

440 SERIES



VERSATILE 4-IN-1
FUNCTIONALITY

INTUITIVE USER INTERFACE

40A GROUND BOND
CAPABILITY





20 PROGRAMMABLE
MEMORIES

EASILY AUTOMATE FOR
DATA COLLECTION

REMOTE SAFETY INTERLOCK

EASILY SAFEGUARD YOUR
WORKSTATION WITH PPE
ACCESSORIES

The **440 Series** provides advanced 4-in-1 test capability in a convenient one-box solution. This new series performs AC Hipot (448 - 500 VA), DC Hipot, Insulation Resistance and 40A AC Ground Bond tests while taking up minimal production line space. The **440 Series** is simple and easy-to-use; reducing setup time and increasing production line throughput for your application. With multiple memories and an optional USB port for remote BUS communication so you can quickly perform tests on a variety of DUTs from the front panel or with a PC.

	 AC Hipot	 DC Hipot	 Insulation Resistance	 40A Ground Bond
446	•	•	•	•
448	500VA	•	•	•

RELEVANT APPLICATIONS

APPLIANCE CONTRACT MANUFACTURING
 INDUSTRIAL EQUIPMENT LABORATORY EQUIPMENT
 INFORMATION TECHNOLOGY

WHAT'S IN THE BOX

- 125-013-001 Power Cord (10A) 6ft - *446 Model
- 99-10164-01 Power Cord (15A) 6ft - *448 Model
- 99-10783-01 Fuse 10A Slow Blow 20mm - *446 Model
- 99-10168-01 Fuse 15A Fast Blow 30mm - *448 Model
- 99-10040-01 Interlock Connector Male
- 99-10866-01 Ground Bond Test Lead
- 99-10865-01 Ground Bond Return Lead
- 102-055-913 High Voltage Test Lead 6ft
- 99-10797-01 USB A-B 1.8M Cable

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

OPTIONS

Description	446	448
Rear Outputs	●	●
USB Port	●	●



SCI 448 Model

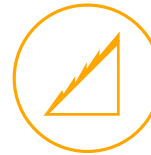
SERIES FEATURES



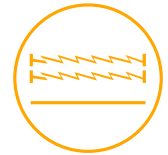
Test Setup Memories



Frequency Selection



Ramp



Dwell



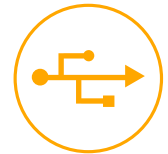
Low Current Sense



Safety Agency Listed



PLC Remote



USB (optional)



On the Go Portability



Intuitive User Interface

440 SERIES SPECIFICATIONS

MODEL	SCI 446			SCI 448		
INPUT						
Voltage	100 - 120Vac / 200 - 240Vac ±10% Auto Range					
Frequency	50/60Hz ± 5%					
Fuse	10A / 250Vac Slow-Blow			15A / 250Vac Fast-Blow		
	Range	Resolution	Accuracy	Range	Resolution	Accuracy
AC WITHSTAND VOLTAGE						
Output Voltage, KVAC	0-5.00	0.01	± (2% of setting + 5V)	0-5.00	0.01	± (2% of setting + 5V)
Output Frequency	50Hz/60Hz ± 0.1% , User Selection,			50Hz/60Hz ± 0.1% , User Selection,		
Output Waveform	Sine Wave, Crest Factor = 1.3 - 1.5 and output voltage > 300V			Sine Wave, Crest Factor = 1.3 - 1.5 and output voltage > 300V		
Output Regulation, Vrms	± (1% of output + 5V), From no load to full load and Low Line to High Line (combined regulation)			± (1% of output + 5V), From no load to full load and Low Line to High Line (combined regulation)		
Hi-Limit AC current, mA	0.10-20.00	0.01	± (2% of setting + 2 counts)	0.10-99.99	0.01	± (2% of setting + 6 counts)
Lo-Limit AC current, mA	0.00-20.00	0.01	± (2% of setting + 2 counts)	0.00-99.99	0.01	± (2% of setting + 6 counts)
Ramp Time, second	0.2-180.0	0.1	± (0.1% of setting + 0.05 sec)	0.2-180.0	0.1	± (0.1% of setting + 0.05 sec)
Dwell Time, second	0, 0.2 - 60.0 (0=continuous)	0.1	± (0.1% of setting + 0.05 sec)	0, 0.2 - 60.0 (0=continuous)	0.1	± (0.1% of setting + 0.05 sec)
DC WITHSTAND VOLTAGE						
Output Voltage, KVDC	0 -6.00	0.01	± (2% of setting + 5V)	0 -6.00	0.01	± (2% of setting + 5V)
DC Output Ripple, Vrms	<5 % (6KV / 5mA at Resistive Load)			<5 % (6KV / 10mA at Resistive Load)		
Hi-Limit DC current, mA	0.02 - 5.00	0.01	± (2% of setting + 2 counts)	0.02 - 10.00	0.01	± (2% of setting + 2 counts)
Lo-Limit DC current, mA	0.00 - 5.00	0.01	± (2% of setting + 2 counts)	0.00 - 10.00	0.01	± (2% of setting + 2 counts)
Ramp Time, second	0.2 - 180.0	0.1	± (0.1% of setting + 0.05 sec)	0.2 - 180.0	0.1	± (0.1% of setting + 0.05 sec)
Dwell Time, second	0, 0.2 - 60.0 (0=continuous)	0.1	± (0.1% of setting + 0.05 sec)	0, 0.2 - 60.0 (0=continuous)	0.1	± (0.1% of setting + 0.05 sec)
Discharge Time	< 50 msec for no load, < 200 msec for capacitor load			< 50 msec for no load, < 100 msec for capacitor load		
Maximum Capacitive Load DC Mode	1µF < 1KV		0.08µF < 4KV			
	0.75µF < 2KV		0.04µF < 5KV			
	0.5µF < 3KV		0.015µF < 6KV			

