

## TRUE RMS DMM 1003



### Description

APLAB's Digital Multimeters Model 1003 are general purpose versatile instruments that makes accurate AC/DC voltage, AC/DC current, resistance and dB measurements.

The instruments are light in weight, portable and with table top design. Being highly reliable & drift free performance make these instruments to be used in test laboratories, service centers, educational institutes & on production floor.

### Features

- 3½ Digits (2000 Counts FS) Display
- 0.1% Basic DC Accuracy
- Auto Zero & Auto Polarity
- Built-in Overload Protection
- Continuity Test Facility
- dB Measurement
- Solid State Protection for Resistance Mode
- Diode Test Facility

### Technical Specifications

#### DC VOLTAGE

Range	Resolution	I/P Imp.	Max I/P	Accuracy
200mV, 2V	100µV, 1mV	100M ohms	300V	± (0.1% of rdg +1 digit)
20V, 200V & 1000V	10mV, 100mV 1V	10M ohms	1000V	± (0.1% of rdg +1 digit)

#### AC VOLTAGE

Range	Resolution	Max I/P	I/P Imp	Freq.	Accuracy
200mV, 2V	100µV, 1mV	250V	>10M ohms	40Hz to 1KHz	±(0.3% rdg +0.1% of range +1 digit)
				1KHz to 20KHz	±(1% rdg +0.1% of range +1 digit)
				20KHz to 100KHz	±(5% rdg +0.1% of range +1 digit)
20V, 200V	10mV, 100mV	500V	>10M ohms	40Hz to 1KHz	±(0.3% rdg +0.1% of range +1 digit)
				1KHz to 20KHz	±(1% rdg +0.1% of range +1 digit)
				20KHz to 100KHz	±(5% rdg +0.1% of range +1 digit)
500V	1V	500V	>10M ohms	40Hz to 60Hz	±(1% rdg +0.5% of range +1 digit)

## DC CURRENT

Range	Resolution	Shunt Drop	Overload Protection	Accuracy
200µA, 2mA 20mA, 200mA	0.1µA, 1µA 10µA, 100µA	0.2V FS	1A, 250V	±(0.3% rdg +1 digit)
1000mA	1mA	0.1V FS	1A, 250V	±(1% rdg +1 digit)

## AC CURRENT

Range	Resolution	Shunt Drop	Overload Protection	Freq.	Accuracy
200µA, 2mA, 20mA, 200mA	0.1µA, 1µA 10µA, 100µA	0.2V FS	1A, 250V	40Hz to 1KHz 1KHz to 20KHz 20KHz to 100KHz	±(0.5% of rdg +0.1% of range +1 digit) ±(1.0% of rdg +0.1% of range +1 digit) ±(5.0% of rdg +0.1% of range +1 digit)
1000mA	1mA	0.1V FS	1A, 250V	40Hz to 1KHz 1KHz to 10KHz	±(1.0% of rdg +0.1% of range +1 digit) ±(3.0% of rdg +1.0% of range +1 digit)

## RESISTANCE

Range	Resolution	Overload Protection	Accuracy
200 ohms	0.1 ohms	250V rms	±(0.2% of rdg +1 digit)
2K ohms	1 ohms	250V rms	±(0.2% of rdg +1 digit)
20K ohms	10 ohms	250V rms	±(0.2% of rdg +1 digit)
200K ohms	100 ohms	250V rms	±(0.2% of rdg +1 digit)
2M ohms	1K ohms	250V rms	±(0.5% of rdg +1 digit)
20M ohms	10K ohms	250V rms	±(1.0% of rdg +1 digit)

## dB MEASUREMENT

Range	Resolution	Overload Protection	Accuracy		
			40Hz - 4KHz	4KHz - 40KHz	40KHz - 100KHz
+20dB to +10dB	0.1dB	250V AC/DC	±1dB	±1dB	±1.5dB
+10dB to -20dB			±0.5dB	±1dB	±1.5dB
-20dB to -40dB			±0.5dB	±1.5dB	—
-40dB to -50dB			±1dB	±3dB	—

**0dB REFERENCE** : 1MW in 600 ohms i.e. 0.775V in 600 ohms.

**Note** : All units are calibrated to 600 ohms reference, however on special request the unit will be calibrated to required reference.

## GENERAL SPECIFICATIONS

Display	: 3½ digit 0.5" LED.
Warmup Time	: 10 minutes.
Power	: 230V AC ±10%, 47-53Hz. Optional 115V AC ±10%, 57-63Hz.
Weight	: 3 Kg. (approx).
Dimensions	: 270 (W) x 88 (H) x 310 (D) mm (approx).
Standard Accessories	: Instruction Manual - 1 No. SP1 to Alligator Clip (Red & Black) - 1 Each. 600 ohms Termination - 1 No.

WE PURSUE A POLICY OF CONTINUOUS DEVELOPMENT AND PRODUCT IMPROVEMENT. THUS THE SPECIFICATIONS IN THIS DOCUMENT AND THE LOCATION OF CONTROLS ON THE FRONT PANEL MAY BE CHANGED WITHOUT NOTICE.

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