ROYAL WORK TECHNOLOGY

IKONIX Authorized Reseller

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LINE

https://www.royalworktechnology.com

Contact Us 081-805-4869 sales@royalworktechnology.com

Royal Work Technology Co.,Ltd. (Head Office)

137/6 Soi Kubon 27 Yak 21, Ramintra Rd., Taraeng, Bangkhen, Bangkok 10220

AC Power Source

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400XAC Series Programmable 1 Phase/3 Phase

One Power Workstation, Three Power Transmission

The 400XAC series is a single workstation capable of independently outputting single-phase, tri-phase, and DC power. The new External Trigger technology features synchronize waveforms for conducting effortless analysis. Free from the limitations of a single power system mode, the 400XAC series is suitable for any power source system used in laboratories and R&D departments.

Features

Exclusive SmartCONFIG feature allows for push button switch of 10, 30, or DC output.

Single phase input power requirements.

50 built-in memory locations with 9 test steps.

Built-in power factor correction (PFC).

Advanced metering circuits monitor voltage, current, peak current, power, apparent power, reactive power, power factor, and crest factor.

External voltage sensing for accurate metering.

Transient feature simulates voltage variations, brownouts, and transient voltage conditions.

Programmable starting and ending angle of the output sine wave.

Rack mount handle kit included.

AC Power Source

Specifications – 400XAC

INPUT			430XAC	460XAC
Phase			1Ø	1Ø or 3Ø
Voltage			200 - 240 VAC	1Ø : 200~240 VAC ± 10% 3Ø3W : 200~240 VAC ± 10% 3Ø4W : 346~416 VAC ± 10%
Frequency			47 - 63 Hz	
AC OUTPUT				
Power Rating	1Ø2W		3000 VA	6000 VA
	1Ø3W		Total 2000 VA (1000 VA per phase)	Total 4000 VA (2000 VA per phase)
	3Ø4W		Total 3000 VA (1000 VA per phase)	Total 6000 VA (2000 VA per phase)
	DC		3000 VA	6000 VA
Max. Current (RMS)	1Ø2W	5- 150 V	27.6 A @ ≤110 V	55.2 A @ ≤110 V
		5 - 300 V	13.8 A @ ≤220 V	27.6 A @ ≤220 V
	1Ø3W	5 - 150 V	9.2 A @ ≤110 V for per phase	18.4 A @ ≤110 V for per phase
		5 - 300 V	4.6 A @ ≤220 V for per phase	9.2 A @ ≤220 V for per phase
	3Ø4W	5 - 150 V	9.2 A @ ≤110 V for per phase	18.4 A @ ≤110 V for per phase
		5 - 300 V	4.6 A @ ≤220 V for per phase	9.2 A @ ≤220 V for per phase
Inrush Current (peak)	1Ø2W	5 - 150 V	110.4 A	220.8 A
		5 - 300 V	55.2 A	110.4 A
	1Ø3W	5 - 150 V	36.8 A for per phase	73.6 A for per phase
		5 - 300 V	18.4 A for per phase	36.8 A for per phase
	3Ø4W	5 - 150 V	36.8 A for per phase	73.6 A for per phase
		5 - 300 V	18.4 A for per phase	36.8 A for per phase
Phase			1Ø2W, 1Ø3W, 3Ø4W, provided option	
THD (Total Harmonic Distortion)			<0.5% (Resistive Load) at 40.0~70.0 Hz and output voltage within the 80~140 VAC at Low Range or the 160~280 VAC at High Range. <1% (Resistive Load) at 70.1~1000 Hz and output voltage within the 80~140 VAC at Low Range or the 160~280 VAC at High Range.	
Crest Factor			≥3	
Line Regulation			± 0.1 V	
Load Regulation (Hardware)			± (1% of output +1 V) at Resistive Load, <400 µS response time	
Load Regulation (Software)			± 0.2 V, <1 S response time	
DC offset			≤ ± 5 mV	
Poly-phase mode (3Ø4W) for per phase output setting			**430XAC**	**460XAC**
Voltage	Range		5.0~300 VAC (phase), 8.6~520 VAC (line), 150/300 V Auto Range	
	Accuracy		± (0.2% of setting + 3 counts)	
Frequency	Range		40~1000 Hz Full Range Adjust	
	Accuracy		± 0.03% of setting	
Starting & Ending Phase Angle	Range		0~359°	
	Accuracy		±1°(45~65 HZ)	
Current Hi Limit	5V~150 V		0.01~9.20 A	0.01~18.40 A
	5V~300 V		0.01~4.60 A	0.01~9.20 A
	Accuracy		± (2.0% of setting + 2 counts)	
OC Fold Back Response Time			<1.4 s	
Ramp-Up Timer (second)	Range		0.0~999.9 s	
	Accuracy		± (0.1% + 0.05 sec)	
Ramp-Down Timer (second)	Range		0.0~999.9 s	
	Accuracy		± (0.1% + 0.05 sec)	
Delay Timer	Range		1 s~999.9 s 0.1 m~999.9 min 0.1 h~999.9 h	
	Accuracy		± (0.1% + 0.1 sec)	
Dwell Timer	Range		0, 1s~999.9 h (0=continuous)	
	Accuracy		± (0.1% + 0.1 sec)	
Poly-phase mode (3Ø4W) for per phase measurement			**430XAC**	**460XAC**
Frequency	Range		0.0-1000 Hz	
	Resolution		0.1 Hz	
	Accuracy		± 0.1 Hz (501-1000 Hz Accuracy ± 0.2 Hz)	
Voltage	Range		0.0-420.0 V	
	Resolution		0.1 V	
	Accuracy		± (0.2% of reading + 3 counts)	

AC Power Source

Specifications – 400XAC

Poly-phase mode (3Ø4W) for per phase measurement			430XAC	460XAC
Current (RMS)	Range	L	0.005 A~1.200 A	0.005 A~2.400 A
		H	1.00 A~13.00 A	2.00 A~26.00 A
	Accuracy	L	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤3.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤7.2 A
		H	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤27.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF < 1.5 and Current (peak) ≤55.2 A
Current (peak)	Range		0.0 A~38.0 A	0.0 A~76.0 A
	Accuracy		± (1% of reading + 5 counts) at 40.0-70.0 Hz ± (1.5% of reading + 10 counts) at 70.1 - 500 Hz ± (1.5% of reading + 10 counts) at 501 - 1000 Hz and CF <1.5	
Power	Range	L	0.0 W~120.0 W	0.0 W~240.0 W
		H	100 W~1300 W	200 W~2600 W
	Accuracy	L	± (2% of reading +15 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +30 counts) at 501-1000 Hz and PF ≥0.5	
		H	± (2% of reading +5 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +15 counts) at 501-1000 Hz and PF ≥0.5	
Power Factor	Range		0 - 1.000	
	Accuracy		W / VA, Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0 VA~120.0 VA	0.0 VA~240.0 VA
		H	100 VA~1300 VA	200 VA~2600 VA
	Accuracy		V×A, Calculated value	
Power Reactive (Q)	Range	L	0.0 VAR ~ ± 120.0 VAR	0.0 VAR ~ ± 240.0 VAR
		H	0 VAR ~ ± 1300 VAR	0 VAR ~ ± 2600 VAR
	Accuracy		$\sqrt{(VA)^2 - (W)^2}$, Calculated value	
Crest Factor	Range		0 - 10.00	
	Accuracy		Ap / A, Calculated and displayed to two significant digits	
Poly-phase mode (3Ø4W) for Σ measurement			**430XAC**	**460XAC**
Frequency	Range		0.0-1000.0 Hz	
	Accuracy		± 0.1 Hz (501-1000 Hz Accuracy ±0.2 Hz)	
Voltage	Range		0.0-727.5 V	
	Calculated Formula		(A+B+C)/√3, Calculated and displayed to one significant digits	
Current (RMS)	Range	L	0.005A~1.200A	0.005A~2.400A
		H	1.00A~13.00A	2.00A~26.00A
	Calculated Formula	L	$\frac{\sum VA}{\sum V} / \sqrt{3}$	
		H		
Power	Range	L	0.0W~360.0W	0.0W~720.0W
		H	300W~3900W	600W~7800W
	Accuracy	L	$\frac{\sum P}{\sum VA}$ A Power + B Power + C Power, Calculated value	
		H		
Power Factor	Range		0 - 1.000	
	Resolution		0.001	
	Accuracy		Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0VA~360.0VA	0.0VA~720.0VA
		H	300VA~3900VA	600VA~7800VA
	Calculated Formula	L	$\sqrt{(\sum W)^2 + (\sum Q)^2}$	
		H		
Power Reactive (Q)	Range	L	0.0VAR~360.0VAR	0.0VAR~720.0VAR
		H	300VAR~3900VAR	600VAR~7800VAR
	Accuracy	L	A VAR + B VAR + C VAR, Calculated value	
		H		
Single-phase mode (1Ø2W) Setting			**430XAC**	**460XAC**
Voltage	Range		5.0~300 VAC, 150/300 V Auto Range	
	Resolution		0.1 V	
	Accuracy		± (0.2% of setting + 3 counts)	

