

**B4000 4-3/4 Digit DMM with RS232**

- 50,000 count 4 3/4 digit Dual display LCD
- Auto calibration
- Measures Frequency, duty cycle and pulse width
- RS-232 interface with software
- AC and AC+DC true rms readings
- Conductance and Peak detect
- Tests Zener diodes to 25V
- Min/Max/Avg and Compare functions
- Stores and Recalls 10 measurements in memory
- Low voltage Ohms measurement
- 0.05% Basic accuracy
- Category II 600Volt and CE approved

**B4000****B4100 5-1/2 Digit Programmable Multimeter**

- 5-1/2 Digit multimeter with selectable count resolutions up to 200,000
- True RMS and measures frequency
- Selectable Count Resolutions: 2k, 20k, 200k
- Auto-ranging
- Trend plot display
- RS-232 interface standard and optional GPIB interface
- Min/Max/Avg, Relative error and comparison functions
- May be used on line voltages from 85V to 250V without any internal changes
- Software included
- Seven setups may be stored and recalled in memory

**B4100****SPECIFICATIONS****[ B4000 ]**

mV DC: Ranges: 500 mV, 2500mV; Accuracy:  $\pm 0.05\% + 5\text{d}$   
 DC Volts: Ranges: 5. V, 50 V, 500V, 1000V; Accuracy:  $\pm 0.05\%$   
 AC and AC + DC mV: Ranges: 500mV; AC mV Accuracy:  $\pm 0.75\% + 20\text{d}$ ; AC+ DC mV accuracy:  $\pm 2.0\% + 50\text{d}$   
 AC and AC + DC Volts: Ranges: 5. V to 750V; AC Volts Accuracy:  $\pm 0.75\% + 200\text{d}$ ; AC + DC Volts accuracy:  $\pm 2.0\% + 50\text{d}$ ; Crest factor: Sine wave: 1, 414  
 DC Current: Ranges: 5000 $\mu$ A, 500mA, 10A; Accuracy:  $\pm 0.2\% + 5\text{d}$   
 AC and AC+DC True RMS Current: Ranges: 5000 $\mu$ A, 500mA and 10A  
 AC Amp Accuracy:  $\pm 0.75\% + 20\text{d}$  50Hz to 1KHz  
 AC + DC Amp Accuracy: 1.5% + 50D DC to 1KHz  
 Resistance: Ranges: 50 $\Omega$  to 50M $\Omega$ ; Accuracy:  $\pm 0.2\%$   
 Resistance: Lo Volt Ohms: Ranges: 5K $\Omega$  to 50M $\Omega$ ; Open circuit Volts. 0.25V  
 Conductance: Range: 500nS; Accuracy:  $\pm 3\% + 5\text{d}$   
 Capacitance: Ranges: 5nF, to 5000 $\mu$ F; Accuracy:  $\pm 2\% + 5\text{d}$   
 Zener Diode Test: Range: 15.00V; Test Current: 1 mA; Test Voltage: 15 to 22V  
 Continuity Test: Ranges: 5K $\Omega$  to 5M $\Omega$   
 Temperature: Ranges: -20°C to 1200°C, -4°F to 2100°F, -253°K to 1473°K  
 Thermocouple: K type: Display: °F, °C, and °K; Accuracy:  $\pm 2^\circ\text{C} + 10\text{d}$   
 Frequency: Ranges: 50Hz to 5MHz; Accuracy:  $\pm 0.01\%$   
 Pulse Width: Range: 200mS; Accuracy: 0.1% + 5d  
 Duty Cycle: Range: 0 to 100%; Accuracy: 0.1% + 5d  
 Peak Hold: Ranges: DC ma, DCV, DC  $\mu$ A, DC mA, and DCA; Accuracy: < 10% of peak with > 5ms pulse width and > than 10% of full scale

