

Diode-Protected Multi-Range Meters

Educational Training Equipment for the 21st Century

Bulletin 424F

Purpose

Hampden **300 Series** Meters are available in multi-range DC volts, AC volts, DC amps, AC amps, and DC galvanometer models to fulfill the wide range of student metering requirements.

Description

Hampden **300 Series** Meters have been mechanically and electrically designed specifically to meet the rigors of student use. The common problems of breakage and tampering are combated by the rear mounting of the meter and panel components and by the use of rugged, captive-head binding post terminals. Burnout or damage due to momentary or sustained electrical overloads are eliminated through the combined effects of over-sized components, protective diodes, and thermal-magnetic circuit breakers. An example of the degree of overload protection achieved by these meters is that any range may be connected directly across a 120-volt AC, 20-amp supply without damaging the meter or affecting its accuracy.

The **300 Series** Meters are completely self-contained portable instruments. Each meter has two five-way binding posts which accept the popular stackable banana plugs. All ranges are switch selectable - an excellent feature on ammeters since the current is not interrupted during range changes. The meters employ taut band movements and mirror scales providing accuracy, readability and high sensitivity. The meters feature internal printed circuit board construction with all ranges calibrated by trimmers. The internal circuit is indicated schematically by the silk-screened legend on the panel.

Dimensions: 7" H x 5" W x 4-3/4" D
Shipping weight: 5 lbs.



MODEL 301B - AC VOLTMETER

Accuracy: $\pm 3\%$ FSD
Sensitivity: 1,000 ohms/volt
Ranges: 0-15 volts
0-75 volts
0-150 volts
0-300 volts

MODEL 302B - AC AMMETER

Accuracy: $\pm 2\%$ FSD
Ranges: 0-0.1 amps
0-0.5 amps
0-1.0 amps
0-5.0 amps
0-10.0 amps



MODEL 303B - DC VOLTMETER

Accuracy: $\pm 2\%$ FSD
Sensitivity: 10,000 ohms/volt
Ranges: 0-5 volts
0-25 volts
0-50 volts
0-250 volts
0-500 volts

MODEL 304B - DC AMMETER

Accuracy: $\pm 2\%$ FSD
Ranges: 0-0.0001 amps
0-0.001 amps
0-0.01 amps
0-0.1 amps
0-1.0 amps
0-10.0 amps



MODEL 305B - DC GALVANOMETER

Accuracy: $\pm 2\%$ FSD
Ranges: 0.5 - 0 - 0.5 milliamps
5.0 - 0 - 5.0 milliamps
0.5 - 0 - 0.5 volts
Continuity Test, utilizing internal battery.

All Hampden units are available for operation at any voltage or frequency

Hampden
ENGINEERING CORPORATION

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