AC Power Source

Specifications – 400XAC

Poly-phase mode (3Ø4W) for per phase measurement			430XAC	460XAC
Current (RMS)	Range	L	0.005 A~1.200 A	0.005 A~2.400 A
		H	1.00 A~13.00 A	2.00 A~26.00 A
	Accuracy	L	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤3.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤7.2 A
		H	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤27.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF < 1.5 and Current (peak) ≤55.2 A
Current (peak)	Range		0.0 A~38.0 A	0.0 A~76.0 A
	Accuracy		± (1% of reading + 5 counts) at 40.0-70.0 Hz ± (1.5% of reading + 10 counts) at 70.1 - 500 Hz ± (1.5% of reading + 10 counts) at 501 - 1000 Hz and CF <1.5	
Power	Range	L	0.0 W~120.0 W	0.0 W~240.0 W
		H	100 W~1300 W	200 W~2600 W
	Accuracy	L	± (2% of reading +15 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +30 counts) at 501-1000 Hz and PF ≥0.5	
		H	± (2% of reading +5 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +15 counts) at 501-1000 Hz and PF ≥0.5	
Power Factor	Range		0 - 1.000	
	Accuracy		W / VA, Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0 VA~120.0 VA	0.0 VA~240.0 VA
		H	100 VA~1300 VA	200 VA~2600 VA
	Accuracy		V×A, Calculated value	
Power Reactive (Q)	Range	L	0.0 VAR ~ ± 120.0 VAR	0.0 VAR ~ ± 240.0 VAR
		H	0 VAR ~ ± 1300 VAR	0 VAR ~ ± 2600 VAR
	Accuracy		$\sqrt{(VA)^2 - (W)^2}$, Calculated value	
Crest Factor	Range		0 - 10.00	
	Accuracy		Ap / A, Calculated and displayed to two significant digits	
Poly-phase mode (3Ø4W) for Σ measurement			**430XAC**	**460XAC**
Frequency	Range		0.0-1000.0 Hz	
	Accuracy		± 0.1 Hz (501-1000 Hz Accuracy ±0.2 Hz)	
Voltage	Range		0.0-727.5 V	
	Calculated Formula		(A+B+C)/√3, Calculated and displayed to one significant digits	
Current (RMS)	Range	L	0.005A~1.200A	0.005A~2.400A
		H	1.00A~13.00A	2.00A~26.00A
	Calculated Formula	L	$\frac{\sum VA}{\sum V} / \sqrt{3}$	
		H		
Power	Range	L	0.0W~360.0W	0.0W~720.0W
		H	300W~3900W	600W~7800W
	Accuracy	L	$\frac{\sum P}{\sum VA}$ A Power + B Power + C Power, Calculated value	
		H		
Power Factor	Range		0 - 1.000	
	Resolution		0.001	
	Accuracy		Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0VA~360.0VA	0.0VA~720.0VA
		H	300VA~3900VA	600VA~7800VA
	Calculated Formula	L	$\sqrt{(\sum W)^2 + (\sum Q)^2}$	
		H		
Power Reactive (Q)	Range	L	0.0VAR~360.0VAR	0.0VAR~720.0VAR
		H	300VAR~3900VAR	600VAR~7800VAR
	Accuracy	L	A VAR + B VAR + C VAR, Calculated value	
		H		
Single-phase mode (1Ø2W) Setting			**430XAC**	**460XAC**
Voltage	Range		5.0~300 VAC, 150/300 V Auto Range	
	Resolution		0.1 V	
	Accuracy		± (0.2% of setting + 3 counts)	

AC Power Source

Specifications – 400XAC

Single-phase mode (1Ø2W) Setting			430XAC	460XAC
Frequency	Range		40~1000 Hz Full Range Adjust	
	Resolution		0.1 Hz at 40.0~99.9 Hz , 1 Hz at 100~1000 Hz	
	Accuracy		± 0.03% of setting	
Starting & Ending Phase Angle	Range		0~359°	
	Resolution		1°	
	Accuracy		± 1°(45~65 HZ)	
Current Hi Limit	5V~150V		0.01~27.60 A	0.01~55.20 A
	5V~300V		0.01~13.80 A	0.01~27.60 A
	Accuracy		± (2.0% of setting + 2 counts)	
OC Fold Back Response Time			< 1.4 s	
Single-phase mode (1Ø2W) measurement			**430XAC**	**460XAC**
Frequency	Range		0.0~1000 Hz	
	Accuracy		± 0.1 Hz (501~1000 Hz Accuracy ±0.2 Hz)	
Voltage	Range		0.0~420.0 V	
	Accuracy		± (0.2% of reading + 3 counts)	
Current (RMS)	Range		0.05 A~39.00 A	0.05 A~78.00
	Accuracy		± (1% of reading +5 counts) at 40.0~500 Hz ± (1% of reading +5 counts) at 501~1000 Hz, CF <1.5 and Current (peak) ≤82.8 A	± (1% of reading +5 counts) at 40.0~500 Hz ± (1% of reading +5 counts) at 501~1000 Hz, CF <1.5 and Current (peak) ≤165.6 A
Current (peak)	Range		0.0 A~114.0 A	0.0 A~228.0 A
	Accuracy		± (1% of reading + 5 counts) at 40.0~70.0 Hz ± (1.5% of reading + 10 counts) at 70.1~500 Hz ± (1.5% of reading + 10 counts) at 501~1000 Hz and CF<1.5	
Power	Range		0 W~3900 W	0 W~7800 W
	Accuracy		± (2% of reading +5 counts) at 40.0~500 Hz and PF ≥0.2 ± (2% of reading +15 counts) at 501~1000 Hz and PF ≥0.5	
Power Factor	Range		0 - 1.000	
	Accuracy		W / VA, Calculated and displayed to three significant digits	
Power Apparent	Range		0 VA~3900 VA	0 VA~7800 VA
	Accuracy		V×A, Calculated value	
Power Reactive (Q)	Range		0 VAR~3900 VAR	0 VAR~7800 VAR
	Accuracy		$\sqrt{(VA)^2 - (W)^2}$, Calculated value	
Crest Factor	Range		0 - 10.00	
	Accuracy		Ap / A, Calculated and displayed to two significant digits	
Poly-phase mode (1Ø3W) for per phase output setting			**430XAC**	**460XAC**
Voltage	Range		5.0~300 VAC (phase), 10.0~600 VAC (line), 150/300 V Auto Range	
	Accuracy		± (0.2% of setting + 3 counts)	
Frequency	Range		40~1000 Hz Full Range Adjust	
	Accuracy		± 0.03% of setting	
Starting & Ending Phase Angle	Range		0~359°	
	Accuracy		± 1°(45~65 HZ)	
Current RI Limit	5V~150V		0.01~9.20 A	0.01~18.40 A
	5V~300V		0.01~4.60 A	0.01~9.20 A
	Accuracy		± (2.0% of setting + 2 counts)	
OC Fold Back Response Time			<1.4 s	
Poly-phase mode (1Ø3W) for per phase measurement			**430XAC**	**460XAC**
Frequency	Range		0.0-1000 Hz	
	Accuracy		± 0.1 Hz (501-1000 Hz Accuracy ±0.2 Hz)	
Voltage	Range		0.0-420.0 V	
	Accuracy		± (0.2% of reading + 3 counts)	
Current (RMS)	Range	L	0.005 A~1.200 A	0.005 A~2.400 A
		H	1.00 A~13.00 A	2.00 A~26.00 A
	Accuracy	L	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤3.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤7.2 A
		H	± (1% of reading + 5counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤27.6 A	± (1% of reading +5 counts) at 40.0-500 Hz ± (1% of reading +5 counts) at 501-1000 Hz, CF <1.5 and Current (peak) ≤55.2 A

