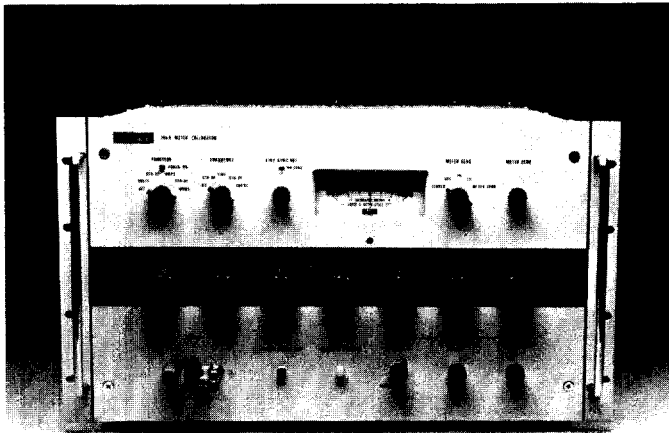


CALIBRATORS AND STANDARDS

Meter Calibrator

760A



760A

760A Meter Calibrator

Meter calibration can be made easier and faster using the Fluke Model 760A Meter Calibrator. This all-solid-state instrument eliminates cumbersome, time-consuming techniques by offering direct percent-error readout, single range for each function, compact size, a minimum of controls and indicators, and a full complement of interlocks and safety features. The 760A operates by adjusting the output for a cardinal point on the meter under test, then reading error directly on $\pm 10\%$, $\pm 3\%$, or $\pm 1\%$ ranges. Accuracy figures for the 760A are percent of setting so that they apply over the entire voltage or current range, not just at several discrete full-range points.

With a 1000V ac and dc capability (up to 20 mA), 10A capability (to more than 1V compliance), and a 10 M Ω rheostat in 1 Ω steps, the 760A can easily calibrate high-impedance electro-dynamometer and iron-vane meters.

One of the most important parameters of the Model 760A is the unusually long recalibration interval. The unit is guaranteed to remain within specifications for one year minimum.

Model 760A includes a stable, low-distortion oscillator that is selectable for either 60 Hz or 400 Hz.

Specifications

Calibrator For DC Voltmeters

Range: 0.001V to 1000V

Accuracy: $\pm(0.1\%$ of setting $+25 \mu\text{V})$ from 0.001 to 1000V except 0.33% at 1 mV, 3 mV, 10 mV. $\pm(0.05\% + 25 \mu\text{V})$ from 20° C to 30° C

Resolution: 100 μV

Current Capability: 0 to 20 mA except 0.5 Ω minimum load resistance

Ripple and Noise (rms): $< 0.5\%$ of output or 150 μV

Calibrator For DC Ammeters

Range: 1 μA to 10A

Accuracy: $\pm(0.25\%$ of setting $+0.025 \mu\text{A})$. $\pm(0.1\% + 0.01 \mu\text{A})$ from 20° C to 30° C

Resolution: 1 μA

Voltage Capability: 0 to 1V minimum (5V open circuit)

Ripple and Noise (rms): $< 0.5\%$ of output or 0.05 μA

Calibrator for AC Voltmeters

Range: 0.001V to 1000V

Frequency: 60 Hz and 400 Hz

Accuracy: $\pm(0.25\%$ of setting $+25 \mu\text{V})$ from 0.001V to 1000V except 0.33% at 1 mV, 3 mV, 10 mV. $\pm(0.2\% + 25 \mu\text{V})$ from 20° C to 30° C

Resolution: 100 μV

Current Capability: 0 to 20 mA except 0.5 Ω minimum load resistance

Harmonic Distortion: $< 0.5\%$ of output

Noise: $< 0.1\%$ of output or 30 μV

Calibrator For AC Ammeters

Range: 1 μA to 10A

Frequency: 60 Hz and 400 Hz

Accuracy: $\pm(0.25\%$ of setting $+0.025 \mu\text{A})$

Resolution: 1 μA

Voltage Capability: 0 to 1V minimum (5V open circuit)

Harmonic Distortion: $< 0.5\%$ of output

Noise: $< 0.1\%$ of output or 0.02 μA

Calibrator For Ohmmeters

Range: 0 to 10 M Ω

Accuracy: $\pm(0.1\%$ of setting $+0.5 \text{ M}\Omega$)

Resolution: 1 Ω

Power Dissipation: Up to 0.25W at 35° C

General

Error Indication (% of setting):

10-0-10 (0.2%/scale division)

3-0-3 (0.1%/scale division)

1-0-1 (0.02%/scale division)

Search Indication: 0 to 100% of setting (accuracy $\pm 3\%$ of end-scale)

Output Controls: Coarse switch, medium and fine verniers (resolution better than 0.02% of setting)

AC Frequency Accuracy: $\pm 1\%$ for 400 Hz; phase-locked to power line for 50 Hz and 60 Hz (remains locked for $\pm 1\%$ frequency variations, manually adjustable to cover 48 to 52 and 55 to 65 Hz)

Calibration Stability: Within performance specifications for 12 mo with no internal adjustments. Improved specifications require more frequent calibration intervals

Safety Features: Front panel lamp indicates when output voltage is greater than 100V. Output terminals are de-energized and indicator lamp is lighted if unit is overloaded or if coarse output control is not at minimum when function or frequency setting is changed. Setting coarse output control to minimum (reset) restores operation.

Operating Temperature: 0° C to 50° C

Line Regulation: 0.05% of setting for a 10% line change from nominal; 0.1% of setting for a 1% line frequency change at 60 Hz

Input Power: 115/230V ac $\pm 10\%$, single-phase, 50 Hz ± 2 Hz and 60 Hz ± 5 Hz, approximately 200W full load, 40W no load

Mounting: Standard EIA rack mounting with chassis slides (not supplied) or bench mounted on nylon feet

Size: 26.7 cm H x 48.3 cm W x 45.7 cm D behind panel (10.5 in H x 19 in W x 18 in D)

Weight: Approximately 34.9 kg (77 lbs)

Price

Model

760A Meter Calibrator \$4495