



1513

### Models 1513, 1514 Switching Mode Power Supplies

The models 1513 & 1514 are DC Power Supplies that uses switching mode technology. They provides six ranges of selectable voltages for many applications.

#### FEATURES:

- Plastic Housing
- Six ranges of selectable Voltages Output
- Overload and Short circuit protection
- Slim in size & light weight
- High Stability
- Fashionable design
- Wide range of operation Voltages

### Specifications

	models	
	1513	1514
Output Voltage	1.5V 3V 4.5V 6V 9V 12V	
Output Current	1 Amps	3 Amps
Ripple & Noise (rms)	25mV	
Line Regulation	60mV	
Load Regulation	300mV	
Operating Voltage	120VAC/60 Hz	
Dimensions (W x H x D)	90 x 50 x 140mm	

### Accessories **One Year Warranty**

SUPPLIED: Instruction Manual, Line Cord  
OPTIONAL: TL-5



TR-110

### Model TR-110 Dual Output Isolation

Use Model TR-110 for safe testing of transformerless equipment.

- **Direct: Convenience duplex outlet provides line voltage for auxiliary equipment up to 500 VA**
- **Isolated: Two 3-position slide switches provide 9 combinations of voltage selection from 90 to 140 V\*, up to 350 VA continuous or 500 VA intermittent. Self-contained power switch with pilot lamp.**

### Specifications

	model
	TR-110
Input Requirements	105-130 VAC, 60 Hz.
OUTPUT POWER RATING	
Direct	500 VA continuous. Isolated: 350 VA continuous, 500 VA intermittent.
CONNECTIONS	
Direct	Duplex outlet (3-conductor).
Isolated	Duplex outlet (3-conductor).
GENERAL	
Regulation	No load (350 VA), voltage change < 4%.
Isolation	Complies—UL standard 1012, May 1977.
Dimensions (HxWxD)	5.1 x 5.5 x 8" (130 x 140 x 200 mm)
Weight	11 lbs. (5 kg)

\*Output voltages rated w/input at 120 volts.

### **One Year Warranty**

SUPPLIED: Instruction Manual, Line Cord



1604A

### Model 1604A Isolation Transformer

Use Model 1604A for safe testing of transformerless equipment.

- **Leakage: less than 0.1 mA**
- **Output Voltage: 117-124 V nominal (120 V input)**
- **Output Current: 1.25 A continuous**

### Specifications

	model
	1604A
Isolation	leakage less than 0.1 mA
Output Voltage	117-124 V nominal (120 V input)
Output Current	1.25 A continuous (2 A intermittent)
Power Requirements	120 VAC, 60 Hz, 175W
Operating Temperature	32° to 104°F (0° to +40°C)
Dimensions (HxWxD)	4 x 4 x 5.5" (100 x 100 x 140 mm)
Weight	6 lbs. (2.7 kg.)

### **One Year Warranty**

SUPPLIED: Instruction Manual, Line Cord