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AC Power Source

Specifications – 400XAC

Poly-phase mode (1Ø3W) for per phase measurement			430XAC	460XAC
Current (peak)	Range		0.0 A~38.0 A	0.0 A~76.0 A
	Accuracy		± (1% of reading + 5 counts) at 40.0-70.0 Hz ± (1.5% of reading + 10 counts) at 70.1-500 Hz ± (1.5% of reading + 10 counts) at 501-1000 Hz and CF <1.5	
Power	Range	L	0.0 W~120.0 W	0.0 W~240.0 W
		H	100 W~1300 W	200 W~2600 W
	Accuracy	L	± (2% of reading +15 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +30 counts) at 501-1000 Hz and PF ≥0.5	
		H	± (2% of reading +5 counts) at 40.0-500 Hz and PF ≥0.2 ± (2% of reading +15 counts) at 501-1000 Hz and PF ≥0.5	
Power Factor	Range		0 - 1.000	
	Accuracy		W / VA, Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0 VA~120.0 VA	0.0 VA~240.0 VA
		H	100 VA~1300 VA	200 VA~2600 VA
	Accuracy		VxA, Calculated value	
Power Reactive (Q)	Range	L	0.0 VAR~120.0 VAR	0.0 VAR~240.0 VAR
		H	0 VAR~1300 VAR	0 VAR~2600 VAR
	Accuracy		$\sqrt{(VA)^2 - (W)^2}$, Calculated value	
Crest Factor	Range		0-10.00	
	Accuracy		Ap / A, Calculated and displayed to two significant digits	
Poly-phase mode (1Ø3W) for L1-L2 measurement			**430XAC**	**460XAC**
Frequency	Range		0.0-1000.0 Hz	
	Accuracy		± 0.1 Hz (501-1000 Hz Accuracy ± 0.2 Hz)	
Voltage	Range		0.0-840.0V	
	Accuracy		L1 Voltage + L2 Voltage, Calculated and displayed to one significant digits	
Current (RMS)	Range	L	0.005A~1.200A	0.005A~2.400A
		H	1.00A~13.00A	2.00~26.00A
	Calculated Formula	L	$\frac{\sum VA}{\sum V}$	
		H		
Power	Range	L	0.0W~240.0W	0.0W~480.0W
		H	200W~2600W	400W~5200W
	Accuracy	L	L1 Power + L2 Power, Calculated value	
		H		
Power Factor	Range		0 - 1.000	
	Calculated Formula		(L1 P + L2 P) / (L1 VA + L2 VA), Calculated and displayed to three significant digits	
Power Apparent (VA)	Range	L	0.0W~240.0VA	0.0W~480.0VA
		H	200W~2600VA	± 400W~5200VA
	Calculated Formula	L	$\sqrt{(\sum W)^2 + (\sum Q)^2}$ Calculated value	
		H		
Power Reactive (Q)	Range	L	0.0VAR ~ ± 240.0VAR	0.0VAR ~ ± 480.0VAR
		H	± 200VAR ~ ± 2600VAR	± 400VAR ~ ± 5200VAR
	Calculated Formula	L	L1 VAR + L2 VAR, Calculated value	
		H		
DC OUTPUT				
Max. Power			3000 W	6000 W
Max. Current	0-210 V		14.4 A	28.8 A
	0-420 V		7.2 A	14.4 A
Ripple and Noise (RMS)			Range: 5-210 V <700 mV Range: 5-420 V <1100 mV	
Ripple and Noise (p-p)			<4.0 Vp-p	
DC SETTINGS				
Voltage	Range		5-210 V / 5-420 V Selectable	
	Accuracy		± (0.2% of setting + 3 counts)	
Current Hi Limit	5 V-210 V		14.40 A	0.10 - 28.80 A
	5 V-420 V		7.20 A	0.10 - 14.40 A
	Accuracy		± (2.0% of setting + 2 counts)	
OC Fold Back Response Time			<1.4 s	