440 SERIES SPECIFICATIONS

MODEL	SCI 446			SCI 448		
	Range	Resolution	Accuracy	Range	Resolution	Accuracy
INSULATION RESISTANCE						
Output Voltage, VDC	100 - 1000	1	± (2% of setting + 5V)	100 - 1000	1	± (2% of setting + 5V)
Hi-Limit resistance, MΩ	0, 1 - 1000 (0 = OFF)	1	100-499V ± (7% of setting + 2 counts)	0, 1 - 1000 (0 = OFF)	1	100-499V ± (7% of setting + 2 counts)
Lo-Limit resistance, MΩ	1 - 1000	1	500-1000V ± (3% of setting + 2 counts)	1 - 1000	1	500-1000V ± (3% of setting + 2 counts)
Ramp Time, second	0.1 or 2.0	0.1	± (0.1% of setting + 0.05 sec)	0.1 or 2.0	0.1	± (0.1% of setting + 0.05 sec)
Delay Time, second	0, 0.5 - 999.9 (0=continuous)	0.1	± (0.1% of setting + 0.05 sec)	0, 0.5 - 999.9	0.1	± (0.1% of setting + 0.05 sec)
GROUND BOND						
Output AC Current, A	1.0 – 40.0	0.1	± (2 % of setting + 2 counts)	1.0 – 40.0	0.1	± (2 % of setting + 2 counts)
Output AC Voltage, V	8V(Fixed)					
Output Frequency, Hz	50Hz/60Hz ± 0.1%, User Selectable					
Maximum Loading	1.0–10.0A/0–600mΩ, 10.1–30.0A/0–200mΩ, 30.1–40.0A/0–150mΩ					
Offset, mΩ	0-100	1	± (2 % of setting + 2 counts)	0-100	1	± (2 % of setting + 2 counts)
HI and LO-Limit Resistance, mΩ	0 – 150 (30.1-40.0A)	1	± (2 % of setting + 2 counts)	0 – 150 (30.1-40.0A)	1	± (2 % of setting + 2 counts)
	0 – 200 (10.1-30.0A)			0 – 200 (10.1-30.0A)		
	0 – 600 (1.0-10.0A)			0 – 600 (1.0-10.0A)		
Fix Ramp Timer, second	0.4	0.1	± 0.05 sec	0.4	0.1	± 0.05 sec
	0-250mOhm à 0.1sec ramp up 251-300mOhm à 0.2sec ramp up 301-450mOhm à 0.3sec ramp up >450mOhm = 0.4sec					
Dwell Timer, second	0, 0.1 - 240.0 (0 = continuous)	0.1	± 0.05 sec	0, 0.1 - 240.0 (0 = continuous)	0.1	± 0.05 sec
GENERAL SPECIFICATIONS						
Memories	Allows storage of up to 20 different test programs and a single step mode					
Remote I/O	Input: Test, Reset, Interlock & Recall Memory 1 – 6 Output: Pass, Fail, Test-in-Process					
Interface	USB (Optional)					
Security	Lockout capability to avoid unauthorized access to test set-up programs					
Calibration	Software and adjustments made through the front panel					
Dimension	280mm(W) × 89mm(H) × 400 mm(D)			430mm(W) × 132mm(H) × 400 mm(D)		
Weight	18lbs (8kg)			53lbs (24kg)		