

4000 SERIES

4-IN-1 ELECTRICAL SAFETY TESTERS



VERSATILE 4-IN-1
FUNCTIONALITY

SIMPLE MENU NAVIGATION

MEETS 200 mA SHORT
CIRCUIT REQUIREMENTS*
*4520 ONLY





6 PROGRAMMABLE
MEMORIES WITH 6 TEST
STEPS EACH

EASILY AUTOMATE FOR
DATA COLLECTION

REMOTE SAFETY
INTERLOCK

EASILY SAFEGUARD YOUR
WORKSTATION WITH PPE
ACCESSORIES

The **4000 Series** provides advanced 4-in-1 test capability in a convenient one-box solution. Our most popular multi-function tester, the **4000 Series** performs AC Hipot, DC Hipot, Insulation Resistance and Ground Bond tests while taking up minimal production line space. The **4000 Series** includes the simplest menu navigation in the industry, reducing set-up time and increasing production line throughput for any application. With multiple memories and an optional RS-232 interface, you can quickly perform tests on a variety of DUT's from the front panel or with a PLC remote. Choose from two models.

	 AC Hipot	 DC Hipot	 Insulation Resistance	 30A Ground Bond
4320	•	•	•	•
4520	500VA	•	•	•

RELEVANT APPLICATIONS

APPLIANCE

INDUSTRIAL EQUIPMENT

INFORMATION TECHNOLOGY

CONTRACT MANUFACTURING

SUPPLIED ACCESSORIES

- 102-050-913 High Voltage Retractable Probe 6 ft. (1.8m)
- 102-055-913 High Voltage Lead 6 ft. (1.8m)
- 125-013-001 Input Power Cable USA
- 99-10164-01 Input Power Cable USA
- 99-10239-01 60 Amp High Current Lead 6 ft. (1.8m)
- 99-10238-01 60 Amp High Current Return Lead 6 ft. (1.8m)
- 99-10040-01 Interlock Connector
- 99-10106-01 Fuse 4320
- 99-10656-01 Fuse 4520

All testers come with all the accessories you need to run a test right out of the box.

OPTIONS

Description	4320	4520
Rear Outputs	•	•
RS-232 Interface	•	•

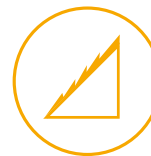
SERIES FEATURES



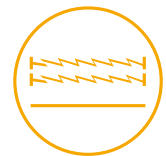
Test Setup Memories



Frequency Selection



Ramp



Dwell



Low Current Sense



Safety Agency Listed



PLC Remote



RS-232 (optional)



4000 SERIES SPECIFICATIONS

INPUT		
Voltage	4320	115/230 VAC \pm 15%, user selection
	4520	115/230V Auto Range, \pm 15% variation
Frequency	50/60 Hz \pm 5%	
Fuse	4320	6.3 A 250 V slow blow
	4520	15 A slow blow 250 VAC

DIELECTRIC WITHSTAND TEST MODE		
Output Rating	4320	5 kV @ 20 mAAC 6 kV @ 5 mADC
	4520	5 kV @ 100 mAAC 6 kV @ 10 mADC
Voltage Setting/ Display	Range: Resolution: Accuracy:	0 - 5.00 kVAC 0 - 6.00 kVDC 0.01 kV \pm (2% of setting + 5 V) \pm (2% of reading + 10 V)
Current Display	4320	Range: 0 - 20.00 mAAC, 0 - 5.00 mADC Resolution: 0.01 mA Accuracy: \pm (2% of reading + 0.02 mA)
	4520	Range: 0 - 99.99 mAAC, 0 - 10.00 mADC Resolution: 0.01 mA Accuracy: \pm (2% of reading + 0.06 mA)
HI-Limit LO-Limit	4320 AC	Range: 0 - 20.00 mA Resolution: 0.01 mA Accuracy: \pm (2% of setting + 0.02 mA)
	4320 DC	Range: 0 - 5.00 mA Resolution: 0.01 mA Accuracy: \pm (2% of setting + 0.02 mA)
	4520 AC	Range: 0 - 99.99 mAAC Resolution: 0.01 mA Accuracy: \pm (2% of reading + 0.06 mA)
	4520 DC	Range: 0 - 10.00 mADC Resolution: 0.01 mA Accuracy: \pm (2% of reading + 0.06 mA)
Failure Detector	Audible and Visual	
DC Output Ripple	4320	< 5% Ripple RMS at 6 kVDC @ 5 mA, resistive load
	4520	\leq 5% Ripple RMS at 6 kVDC @ 10 mA, resistive load
Discharge Time	\leq 200 ms	
Max. Capacitive Load in DC Mode	1.00 μ F < 1 kV	0.08 μ F < 4 kV
	0.75 μ F < 2 kV	0.04 μ F < 5 kV
	0.50 μ F < 3 kV	0.01 μ F < 6 kV
AC Wave Form	Sine Wave distortion <2%, Crest Factor = 1.3 - 1.5	
AC Output Frequency	Range:	50/60 Hz, user selection
Output Regulation	\pm (1% of setting + 5 V) from no load to full load	
Dwell Timer	Range:	0, 0.2 - 999.9 sec, (0 = continuous)
	Resolution:	0.1 sec increments
	Accuracy:	\pm (0.1% + 0.05 sec)
Ramp Timer	Range:	0.1 - 999.9 sec
	Resolution:	0.1 sec increments
	Accuracy:	\pm (0.1% + 0.05 sec)