AC Power Source

Specifications – 400XAC

DC MEASUREMENT		430XAC	460XAC
Voltage	Range	0.0-420.0 V	
	Accuracy	± (0.2% of setting + 5 counts)	
Current	Range	0.05 A~19.50 A	0.05 A~39.00 A
	Accuracy	± (1% of reading +5 counts)	
Power	Range	0 W~3900 W	0 W~7800 W
	Accuracy	± (2% of reading +5 counts)	
PROTECTION			
Software OCP		Over Current 110% of full rated current >1 second	
Output Short Shut Down Speed		<1 second	
Software OPP		When over Power 105 ~ 110% of full power >5 second. When over Power >110% of full power <1 second.	
Software OTP		Temperature over 95 degree C on the power amp and PFC heatsink	Temperature over 120 degree C on the power amp and PFC heatsink
Software OVP	L	When output frequency < 100Hz, maximum voltage deviation + 5V When output frequency 101-500Hz, maximum voltage deviation + 15V When output frequency 501-1000Hz, maximum voltage deviation + 20V	
	H	When output frequency < 100Hz, maximum voltage deviation + 10V When output frequency 101-500Hz, maximum voltage deviation + 30V When output frequency 501-1000Hz, maximum voltage deviation + 40V	
Software LVP	L	When output frequency < 100Hz, maximum voltage deviation -5V > 0.5 second When output frequency 101-500Hz, maximum voltage deviation -15V > 0.5 second When output frequency 501-1000Hz, maximum voltage deviation -20V > 0.5 second	
	H	When output frequency < 100Hz, maximum voltage deviation -10V > 0.5 second When output frequency 101-500Hz, maximum voltage deviation -30V > 0.5 second When output frequency 501-1000Hz, maximum voltage deviation -40V > 0.5 second	
Reverse Current Protection (RCP)		Over 75W	
GENERAL			
Transient (only for 40~70 Hz)		Trans-Volt 0.0-300.0 V Resolution 0.1 V Trans-Site 0°~359° Resolution 1° Trans-Time 0.5-999.9 mS Resolution 0.1 mS Trans-Cycle 0-9999, 0-Constant	
Operation Key Feature		Soft key, Numeric key, Rotary Knob	
Remote Input Signal		Test, Reset, Interlock, Recall program memory 1 through 7	
Remote Output Signal		Pass, Fail , Test-in Process	
Key Lock		Yes, Password Driven	
Memory		50 memories, 9 steps/memory	
Ext Trigger		START / END / BOTH / OFF in the Program mode, Output Signal 5 V, BNC type	
Alarm Volume Setting		Range: 0-9 ; 0 = OFF, 1 is softest volume, 9 is loudest volume.	
Graphic Display		240 x 64 dot resolution Monographic LCD/Contrast 9 Levels 1-9	
PFC		PF ≥0.97 at Full load	
Efficiency		≥78% (at Full load)	
Auto Loop cycle		0 = Continuous, OFF, 2~9999	
Over Current Fold Back		On/Off, Setting On when output current over setting Hi-A value it will fold back output voltage to keep constant output current is setting Hi-A value, Response time <1400ms	
Safety Agency		CE Listed	
Dimensions (W x H x D)		430 x 400.5 x 500 mm	
		16.93 x 15.77 x 19.69 in	
Net Weight		105.8 lbs (48 kg)	125.6 lbs (57 kg)
Operation Environment		0-40°/20-80% RH	

AC Power Source

8500 Series Programmable

Programmable AC Power Source

The EEC 8500 Series is the most power dense and functionality rich power source in our history, giving you improved capability, functionality, and a reduced footprint all in one series. This series is manufactured for simulating common grid faults, voltage dips, and other power abnormalities. The 8500 Series provides an output voltage up to 310 VAC and an output frequency ranging from 5 Hz-1,200 Hz making it the obvious solution for all kinds of applications. Not to mention, an enhanced interface to all models completely designed with the end- user in mind. Our 8500 Sources can be configured as a simple AC Power Source in Standard mode or, as an upgraded option, Programmable mode. Programmable mode adds the benefits of a sweep of voltage, frequencies, transients, and DC bias over the course of a single sequence or several different tests. The 8500 Series includes the following models: 8505, 8512, 8520, 8530, 8540, & 8560.

Features

- 14 pre-configured waveforms allow you to simulate nearly any abnormal condition on your DUT by simply selecting the waveform you would like to output.
- With expanded output voltage to 310VAC and output frequency from 5Hz to 1200Hz, the 8500 provides a single, simple solution to meet a wide variety of testing applications.
- Advanced mode option allows you to easily simulate voltage surges, voltage drops, voltage pulses, voltage sweeps, DC bias, and frequency sweeps to help make meeting the specific needs of your testing application easier than it has ever been.
- High power density with a reduced overall footprint offers you the flexibility you need to use your 8500 Series power source in either a bench top or rack mount application.
- Legacy Mode allows you to keep your command set from your 6000, 7000, or 300XAC series.

AC Power Source

Modes

INPUT	STANDARD MODE	ADVANCED MODE
Manual Operation	•	•
PC Interface (USB/LAN standard, optional GPIB)	•	•
PowerTRAC Compatibility	•	•
Voltage, Frequency, Transient, and DC Bias Sweeps		•

Specifications – 8500

8500 SPECIFICATIONS							
MODEL			8505	8512	8520	8530	8540	8560
AC OUTPUT								
Phase			1Ø2W					
Power Rating			500VA	1250VA	2kVA	3kVA	4kVA	6kVA
Voltage	Range		0 - 310V, 155/310V Auto Range					
	Resolution		0.1V					
	Accuracy		±(0.2% of setting + 3counts)				±(0.2% of setting + 6counts)	
Max. Current (r.m.s)1	0 - 155V		5A	12.5A	20A	30A	40A	60A
	0 - 310V		2.5A	6.25A	10A	15A	20A	30A
Frequency	Range		DC, 5 - 1200Hz Full Range Adjust					
	Resolution		0.1Hz at 0.0 - 999.9Hz , 1Hz at 1000 - 1200Hz					
	Accuracy2		±0.03% of setting(≥ 15Hz) , ±0.3% of setting(<15Hz)					
Total Harmonic Distortion (THD)3			≤ 0.3% @ 50/60Hz (Full Resistive Load)					
Crest Factor4			≥ 3	≥ 3	≥ 3	2.5	≥ 3	2.5
Inrush Current			4	4	4	3	4	3
Line Regulation			± 0.1V					
Load Regulation5			±0.2V,<1s response time					
DC OUTPUT								
Power rating			300W	750W	1200W	1800W	2400W	3600W
Voltage	Range		0 - 420V, 210/420V Auto Range					
	Resolution		0.1V					
	Accuracy		±(0.2% of setting + 3counts)			±(0.2% of setting + 6counts)		
Max. Current (r.m.s)2	0 - 210V		3.0A	7.5A	12.0A	18.0A	24.0A	36.0A
	0 - 420V		1.5A	3.75A	6.0A	9.0A	12.0A	18.0A
Ripple and Noise (r.m.s)6	Range	L	< 700mV				< 800mV	
		H	< 700mV				< 800mV	
Ripple and Noise (p-p)6			< 6.0Vp-p				< 7.0Vp-p	
Load Regulation5			±0.2V,<1s response time					

AC Power Source

Specifications – 8500

8500 SPECIFICATIONS							
MODEL		8505	8512	8520	8530	8540	8560
SETTINGS							
Start/End Angle	Range	0-359					
	Resolution	1					
Current Hi Limit (OC Fold=OFF) OC Fold Back (OC Fold = ON)	0 - 155V	0.05-5.00A	0.05-12.50A	0.05-20.00A	0.10-30.00A	0.10-40.00A	0.10-60.00A
	0 - 310V	0.05-2.50A	0.05-6.25A	0.05-10.00A	0.10-15.00A	0.10-20.00A	0.10-30.00A
	Resolution	0.01A					
	Accuracy	± (2.0% of setting + 4 counts)					
OC Fold Back Response Time[7]		< 1.4s					
Time	Range	1.0 - 999.9h/ 1.0 - 999.9m /1.0 - 999.9s /0.2 - 999.9ms					
	Resolution	0.1h/ 0.1m/ 0.1s/ 0.1ms					
	Accuracy	± (0.1% + 0.1 h)/ ± (0.1% + 0.1 m)/ ± (0.1% + 0.1 s)/ ± (0.1% + 0.1 ms)					
Time unit		h, m, s, ms					
Ramp up	Range	0.1 - 999.9s, 0 = OFF					
	Resolution	0.1s					
	Accuracy	± (0.1% + 1 Cycle) at Output frequency ≤ 10Hz/ ± (0.1% + 0.1 s) at Output frequency > 10Hz					
INPUT							
Phase		1Ø					1Ø or 3Ø
Voltage		100 - 240 V ± 10%			200 - 240 V ± 10%		1Ø/3Ø3W: 200-240V±10% 3Ø4W: 346 - 416V ± 10%
Max. Current		8A	18A	30A	22A	30A	1Ø :45A/3Ø3W: 38A 3Ø4W: 22A
Frequency		50 / 60 Hz					
Power Factor[8]		≥ 0.93	≥ 0.97				

