Millennium Series M2000A Bench Calibrator
Lab Standard
Voltage/Current Calibrator

The Martel M2000A Bench Calibrator sets a new standard in lab calibrator value — the M2000A features the accuracy and stability of calibration sources costing twice as much — and provides useful features no other calibrator offers in its class! Despite its world-class performance and powerful operating features, the M2000A Calibrator is very simple to setup and use.

Features:

- Superior calibration accuracy
- Direct keyboard entry or cursor entry with decade control
- Automatic standby function protects device under test
- Nine (9) manual/automatic setpoints per output range
- Local or RS232 remote control
- IEEE-488 (GPIB) port included
- Compatible with Fluke Met/Cal® software
- Optional rack/panel mount kit available

Simple Data Entry

The M2000A provides simple, front-panel control of output voltage or current using either direct keyboard entry or cursor entry.

The M2000A calibrator has an automatic OPERATE/STANDBY function, which not only protects the device under test and the M2000A from overload conditions, but also provides UL/CSA-certified safe operation when ranging to output voltages over 30V.

A second function key provides easy access for up to nine setpoints for each output range that can be recalled individually at the touch of a button, or can be stepped through automatically with control of the setpoint dwell time.

Remote Control

All of the M2000A operating functions can be accessed via RS232 using a standard PC running Fluke Met/Cal® software, Windows® HyperTerminal, Visual Basic or any other software using an ASCII interface. An IEEE-488 bus interface is available as an option.

Rock-Solid Stability

The M2000A stability and accuracy is traceable to NIST standards. The accuracy of the M2000A is specified for both 90-day and one-year intervals.

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Martel M2000A Lab Calibrator

Specifications (1 year at 23°C ±5°C unless noted)

Output Voltage

Ranges & Resolutions	
0 to 100 mV range	1 µV
0 to 1 V range	10 µV
0 to 10 V range	100 µV
0 to 100 V range	1 mV
Accuracy (% of reading)	
0 to 100 mV range	±0.003% (30 ppm) ± 3.0 µV
0 to 1 V range	±0.003% (30 ppm) ± 20.0 µV
0 to 10 V range	±0.003% (30 ppm) ± 200.0 µV
0 to 100 V range	±0.003% (30 ppm) ± 2.0 mV
Maximum Burden (≤ 1 Ohm output impedance)	
0 to 100 mV range	10 mA
0 to 1 V range	10 mA
0 to 10 V range	10 mA
0 to 100 V range	1 mA (10 mA @ 24 VDC)

Output Current

Range	0 to 100.000 mA
Resolution	1 µA
Accuracy (% of reading)	±0.01% ± 2 µA
Maximum Burden	10 V

Stability

Warm up time	30 minutes to rated accuracy

Temperature Coefficient (<18°C/>28°C)

10% of accuracy spec/°C

Temperature Range

Operating	0°C to 50°C
Storage	-20°C to 70°C

Power Requirements

Voltage Range	90 to 240 VAC (factory set)

Mechanical

Dimensions	11.5” x 4.7” x 8.75” 29.21 cm x 11.83 cm x 22.00 cm
Weight	5 lbs. (2.27 kg)
Display	16 large characters x 2 lines Alphanumeric, backlit high contrast LCD

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