INSULATION RESISTANCE TEST MODE					
Output Voltage	Range:	100 - 1000 VDC			
	Resolution:	1 V			
	Accuracy:	\pm (2% of reading + 5 V)			
Voltage Display	Range:	0 - 1000 V			
	Resolution:	1 V			
	Accuracy:	\pm (2% of reading + 2 V)			
Resistance Display	Range:	1 - 1000 M Ω (4 digit, auto ranging)			
	Resolution:		500 VDC	1000 VDC	
			M Ω	M Ω	M Ω
			0.01	1.00 - 40.00	1.00 - 80.00
	0.1	35.0 - 999.9	75.0 - 999.9		
Hi-Limit	Range:	0, 1 - 1000 M Ω (0 = off)			
LO-Limit	Range:	1 - 1000 M Ω			
Delay Timer	Range:	0, 0.5 - 999.9 sec, (0 = continuous)			
	Resolution:	0.1 sec			
	Accuracy:	\pm (0.1% of 0.05 sec)			

GROUND BOND TEST MODE			
Output Voltage	Range:	6 VAC fixed	
Output Frequency	Range:	50/60 Hz, user selectable	
Output Current	Range:	3.0 - 30.0 AAC	
	Resolution:	0.1 A	
	Accuracy:	\pm (2% of setting + 0.02 A)	
Current Display	Range:	0 - 30.0 A	
	Resolution:	0.1 A	
	Accuracy:	\pm (3% of reading + 0.01 A)	
HI-Limit LO-Limit	Range:	0 - 510 m Ω for 3.0 - 10.0 A	
		0 - 200 m Ω for 10.1 - 25.0 A	
		0 - 150 m Ω for 25.1 - 30.0 A	
	Resolution:	1 m Ω	
Accuracy:	\pm (2% of setting + 2 m Ω)		
Dwell Timer	Range:	0, 0.5 - 999.9 sec, (0 = continuous)	
	Resolution:	0.1 sec	
	Accuracy:	\pm (0.1% + 0.05 sec)	
Milliohm Offset	Max. Offset Capability:	0 - 100 m Ω	
	Resolution:	1 m Ω	
	Accuracy:	\pm (2% of setting + 2 m Ω)	

GENERAL SPECIFICATIONS		
Memories	Allows storage of up to 6 different test programs and 6 steps per memory and a single step mode	
Remote I/O	Input:	Test, Reset, Interlock & recall memory 1-6
	Output:	Pass, Fail, Test-In-Process
Interface	Optional RS-232	
Security	Lockout capability to avoid unauthorized access to test set-up programs	
Calibration	Software & adjustments made through front panel	
Mechanical	Bench or rack mount with tilt up front feet (4520 Only)	
Dimensions (W x H x D)	4320	11" x 3.5" x 17" (280 x 89 x 430 mm)
	4520	16.9" x 5.2" x 15.7" (430 x 133 x 400 mm)
Weight	4320	33 lbs. (15 kg)
	4520	54 lbs. (24.5 kg)

Specifications subject to change without notice.