AC Power Source

Specifications – 8500

8500 SPECFICIATIONS								
MODEL			8505	8512	8520	8530	8540	8560
MEASUREMENT								
Voltage(AC)	Range		0 - 310V, 155/310V Auto Range					
	Resolution		0.1V					
	Accuracy[2]		±(0.2% of reading + 3counts) at voltage > 5V				±(0.2% of reading + 6counts) at voltage > 5V	
Voltage(DC)	Range		0 - 420V, 210/420V Auto Range					
	Resolution		0.1V					
	Accuracy[2]		±(0.2% of reading + 3counts) at voltage > 5V				±(0.2% of reading + 6counts) at voltage > 5V	
Current[9]	Range	L	0.050 - 1.200A	0.050 - 5.000A		-		
		Resolution	1.00 - 6.25A	4.00 - 15.62A	4.00 - 25.00A	0.10 - 37.50A	0.10 - 50.00A	0.10 - 75.00A
	Resolution[3]	L	0.001A			-		
		H	0.01A					
	Accuracy[2]	L	± (1% of reading + 10counts) at CF < 3			-		
		H	± (0.5% of reading +8counts)			± (0.5% of reading +12counts)		
Frequency	Range		0.0 - 1200Hz					
	Resolution		0.1Hz / 1Hz					
	Accuracy		±0.1Hz @ 5 - 999.9Hz. / ±1Hz @ 1000 - 1200Hz					
Power[10] (AC,DC)	Range	L	0.0 - 75.0W	0.0 - 300.0W		-		
		H	60 - 625W	240 - 1563W	240 - 2500W	0 - 3750W	0 - 5000W	0 - 7500W
	Resolution	L	0.1W			-		
		H	1W					
	Accuracy	L	± (1% of reading +10 counts) at PF ≥ 0.35 and voltage > 5V	± (2% of reading +15 counts) at PF ≥ 0.35 and voltage > 5V		-		
		H	± (1% of reading +5 counts) at PF ≥ 0.35 and voltage > 5V	± (1% of reading +10 counts) at PF ≥ 0.35 and voltage > 5V		± (1% of reading +20 counts) at PF ≥ 0.35 and voltage > 5V		
Power Factor	Range		0.000 - 1.000					
	Resolution		0.001					
	Accuracy		W/VA, Calculated and displayed to three significant digits					
Power Apparent (VA)	Range	L	0.0 - 75.0VA	0.0 - 300.0VA		-		
		H	60 - 625VA	240 - 1563VA	240 - 2500VA	0 - 3750VA	0 - 5000VA	0 - 7500VA
	Resolution	L	0.1VA			-		
		H	1VA					
	Calculated Formula		$\sqrt{V \times A}$, Calculated value					
Peak Current Measurement	Range		0.0 - 20.0Apk	0.0 - 50.0Apk	0.0 - 80.0Apk	0.0 - 120.0Apk	0.0 -160.0Apk	0.0 -240.0Apk
	Resolution		0.1A					
	Accuracy		± (0.5% of reading +8counts)				± (0.5% of reading +12counts)	
Reactive Power Measurement	Range	L	0.0 - 75.0VAR	0.0 - 300.0VAR		-		
		H	60 - 625VAR	240 - 1563VAR	240 - 2500VAR	0 - 3750VAR	0 - 5000VAR	0 - 7500VAR
	Resolution	L	0.1VAR			-		
		H	1VAR					
	Calculated Formula		$\sqrt{(VA)^2 - (VA)^2}$, Calculated value					
Crest Factor Measurement	Range		0.00 - 10.00					
	Resolution		0.01					
	Accuracy		Ap / A					

AC Power Source

Specifications – 8500

8500 SPECFICIATIONS							
MODEL		8505	8512	8520	8530	8540	8560
GENERAL							
PLC Remote Control		Input:Output ON, Output OFF/Reset, Output Verify, Interlock,File Recall M1 through M7, Trigger Output: Fail, Test-in-Process					
Rear Input		AC Outlet	Terminal Block				
Memory	Std.	10 x 100 (file x sequence) / MANUAL only 10 file no sequence					
	Adv.	100 x 100 (file x sequence) / MANUAL, STEP, PULSE only 100 file no sequence					
Sync Signal/ Ext Trigger	Std.	ON/OFF					
	Adv.	ON / START / END / BOTH / OFF / EVENT, Output Signal 5V ,BNC type					
Display		4.3" TFT LCD					
Protection		OCP, OVP, OPP, OTP, LVP, RCP and FAN.					
Interface		Standard USB, PLC remote, LAN, Analog / Option GPIB, RS-232					
Eeciency (at Full load)[11]		≥ 74%	≥ 81%	≥ 84%	≥ 83%	≥ 84%	≥ 84%
Response Time (Tr/Tf)[12]		275-400usec (Typical)					
Electromagnetic compatibility (EMC)		Complies with the requirements of the following directive and standards. EMC Directive 2014/30/EU EN 55011:2016/A1:2017 (Group 1, Class A), EN 61326-1:2013, EN 61326-2-1:2013, EN 61000-3-11:2000, EN 61000-3-12:2011					
Safety		Complies with the requirements of the following directive and standards. Low Voltage Directive 2014/30/EU, EN 61010-1					
Op. / Non-Op. Temp. / Humidity[13]		0 to 40°C/-40 to 75°C/20 to 80%RH					
Dimension (W x H x D), mm		430 x 88 x 500	430 x 88 x 500	430 x 88 x 500	430 x 88 x 500	430 x 176 x 500	430 x 176 x 500
Weight		15KG	15KG	15KG	15KG	28KG	28KG
STANDARD ACCESSORIES							
Interlock Disable Key (1505)		X1					
USB Cable		X1					
Shorting bar		X1					
Power Cord (125Vac/10A)		X1	-				

AC Power Source

6700 Series Linear Programmable

Linear Programmable AC Power Source

The 6700 Series Linear Programmable AC Power Source delivers clean, reliable power with versatile functionality. Its ultra-low noise design is ideal for sensitive applications such as networking communication, audio & video equipment, and surveillance systems. Experience precise and interference-free performance, ensuring optimal operation for your critical equipment

Key Highlight

0.1mA/0.01W high resolution measurement feature (optional).

EEC proprietary Over Current Fold (OCF) function automatically adjust voltages, maintaining current for activating the DUT.

Ultra-low noise design on output voltage.

Wide output voltage range of 0-600Vac and frequency range of 45 - 1000Hz (optional).

Integrated with the latest high density power technologies with compact design; 1kVA with 89mm height only, which require less space for the tests.

The rapid transient reaction allows the waveforms to restore within 100us whenever loads are either added or removed instantly.