**General Specifications**

Update Rate: 2/Sec  
 Operating Temperature: 0° to 40° C at a relative Humidity of < 80%  
 Power: 120/220V, 50/60Hz  
 Size: TBD  
 Weight : 5 lbs  
 Supplied Accessories: Carrying case, protective holster, User manual, Safety probes with alligator tips, R-232 Cable and software CD ROM, Temperature adapter and K type temperature probe and carrying case and Line cord

**[ B4100 ]**

**Display**  
 Slow: Counts: 200,000; Digits: 5 1/2  
 Medium: Counts: 20,000; Digits: 4 1/2  
 Fast: Counts: 2,000; Digits: 3 1/2  
**Specifications (at 25°C  $\pm 5^\circ\text{C}$ )**  
**DC Voltage:** Ranges: 2V, 20V, 200V, 1000V  
 Best Resolutions: 10  $\mu$ V (Slow), 100  $\mu$ V (Med), 1mV (Fast)  
 Accuracy:  $\pm (0.05\% + 3\text{d})$ , Input impedance: 10M $\Omega$   
 Overload protection: 1000V  
**AC Volts:** Ranges: 2V, 20V, 200V, 1000V  
 Best Resolutions: 100  $\mu$ V (Slow and Med), 1mV (Fast)  
 Accuracy:  $\pm (0.5\% + 5\text{d})$  45Hz to 450Hz  
 Overload Protection: 1000V, Crest Factor: 3:1  
**DC Current:** Ranges: 200 $\mu$ A, 20mA, 10A  
 Best Resolutions: 200 $\mu$ A: 1nA (Slow), 10nA (Med), 100nA (Fast); 200mA: 1 $\mu$ A (Slow), 10 $\mu$  (Med), 100 $\mu$  (Fast); 10A: 100 $\mu$ A (Slow), 1mA (Med), 10mA (Fast)

Accuracy:  $\pm (0.1\% + 5\text{d})$ , Max burden: 200mV  
 Overload protection: 0.5A/250V and 10/250V fuse

**AC Current:** Best Resolution: 200  $\mu$ A: 10 nA (Slow and Med), 100nA (Fast)  
 200mA: 1 $\mu$ A (Slow), 10 $\mu$  (Med), 100 $\mu$  (Fast)  
 10A: 100 $\mu$ A (Slow), 1mA (Med), 10mA (Fast)  
 Accuracy:  $\pm (0.5\% + 5\text{d})$ , Max burden: 200mV  
 Overload protection: 0.5A/250V and 10A/250V fuse  
**Resistance:** Ranges: 200 $\Omega$ , 2K $\Omega$ , 200K $\Omega$ , 2M $\Omega$ , 10M $\Omega$   
 Best Resolutions: 1m $\Omega$  (Slow), 10m $\Omega$  (Med), 100m $\Omega$  (Fast)  
 Accuracy:  $\pm (0.05\% + 5\text{d})$   
**Overload Protection:** 250V or AC RMS  
**Frequency:** Ranges: 200Hz, 2KHz, 20KHz, 200KHz  
 Best Resolutions: 1mHz(Slow), 10mHz (Med), 100mHz (Fast)  
 Accuracy:  $\pm (0.05\% + 2\text{d})$   
**Overload protection:** 250V DC or AC RMS  
**Diode:** Range: 2V  
 Test current: Approximately 1.0mA  
**Test Volts:** Approximately 3 Volts  
**Continuity:** Buzzer will sound at 100 $\Omega$  or less  
**Interface:** RS-232:  
 Connector: 9 Pin din  
 Baud Rate: 1200, 2400, 4800 or 9600 bps  
 GPIB: optional  
**General Specifications**  
**Display:** 128 x 64 pixel super twisted LCD  
**Size:** 3.3" H x 12.0" W x 11.0" D  
**Weight:** TBD  
**Operating Temperature:** 0 to 50°C (32 to 120°F)  
**Power:** 85V to 275V  $\pm 10\%$   
**Supplied Accessories:** Manual, Power cord, BNC cable, Software disk, RS-232 cable