

Single and Dual Channel AC Millivoltmeters

- 5 Hz to 1 MHz
- Amplified Output Signal Terminals
- Calibrated in Millivolts and dB
- 30 μ V or 100 μ V Sensitivity



The LMV-181A and LMV-185A are general purpose average responding ac voltmeters with a measurement range of 100 μ V to 300 V. The LMV-182A is an average responding ac voltmeter with increased sensitivity featuring an effective measurement range of 30 μ V to 100 V. Bandwidth is 5 Hz to 1 MHz permitting use in a broad range of applications including audio, IF and ultrasonic circuits and systems.

The meter scales are conveniently calibrated in both millivolts and dB (0 dB = 1 V and 0 dB = 0.775 V). Output terminals on all three models permit using these instruments as sensitive, accurate pre-amplifiers.

The LMV-185A is a dual channel instrument employing a dual movement meter and concentric range switches for each channel. This permits convenient measurement and comparison of input/output levels and direct indications of gain/attenuation.

The LMV-181A, LMV-182A and LMV-185A are accurate to within $\pm 2\%$ f.s.

SPECIFICATIONS

METER
Sensitivity
(LMV-181A/LMV-185A)

100 μ V.
(LMV-182A)
30 μ V.

Voltage Range (full scale)
(LMV-181A/LMV-185A)

1 mV to 300 V in 12 ranges
-60 to +50 dB.

(LMV-182A)
(300 μ V to 100 V in 12 ranges
-70 to +40 dB.

Accuracy
 $\pm 2\%$ of full scale at 1 kHz or 400 Hz.

Frequency Response (1 kHz ref.)
5 Hz to 1 MHz, $\pm 10\%$;
10 Hz to 500 kHz, $\pm 5\%$;
20 Hz to 200 kHz $\pm 2\%$.

Input Impedance
10 M Ω , 50 pF.

Maximum Input
600 V (dc plus ac peak).

Noise
Less than 2% full scale.

AMPLIFIER

Output
1 V (no load) corresponds to a full scale indication on each range.

Frequency Response (1 kHz ref.)
10 Hz to 500 kHz, -3 dB.

NEW

Output Impedance

600 Ω , $\pm 20\%$.

Distortion (1 kHz)

<1% full scale.

ENVIRONMENTAL

Operating Temperature

0-40° C

Operating Humidity

85%.

POWER REQUIREMENTS

100, 115, 200, 230 Vac, 50 to 60 Hz, 2.5 VA; normally supplied for 115 Vac operation.

PHYSICAL

Size (H x W x D)

5 $\frac{7}{8}$ x 5 $\frac{1}{4}$ x 9 $\frac{7}{8}$ in.

150 x 132 x 250 mm.

Weight

0.5 lb, 0.2 kg.

ACCESSORIES SUPPLIED (LMV-181A/LMV-182A)

One (1) Instruction Manual.
One (1) Test Cable (banana plugs to alligator clips).
One (1) Adapter, UHF to banana jack.

ACCESSORIES SUPPLIED (LMV-185A)

One (1) Instruction Manual.
Two (2) Test Cables (banana plugs to alligator clips).
Two (2) Adapters, UHF to banana jack.