AC Power Source

Specifications – 6700 Series (APAC Only)

6700 Series							
MODEL			6705	6710	6720	6730	6750
AC OUTPUT							
Phase			1Ø				
Power Rating			500VA	1kVA	2kVA	3kVA	5kVA
Voltage	Range		0 - 300V, 150/300V Auto or 0 - 600V, 300/600V Auto (Optional 0 - 600V)				
	Resolution		0.1/0.2V				
	Accuracy		±(0.5% of setting + 2 counts)				
Max. Current (r.m.s)	0 - 150V		4.2A	8.4A	16.8A	25.2A	42 A
	0 - 300V		2.1A	4.2A	8.4A	12.6A	21A
Max. Current (r.m.s) for Optional 0 - 600V	0 - 300V		2.1A	4.2A	8.4A	12.6A	21A
	0 - 600V		1.05A	2.1A	4.2A	6.3A	10.5A
Max. Current (r.m.s) for Optional 0 – 1kV	0 - 500V		-	2A	4A	-	-
	0 - 1kV		-	1A	2A	-	-
Frequency	Range		45 - 500Hz/45 - 1kHz (Optional 45Hz - 1kHz) Full Range Adjust				
	Resolution		0.1Hz at 45 - 99.9Hz, 1Hz at 100 - 1kHz				
	Accuracy		± 0.02% of setting				
Total Harmonic Distortion (THD)			< 0.3% at 110/220V & 50/60Hz (Resistive Load)				
Inrush Current			4 times rated Current (r.m.s)				
Crest Factor			4 times rated Current (r.m.s)				
Line Regulation			0.1% max for ± 10% line change				
Load Regulation			≤ 0.5% (Resistive Load)				
INPUT							
Phase			1Ø				
Voltage			115/230VAc ± 15%		230VAc ± 15%		
Max. Current			16/8A	30/16A	30A	50A	75A
Frequency			47 - 63 Hz				
Power Factor			0.7				
MEASUREMENT							
Voltage	Range		0.0 - 300.0V/0.0 - 600.0V/0.0 - 1kV	0.0-300.0V/0.0-600.0V/0-1kV		0.0-300.0V/0.0-600.0V	
	Resolution		0.1V/0.2V/1V				
	Accuracy		±(0.5% of reading + 2 counts)				
Current	Range	L	0.000 - 3.500A				0.000 - 7.000A
		H	3.00 - 35.00A				6.00 - 42.00A
	Resolution	L	0.001A				0.002A
		H	0.01A				0.02A
	Accuracy	L	±(0.5% of reading + 5counts) for 5 - 300V/±(0.5% of reading + 10 counts) for 5 - 600V, 5 - 1kV				
		H	±(0.5% of reading + 3 counts) at Voltage > 5V				
Current for Optional High Resolution Meter	Range		2.0 - 350.0mA		-	-	-
	Resolution		0.1mA		-	-	-
	Accuracy		±(0.6% of reading + 5counts) ±(1% of reading + 5counts) for Optional 0 - 600V		-	-	-
Frequency	Range		0.0 - 1000.0Hz				
	Resolution		0.1Hz				
	Accuracy		± 0.1Hz at 45.0 - 500.0Hz/± 0.5 Hz at 501.0 - 1000.0Hz				
Power	Range	L	0.0 - 350.0W				
		H	300 - 4000W				
	Resolution	L	0.1W				
		H	1W				
	Accuracy	L	±(0.6% of reading + 5 counts)/±(0.5% of reading + 30 counts)				
		H	±(0.6% of reading + 2 counts)/±(0.5% of reading + 5 counts)				

AC Power Source

Specifications – 6700 Series (APAC Only)

MODEL	6705	6710	6720	6730	6750
GENERAL					
Surge/Drop	SD-Volt : 0.0 - 300.0V, Resolution : 0.1V SD-Site : 0 - 20ms at SD-Cont. : ON, 0 - 99ms at SD-Cont. : OFF, Resolution : 1ms SD-Time : 0 - 20ms at SD-Cont. : ON, 0 - 99ms at SD-Cont. : OFF, Resolution : 1ms SD-Cont. : ON/OFF				
Remote Input Signal Interface (Optional)	Test, Reset, Recall memory 1 through 7				
Remote Output Signal	Pass, Fail, Test-in Process				
I/P Terminal	Inlet	Terminal			
Memory	50 memories, 9 steps/memory				
Sync Output Signal	Output Signal 10V, BNC type, Between the sync signal and the output voltage will be 0.5ms time difference				
Display	240 x 64 dot resolution Monographic LCD/Contrast 9 Levels 1 - 9				
Efficiency	≥ 40% (at Full Load)				
Protection	OCP, OVP, OPP, OTP, LVP, Short Circuit ; Alarm and shutdown				
Interface	Standard USB & RS232, Optional GPIB, PLC Remote Input Card				
Op./Non-Op. Temp./Humidity	0 to 40°C/-40 to 75°C/20 to 80%RH				
Dimension (W x H x D), mm	430 x 89 (111.5) x 400	430 x 89 (111.5) x 560 (588)	430 x 268 (355) x 650 (730)	430 x 624 (711) x 650 (730)	430 x 624 (711) x 650 (730)
Weight	24kg	39kg	90kg	205kg	205kg
INBOX ACCESSORIES					
1224 USB Cable*1					

AC Power Source

6900S Series A Simple AC Power Source,

Valuable in Performance

The 6900S Series AC Power Source provides clean, reliable power for precise testing of your electronic designs and prototypes. With an intuitive interface and flexible operation, it adapts effortlessly to diverse testing needs, from home appliances and power adapters to LEDs and laboratory applications. Offering a wide range of power selection options, the 6900S Series ensures comprehensive test coverage. Now featuring an optional RS-232 interface, it streamlines manufacturing automation, making your production process more efficient than ever

Key Highlight

- Simulate worldwide AC power conditions with a wide and flexible combination of adjustments for output voltage ranges of 0-310V and frequency range of 40-450Hz.
- High crest factor and inrush current capabilities provide more powerful sources.

EEC proprietary Over Current Fold (OCF) function automatically aadjust voltages, maintaining current for activating the DUT.

- Superior clean power delivers low THD of 0.3% when powered at 50Hz or 60Hz.
- Effective cooling performance for a better reliability and maximum business uptime.
- Intuitive user interface design for easy parameter settings.
- Three fast recall settings to increase operational efficiencies.
- Dedicated LED indicator for better visibility and reading accuracy.
- Compact size, only 2U (89mm) height with 2kVA rating (6905S, 6910S, 6920S Models).
- Optional RS-232 interface simplifies automation, making it easier to integrate manufacturing processes.

AC Power Source

Specifications – 6900S Series (APAC Only)

