

AC Millivoltmeter



Aplab Digital AC Millivolt Meter Model ACMV32 is a wide range two channel (dual inputs) AC millivoltmeter with dual VFD digital display and RS232 connectivity. It measures AC voltages from 50 μ V to 300V rms of sine wave signal frequencies between 5Hz to 3MHz. It has a manual / Auto range selection. It also measures voltages in dBV and dBm. It has floating Input. Very useful for wide applications in measurements in R&D labs, College Labs, Navigation, Communications, Private Industries and Scientific Institutions etc.

Features

- High Sensitivity of 50 μ V
- Wide Frequency Range, 5Hz - 3MHz
- 2 Input Channels
- Dual Digital VFD Display
- Auto/Manual Range Selection
- dBV/dBm Measurements
- RS232 Connectivity
- Isolated Input
- Protected Against Overloads

Technical Specifications

MEASUREMENT RANGES

AC Voltage	: 50 μ V to 300V.
dBV	: -86dBV to 50dBV (0dBV=1V).
dBm	: -83dBm to 52dBm (0dBm=1mW 600 Ohms).
Vp-p	: 140 μ V to 850V.

VOLTAGE : 3mV, 30mV, 300mV, 3V, 30V, 300V.

MEASUREMENT RANGES : Auto / Manual Mode Selection.

FREQUENCY RANGE : 5Hz to 3MHz (AC coupled).

ACCURACY : At 25 \pm 5 $^{\circ}$ C.

Frequency Range	Measuring Error for Voltage
50Hz to 100kHz	\pm 2.5% reading \pm 0.8 of range
100Hz to 500kHz	\pm 1.5% reading \pm 0.5% of range
500KHz to 2MHz	\pm 2.0% reading \pm 1 % of range
2MHz to 3MHz	\pm 3% or reading \uparrow 12% of range

RESOLUTION

In dBV Mode : ± 0.1 dBV.
 In dBm Mode : ± 0.1 dB.
 In voltage Mode : 0.001mV to 0.1V.

Measurement Range	Full Value	Voltage Resolution
3mV	3.000mV	0.001mV
30mV	30.00mV	0.01mV
300mV	300.0mV	0.1mV
3V	3.000V	0.001V
30V	30.00V	0.01V
300V	300.0V	0.1V

NOISE : Zero, when input shorted.

INPUT IMPEDANCE : 10M Ohm.

INPUT CAPACITANCE : 30pF.

MAXIMUM INPUT VOLTAGE

Measurement Range	Frequency	Maximum Input Voltage
3V - 300V	5Hz to 3MHz	350Vrms
3mV to 300mV	1KH to 10KHz	35V rms
	10KHz to 3MHz	10Vrms

WARM-UP : 30 minutes.

INTERFACE : RS232 interface for Remote Operation.

POWER SUPPLY

AC Mains Voltage : 230V $\pm 10\%$.
 Frequency : 50Hz $\pm 5\%$.
 Consumption : <20VA.

ENVIRONMENTAL OPERATION

Temperature : 0 to +40°C (operating).
 Relative Humidity : 20 to 90% RH at 40°C.

DIMENSION : 260 (W) x 106 (H) x 375 (D) mm.
 290 (W) x 190 (H) x 430 (D) mm (with carton).

WEIGHT : 3 Kg.
 5 Kg. (with carton).

STANDARD ACCESSORIES : Input Test Leads - 2 Nos.
 Instruction Manual - 1 No.
 RS232 Interface Cable
 Mains Power Cord.