20MΩ range

**Open Circuit volts:** <0.3Vdc, <3.0Vdc on 200Ω ranges

**Overload Protection:** 500VDC or AC rms

## CONTINUITY

**Audible indication:** Less than 100Ω

**Overload protection:** 500VDC or AC rms

## DIODE TEST

**Test current:** 1.0mA ± 0.6mA

**Accuracy:** ± (1.0% rdg + 1 dgt)

**Open circuit volts:** 3.0Vdc typical

**Overload protection:** 500VDC or AC rms