6900S Series							
MODEL			6905S	6910S	6920S	6930S	6950S
AC OUTPUT							
Phase			1Ø				
Power Rating			500VA	1kVA	2kVA	3kVA	5kVA[1]
Voltage	Range		0 - 310V				
	Resolution		0.1V				
	Accuracy		±(1% of setting + 0.1% f.s)		±(1% of setting + 0.2% f.s)		
Max. Current (r.m.s)	0 - 155V		4.6A	9.2A	18.4A	27.6A	46.0A
	0 - 310V		2.3A	4.6A	9.2A	13.8A	23.0A
Frequency	Range		40 - 450Hz Full Range Adjust				
	Resolution		0.1Hz at 40.0 - 99.9Hz , 1Hz at 100 - 450Hz				
	Accuracy		±0.03% of setting				
Total Harmonic Distortion (THD)			< 0.3% at 110/220V & 50/60Hz (Resistive Load)				
Inrush Current			4 times rated Current(r.m.s)				
Crest Factor			3 times rated Current(r.m.s)				
Line Regulation			± 0.1V				
Load Regulation			±(0.5% of output + 0.5V) at Resistive Load				
INPUT							
Phase			1Ø				
Voltage			110/220VAc ± 10%		220VAc ± 10%		
Max. Current			10/5A	20/10A	20A	30A	50A
Frequency			47 - 63Hz				
Power Factor			≥ 0.67				
MEASUREMENT							
Voltage	Range		0.0 - 400.0V				
	Resolution		0.1V				
	Accuracy		±(1% of reading + 0.1% f.s)		±(1% of reading + 0.2% f.s)		
Current	Range	L	0.005 - 0.600A	0.005 - 1.200A	0.005 - 2.400A	-	-
		H	0.50 - 6.50A	1.00 - 13.00A	2.00 - 26.00A	0.05 - 39.00A	0.05 - 65.00A
	Resolution	L	0.001A			-	-
		H	0.01A				
	Accuracy	L	±(1% of reading + 0.005A) at voltage > 5V			-	-
		H	±(1% of reading +0.05A)				
Frequency	Range		0.0 - 450.0Hz				
	Resolution		0.1Hz				
	Accuracy		±0.1Hz				
Power	Range	L	0.0 - 60W	0.0 - 120W	0.0 - 240W	-	-
		H	50 - 650W	100 - 1300W	200 - 2600W	0 - 3,900W	0 - 6,500W
	Resolution	L	0.1W			-	-
		H	1W				
	Accuracy	L	±(2% of reading +1.5W)		±(2% of reading + 3W)	-	-
		H	±(2% of reading + 5W)		±(2% of reading + 10W)	±(2% of reading + 5W)	

AC Power Source

Specifications – 6900S Series (APAC Only)

MODEL	6905S	6910S	6920S	6930S	6950S
GENERAL					
I/P Terminal	Terminal				
Memory	3 memories				
Display	Green LED				
Efficiency	≥ 78% (at Full Load)	≥ 80% (at Full Load)			
Protection	OCP, OVP, OPP, OTP, Short Circuit ; Alarm and shutdown				
Op./Non-Op. Temp./Humidity	0 to 40°C/-40 to 75°C/20 to 80%RH				
Dimension (W x H x D), mm	430 x 89 (111) x 410 (429)	430 x 89 (111) x 410 (429)	430 x 89 (111) x 510 (529)	430 x 222 (246) x 526 (536)	430 x 222 (246) x 526 (536)
Weight	18.2kg	18.2kg	30kg	65kg	65kg
INBOX ACCESSORIES					
Power Cable for 6905S, 6910S					

Electrical Safety Tester

ASSOCIATED® RESEARCH
AN IKONIX BRAND
Authorized Reseller

HYAMP® Ground Bond Tester

Compact in Size, Completes Your Safety

The HYAMP® 3240 (formerly known as eec EGB-300) is AR's next-generation ground bond (GB) tester brings together AC and DC testing capability in a compact size design. Offering a maximum 40A current measurement capability and high-accuracy performance, the HYAMP® 3240 embodies AR's commitment on delivering high quality products to customers.It is the ideal solution for electrical hardware tests, ranging from home appliances to audio/video equipment. Despite its compact design, the HYAMP® 3240 does not come up short on adaptability. Interlink to an HYAMP® 3240 hipot tester for a 5-in-1 testing system. Which can be conveniently mounted in a 2U rack to create a complete ACW, DCW, IR, AC GB, and DC GB testing solution.

GROUND BOND TEST MODE		
Output Voltage (Open Circuit Voltage)	Range: Resolution: Accuracy:	3.00 – 8.00 VAC/DC 0.01 VAC/DC ± (3% of setting + 3 counts)
Output Frequency	50 or 60 Hz, User Selectable/DC	
Output Current	Range: Resolution: Accuracy:	0 – 150 mΩ for 30.01 – 40.00 A 0 – 200 mΩ for 10.01 – 30.00 A 0 – 600 mΩ for 1.00 – 10.01 A 0.1 A ± (3% of setting + 3 counts)
Maximum Loading	Range: Resolution: Accuracy:	1.00 – 10.00 A, 0 – 600 mΩ 10.01 – 30.00 A, 0 – 200 mΩ 30.01 – 40.00 A, 0 – 150 mΩ 1 mΩ ± (2% of setting + 2 counts)
HI and LO-Limit Resistance	Range: Resolution: Accuracy:	0 – 150 mΩ for 30.01 – 40.00 A 0 – 200 mΩ for 10.01 – 30.00 A 0 – 600 mΩ for 1.00 – 10.01 A 1 mΩ ± (2% of setting + 2 counts)
HI and LO-Limit Voltage	Range: Resolution: Accuracy:	0.00 – 6.00 V 0.01 ± (2% of settings + 2 counts)
Dwell Time Setting	Range:	0, 0.5 – 999.9 sec (0=Continuous)
Ω Offset Capability	Range: Resolution: Accuracy:	0 – 100 mΩ 1 mΩ ± (2% of setting + 2 counts)
V Offset Capability	Range: Resolution: Accuracy:	0.00 – 4.00 V 0.01 V ± (2% of setting + 2 counts)

Current Display	Range: Resolution: Accuracy:	0.00 – 40.00 AAC/DC 0.01 AC/DC ± (3% of reading + 1 count)
Voltage Display	Range: Resolution: Accuracy:	0.00 – 8.00 VAC/DC 0.01 AC/DC ± (2% of reading + 2 counts)
Ohmmeter Display	Range: Resolution: Accuracy:	0 – 600 mΩ for 1.00 – 5.99 A 1 mΩ ± (3% of reading + 3 counts)
	Range: Resolution: Accuracy:	0 – 600 mΩ for 6 – 40 A 1 mΩ ± (2% of reading + 2 counts)

GENERAL SPECIFICATIONS	
Remote Control and Signal I/O	The following input and output signals are provided through two 9 pin D type connectors: Inputs: Test, Reset, Hardware Interlock, File Recall Outputs: Pass, Fail, Test-in-Process, Reset-Out, Start-Out Hardware Interlock (safety)
Memories	50 steps 1500 test results
Interface	USB standard
Language	English, Traditional Chinese, Simplified Chinese, Turkish, Portuguese, Spanish, German, French
Security	Multiple user setups with ID and password
Dimensions (W x H x D)	8.5" x 3.5" x 11.9" (215 x 88.1 x 300 mm)
Weight	11 lbs (5 kg)

Electrical Safety Tester

ASSOCIATED RESEARCH AN IKONIX BRAND Authorized Reseller

Hypot®Series Electrical Safety Tester

Compact in Size, Completes Your Safety

The Hypot® (formerly known as eec EST-300) safety tester's compact size does not compromise the device's performance or reliability. The series delivers high testing efficiencies that show in every detail. The built-in ARC detection feature — utilized by many top-tier manufactures – detects abnormal circuit shorts, preventing poor gap spacing that can cause dielectric breakdowns while enhancing quality assurance. The ramp-high and charge-low functions increase efficiency, eliminating common errors from the DUT's test results caused by current overshoots and faulty connections.

