



## 8001B 1200 V RANGE EXTENDER

Developed & designed by metrologists for metrologists & calibration technicians



### Featuring

- ▶ Calibrate the Calibrator
- ▶ 10 V, 30 V, 120 V, 300 V and 1200 V Ranges
- ▶ Best Accuracy < 0.1 ppm
- ▶ Self-Calibrating Using 8000B
- ▶ Bipolar Voltage Measurements
- ▶ Optional Lab Temperature, Humidity, and Pressure Monitoring

### Overview

The model 8001B Range Extender extends the measurement range of the model 8000B Potentiometer to 1200 Volts. Voltages are calibrated directly against the 10 V reference on the 8000B. The 8001B includes ranges of 10, 30, 120, 300 and 1200 V.

The 8001B maintains excellent short term drift and is self-calibrating using the 8000B Potentiometer and a stable 10 Volt reference. The 8000B and 8001B combination can be used to calibrate and verify the linearity of both calibrators and DMM's up to 1200 V.

Feature	Benefit
Automated self-calibration.	Does not require sending out for calibration.
Bi-polar voltage measurements.	Allows for automatic + and - voltage measurements against +10 V Reference.
Calibration of 57XXA.	Automated characterization of Fluke 5700A/5720A/5703A voltage output.
Calibration of DMM's.	Can characterize the Voltage Linearity of Reference Multimeters like 3458A and 85X8A.
10 V to 1200 V DC range.	Enough range to calibrate all Voltage calibrators without reconfiguring connections.
Low uncertainties.	$1 \times 10^{-6}$ for up to 1200 V.



# Measurements International

Metrology is Our Science, Accuracy is Our Business™

## 8001B 1200 V RANGE EXTENDER

### Specifications: Rev 2

<b>Automatic Self-Calibration of Ratio</b>	Completely Self-Checking	
<b>Ranges</b>	30 V, 120 V, 300 V, 1200 V	
<b>Accuracy</b> K=2 * We have attempted to include all reasonable considerations for our uncertainty budgets but your uncertainty budgets should be re-assessed considering your environment, operating conditions and metrological needs. As this is a ratio device, the results that we show can easily be improved upon. ** Lower Voltages, e.g. 100 mV, 10 mV, 1 mV the resolution of the DMM (Detector) becomes the dominant uncertainty.	30 V	< $0.1 \times 10^{-6}$
	120 V	< $0.2 \times 10^{-6}$
	300 V	< $0.5 \times 10^{-6}$
	1200 V	< $1 \times 10^{-6}$
<b>Insulation Resistance</b>	$10^{11} \Omega$	
<b>Effective Linearity</b>	< 0.02 ppm of Full-scale	
<b>Long-term Drift</b>	N/A – Corrected by Self-Calibration	
<b>Short-term Drift</b>	Dependant on Drift of Source and Environmental Conditions	
<b>Input Impedance</b>	4.8 M $\Omega$	
<b>Output Impedance</b>	40 k $\Omega$	
<b>Operating Environment</b>	18 to 34 °C, 10 to 80 % RH	
<b>Storage Environment</b>	-5 °C to 40 °C, 95 % Non-condensing	
<b>Warranty</b>	2 Years Parts & Labour	

<b>How to Order</b> Model 8001B - 1200 V Range Extender	<b>Accessories</b> 10 V Reference 1330A or 732C Detector 3458A or 2182A
--	---

**Dimensions (L × W × H):**  
610 × 508 × 407 (mm)

**Weight:**  
11 kg

**Shipping Weight:**  
21 kg

**Main Power:**  
100 V<sub>ac</sub>-240 V<sub>ac</sub> – 50/60 Hz  
6 VA Max.

**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

**MI-China**  
Phone: +(86) 10-64459890  
Email: sales@mintl.com

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

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

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

