

AC Millivoltmeter (3MHz)



APLAB's AC Millivoltmeter Model 5002 is ruggedly built precision instruments for measuring voltages from 1mV to 300V.

The Millivoltmeter is simple to operate & is mainly used for measurements in accoustics & ultrasonic fields, electrical measurements of mechanical vibration & measurements on carrier telephone installation. It is also used as a dB meter for investigation of network characteristics, source of noise, erratic operation in high gain amplifiers and other applications when high gain & calibration accuracy is required.

AC Millivoltmeter can also be used as an amplifier upto 150KHz with 42dB gain at 1mV.

FEATURES

- Wide Freq. Range : From 20Hz to 3MHz
- High Sensitivity 1mV FSD
- Wide Voltage Range from 1mV to 300V Full Scale
- Internal Calibrating Signal Facility
- Built-in Amplifier can be used Separately
- Protected Against Overloads
- Independent of Mains Voltage Variation

Technical Specifications

| | |
|--|---|
| Frequency Range | 1mV to 300V Full Scale in 12 ranges in 1-3-10 sequence. |
| Bandwidth | 20Hz to 3MHz. |
| dB Range | -60dB to +50dB in 10dB steps. |
| Input Impedance | 10M ohm // 40pF nominal. |
| Calibration | Reads rms value of sine wave : Voltage indication proportional to average value of applied signal. Linear Voltage Scales : 0 to 3V, 0 to 10V. dB Scale : -20 to +2dB (0dBm = 1mW in 600 ohms). |
| Meter Accuracy | ±3% of FSD at 10KHz. |
| Frequency Response | 1mV to 30mV Ranges : ±0.3dB for 30Hz to 1MHz ±0.5dB for 20Hz to 30Hz & 1MHz to 3MHz. 100mV to 3V Ranges : ±0.5dB for 30Hz to 500KHz. ±1.0dB for 20Hz to 30Hz & 500KHz to 3MHz. 10V & above Ranges : ±0.5dB upto 100KHz. |
| Calibration Signal | Built-in 1V cal signal available on panel of ±1% accuracy. |
| CHARACTERISTICS AS AN AMPLIFIER | |
| Gain | Approx. 40dB on 1mV range. |
| Frequency Range | Useful gain from 10Hz to 150KHz between ±1dB. |
| Distortion | <5%. |
| Output Impedance | 2.2K ohms approx. |
| GENERAL | |
| Power | 230V AC ±10%, 47-53Hz. Optional 115V AC ±10%, 57-63Hz. |
| Dimensions | 210 (W) x 140 (H) x 235 (D) mm approx. |
| Weight | 2.5 Kg. approx. |
| Standard Accessories | Instruction Manual - 1 No. BNC(M) to BNC(M) Cable - 1 No. BNC(M) to Alligator Clip - 1 No. Mains Cord - 1 No. |