# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## Test Equipment

**Bench Digital Multimeter** 

Engineers, Technicians, Electricians, Educators, Manufacturing,

Quality Control can all use the PRO-1000 in confidence with its

exceptional quality, rugged design & housed in high impact case

with convent multipleposition handle.



#### Features:

- True RMS Digital Multimeter with 4 1/2 digit (LED) display.
- Basic DC Voltage accuracy of 0.05 %
- Basic AC Voltage accuracy of 0.75 %
- Overload protection on all ranges
- AC/DC Voltage measurement up to 1000V DC and 750V AC
- AC/DC Current measurement up to 10A
- Resistance measurement up to 20MΩ
- Frequency Measurement up to 200kHz
- Audible continuity test
- Diode Test Voltage, 2V
- 110-120VAC @ 50 Hz/ 210-220VAC @ 50 Hz Input Voltage
- Weighs only 4.4lbs (approx. 2.0kg)
- Comes complete with User's Manual, 1 Set Test Leads, Power cord & Spare Fuse

### Pro-1000

The Model PRO-1000A is a highly versatile, economically-priced, portable, bench type digital multimeter with a 4 ½ digit LED display that can measure diodes, frequency, current, voltage, resistance, as well as test continuity & all for a very Low List Price of ONLY \$345.00

Designed to meet CAT II (600V) safety standards, Engineers, Technicians, Electricians, Educators,

Manufacturing, Quality Control can use the PRO-1000 in confidence with its rugged design, housed in high impact case with convent multiple-position handle and non-contact AC voltage (NCV) detection feature. The PRO-1000, fused & fully overload protected, and can be used with either 115V AC, or 230V AC (50-60 Hz) input voltages



Innovative Training Solutions

www.globalspecialties.com

## Test Equipment

**Bench Digital Multimeter** 

### Specifications

\*Important Note: All accuracies apply to 5% to 95% full scale of each range.

#### DC VOLTS

Range	Resolution	Accuracy	Impedance
2V	100uV		
20V	1mV	$\pm (0.05\% + 10d)$	10ΜΩ
200V	10mV		
1000V	100mV	$\pm (0.1\% + 5d)$	

#### AC VOLTS

Range	Resolution	Accuracy		Impedance
		50-60Hz	60-400Hz	
2V	100µV		$\pm (1.5\% + 10d)$	
20V	1mV	$\pm (0.75\% + 10d)$		10ΜΩ
200V	10mV		$\pm (2.5\% + 10d)$	
750V	100mV			

#### **DC CURRENT**

Range	Resolution	Accuracy	Overload Protection
2mA	100nA		
20mA	1µA	$\pm (1.0\% + 5d)$	
200mA	10µA		2A/250V
2A	100µA	$\pm (1.0\% + 10d)$	
*10A	1mA	$\pm (1.0\% + 10d)$	10A/250V

\*10A range specified for 30 seconds maximum for each 15 minute interval.

#### AC CURRENT

MC CORRENT				
Range	Resolution	Accuracy		Overload
		50-60Hz	60-400Hz	Protection
2mA	100nA			
20mA	1µA	$\pm (0.75\% + 10d)$		
200mA	10µA		$\pm (2.0\% + 10d)$	2A/250V
2A	100μΑ	$\pm (1.0\% + 10d)$		
*10A	1mA			10A/250V

\*10A range specified for 30 seconds maximum for each 15 minute interval.



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## Test Equipment Bench Digital Multimeter

## Specifications

#### RESISTANCE

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	Range	Resolution	Accuracy	<b>Overload Protection</b>
	2kΩ	$0.1\Omega$		
	$20k\Omega$	1Ω	$\pm (0.2\% + 5d)$	
	200κΩ	10Ω		600V DC or Peak
	$2M\Omega$	100Ω		
	20ΜΩ	1kΩ	$\pm (1\% + 10d)$	

#### FREQUENCY

Range	Resolution	Accuracy	Overload Protection
20kHz	1 Hz	$\pm (1.5\% + 5d)$	600V DC or Peak
200kHz	10 Hz	$\pm (2.0\% + 5d)$	

- Frequencies under 500Hz requires a minimum amplitude of at least 4Vpp. Other sensitivities are not specified.
- Errors of less than 5 digits are added in the total measurement.

#### AUDIBLE CONTINUITY

Test Voltage	Threshold	Overload Protection
3V	Less Than $200\Omega$	600V DC or Peak

#### **DIODE TEST**

Test Voltage	Max. Test Current	Overload Protection
2V	Approx. 1.0mA	600V DC or Peak

#### **Equipment Ratings**

Plug and Socket: 3 wire AC power plug and 3 wire outlet

Power & Fuse Ratings

Input Voltage	Fuse	Power Max
103 ~ 126V AC (50/60Hz)	F 0.5A / 250V	10W
206 ~ 252V AC (50/60Hz)	F 0.2A / 250V	



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### **Test Equipment**

**Bench Digital Multimeter** 

### **Specifications**

Operating Environment:

Temperature: 0 °C to + 40 °C (Accuracy Specified at 23 °C  $\pm$ 5 °C)

Humidity: Up to 85%RH to 40°C without temperature extremes which may cause condensation within the instrument.

Storage Environment:

Temperature: -20°C to 70°C

Humidity: <85%RH

Temperature Coefficient: 1.0x (Specified Accuracy) per °C for temp. < 18°C or > 28°C

Insulation Category: II

Pollution Degree: 2

Protection to IEC 529: Ordinary

Dimensions: 9.5" x 3.5" x 11" (240 x 90 x 280 mm)

Weight: 4.4 lbs (approx. 2.0kg)

Supplied Accessories

User's Manual1
Test Leads1
Power Cord1
Spare Fuse1



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