

# **Measurements International**

Metrology is Our Science, Accuracy is Our Business™

#### **MODEL 4304**

### **Traveling Resistance Standard**

- Battery Backup
- 1 Ω, 10 kΩ, 1 MΩ & 100 MΩ Values
- Custom Values Available
- Stability < 2 x 10<sup>-6</sup>/year
- Temperature coefficient < 0.005 x 10<sup>-6</sup>
- Temperature regulation ±0.01 °C/year
- Other values available upon request



## Model 4304 Traveling Resistance Standard

The Model 4304, a four-element resistance standard is the latest development from Measurements Internationals' series of DC resistors and shunts. After many years of research in resistance materials, the Model 4304 insures that you get the best performance on the market today. Combined with MI's experience in automated resistance measurements the 4304 is used as a mobile temperature controlled, 4-element working resistance reference.

The four-resistance elements; 1  $\Omega$ , 10 k $\Omega$ , 1 M $\Omega$  & 100 M $\Omega$  have excellent stability and extremely low temperature coefficients and are all packaged in a portable unit. Each output resistance element is accessible from front of the unit with four terminal binding posts suitable for easy termination with spade lugs or wires. The resistor elements are maintained at 30 °C, with an operating environment temperature range extending from 20 to 26 °C. An internal battery backup will maintain the temperature for up to 140 hours under normal transportation conditions.





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**Specifications:** Rev 4

Nominal Resistance (ohms)	Nominal Resistance tolerance (+/- ppm)	Calibration Uncertainty (+/- ppm)	24 Hour Stability (+/- ppm)		12 Month Stability (+/- ppm)	Temperature Coefficient (+/- ppm/°C)	Max. Voltage (Volts)
100 ΜΩ	50	18	3.2		25	0.025	1000
1 ΜΩ	25	5	0.8		5	0.005	320
10 kΩ	10	0.2	0.25		5	0.005	32
1Ω	10	0.2	0.25		5	0.005	0.32
Temperature Regulation				+/- 0.01 °C over a 1 year period			
Ambient Temperature Range				23 °C +/-3 °C			
Ambient Humidity Range				20 to 50% RH			
Warranty				Standard 1 year Parts & Labor			

Dimensions: (L x W x H) 381 x 305 x 216 (mm)

Weight: 14 kg **Shipping Weight:** 

20 kg

**Main Power:** 

115, 230V - 50/60 Hz

### **Corporate Headquarters**

**Measurements International** PO Box 2359, 118 Commerce Drive

Prescott, Ontario, Canada K0E 1T0 Phone: (613) 925-5934

Fax: (613) 925-1195 Email: sales@mintl.com Toll Free: 1-800-324-4988

## Worldwide Offices MI-USA

Phone: (407) 706-0328 Email: sales@mintl.com-Toll Free: 1-866-684-6393

MI-China

Phone: 86-10-64459890 Email: sales@mintl.com

#### MI-Europe N

Phone: +(420) 731-440-663 Email: sales@mintl.com

#### MI-Japan

Phone: +(81) 72 39 64 660 Email: kaz@mijpn.com



Phone: +(91) 98 10 134 932 Email: sales@MILLP.co.in