DIELECTRIC WITHSTAND TEST MODE				
Output Rating	3805/3855/ 3865/3870	5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)		
Maximum Limit	3805/3855/ 3865/3870	AC	Range: Resolution:	0.00 – 20.00 mA 0.01 mA
		DC	Range: Resolution: Accuracy:	0 – 7500 µA 1 µA AC and DC ± (2% of setting + 2 counts)
Minimum Limit	3805/3855/ 3865/3870	AC	Range: Resolution:	0.000 – 9.999 mA 0.001 mA
		DC	Range: Resolution: Accuracy:	0.0 – 999.9 µA 0.1µA AC and DC ± (2% of setting + 2 counts)
Arc Detection	Range:	1 – 9 (9 is most sensitive)		
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC), Fixed			
	HV Shut Down Speed: < 1 msec			
Current Display	3805/3855/ 3865/3870	AC	Range 1: Range 2:	0.000 – 4.000 mA 3.50 – 20.00 mA
		DC	Range 1: Range 2: Range 3:	0.0 µA – 400.0 µA 0.350 mA – 4.000 mA 3.50 mA – 7.50 mA
			Accuracy:	All Ranges ± (2% of reading + 2 counts)
DC Output Ripple	≤ 5% Ripple rms at 6 kVDC @ 7.5 mA Resistive Load			
RAMP-HI Selectable	Range: 0.0 – 7,500 µA, User Selectable			
Charge-LO	0 – 350 µA DC or Auto Set			
Discharge Time	< 50 msec for no load, < 100 msec for capacitive load **The maximum capacitive load vs. output voltage:** 1µF < 1KV 0.08µF < 4KV 0.75µF < 2KV 0.04µF < 5KV 0.5µF < 3KV 0.015uF < 6KV			
AC Voltage Waveform/ Frequency	Sine Wave, Crest Factor = 1.3 – 1.5			
	Range:	50 or 60 Hz, User Selectable		
Dwell Timer	Range:	AC 0, 0.2-999.9 sec (0=Continuous) DC 0, 0.4-999.9 sec (0=Continuous)		
Ramp Timer	Range:	Ramp-Up: 0.1 – 999.9 sec Ramp-Down: AC 0.0 – 999.9 sec DC 0, 1.0 – 999.9 sec, (0=OFF)		

INSULATION RESISTANCE TEST MODE		
Voltage Setting	Range: Resolution: Accuracy:	30 – 1,000 VDC 1 V ± (1.5% of setting + 5 V)
Resistance Display	Range:	1 – 50,000 MΩ
	Resolution:	30 – 99 VDC / 100 – 499 VDC / 500 – 1000 VDC MΩ / MΩ / MΩ / MΩ 0.001 / 1.000 – 1.999 / 1.000 – 1.999 / 1.000 – 9.999 0.01 / 2.00 – 19.99 / 2.00 – 19.99 / 10.00 – 99.99 0.1 / 20.0 – 199.9 / 20.0 – 199.9 / 100.0 – 999.9 1 / 200 – 10,000 / 200 – 20,000 / 1000 – 50000
	Accuracy:	± (8% of reading+2 counts) at test voltage 30 – 499 V and 1.00–999.9 MΩ
	At test voltage 500-1000 V ± (2% of reading + 2 counts) for 1.00 – 999.9 MΩ ± (5% of reading + 2 counts) for 1000 – 9999 MΩ ± (15% of reading + 2 counts) for 10000 – 50,000 MΩ	
HI & LO-Limit	Range: Resolution:	0, 1.00 – 99.99 MΩ (0=OFF, HI-Limit ONLY) 0.01 MΩ 1000-50000 1 MΩ
	Range: Resolution:	100.0 – 999.9 MΩ 0.1 MΩ
	Accuracy:	At test voltage 500-1000 V ± (2% of setting + 2 counts) for 1.00 – 999.9 MΩ ± (5% of setting + 2 counts) for 1000 – 9999 MΩ ± (15% of setting + 2 counts) for 10000 – 50,000 MΩ
Charge-LO	Range:	0.000 – 3.500 µA DC or Auto Set
Ramp Timer	Range:	Ramp-Up: 0.1 – 999.9 sec Ramp-Down: 0, 1.0 – 999.9 sec, (0=OFF)
Delay Timer	Range:	0.5 – 999.9 sec (0=OFF)
Dwell Timer	Range:	0, 0.5 – 999.9 sec (0=continuous)

ROYAL WORK TECHNOLOGY

www.royalworktechnology.com

Electrical Safety Tester

ASSOCIATED RESEARCH AN IKONIX BRAND Authorized Reseller

HypotULTRA®Series Electrical Safety Tester

All-in-One Enhanced Simplicity, Safety, and Reliability

The next generation HypotULTRA Electrical Safety Tester series compact 4-in-1 safety analyzer brings together the enhanced safety features of advanced ARC detection, next level precision ground bond measurements and true negative voltage with the convenience of maximum 500VA output capacity. The result is a line of testers that is ideally suited to the demanding environment of today's industrial settings. Designed with user-friendly 4.3-inch touch panel and barcode data scanning features, it makes the testing operations simple and intuitive and in overall, achieving highest work productivity.

AC WITHSTAND TEST MODE (All Models)			
Output Voltage	Range: Resolution: Accuracy:	0 – 5,000 VAC 1 VAC ± (1.5% of setting + 5V)	
Output Frequency	50/60 Hz ± 0.1%, User Selection		
Output Waveform	Sine Wave, Crest Factor = 1.3 – 1.5		
Output Regulation	± (1% of output + 5V)		
HI and LO-Limit Total	Total	Range: Resolution: Range: Resolution: Accuracy:	0.000 – 9.999 mA 0.001 mA 10.00 – 40.00 mA (10 – 99.99 mA, Models 7800/7854) 0.01 mA ± (2% of setting + 2 counts) 7804/7820/7850 ± (2% of setting + 6 counts) 7800/7854
	Real	Range: Resolution: Range: Resolution: Accuracy:	0.000 – 9.999 mA 0.001 mA 10.00 – 40.00 mA (10 – 99.99 mA 7800/7854) 0.01 mA ± (3% of setting + 50 µA)
Ramp Up Timer Ramp Down Timer Dwell Timer	Range: Range: Range:	0.1 – 999.9 sec 0.0 – 999.9 sec 0, 0.2 – 999.9 sec (0=Continuous)	
Ground Continuity	Current: DC 0.1A ± 0.01A, fixed		
Current	Max. Ground Resistance: 1.0 Ω ± 0.1 Ω		
Arc Detection	Range:	1 – 9 (9 is most sensitive)	

DC WITHSTAND TEST MODE (Models 7800/7804/7850 & 7854 Only)		
Output Voltage	Range: Resolution: Accuracy:	0 – 6000 VDC 1 V ± (1.5% of setting + 5 V)
DC Output Ripple	<4% (6 KV/10 mA at Resistive Load)	
HI and LO-Limit	Range: Resolution: Accuracy:	0.0000 – 0.9999 µA 0.0001 µA ± (2% of setting + 10 counts), Low Range is ON
	Range: Resolution: Accuracy:	1.000 – 9.999 µA 0.001 µA ± (2% of setting + 10 counts), Low Range is ON
	Range: Resolution: Accuracy:	10.00 – 99.99 µA 0.01 µA ± (2% of setting + 10 counts), Low Range is ON
	Range: Resolution: Accuracy:	100.0 – 999.9 µA 0.1 µA ± (2% of setting + 2 counts)
	Range: Resolution: Accuracy:	1,000 – 20,000 µA range (7804/54) 1,000 – 10,000µA range (7800/50) 1 µA ± (2% of setting + 2 counts)
Ramp Up Timer	Range:	0.4 - 999.9 sec, Low Range is OFF 0.5 – 999.9 sec, Low Range is ON
Ramp Down Timer	Range:	0.0, 1.0 – 999.9 sec (0=OFF)
Dwell Timer	Range:	0, 0.4 – 999.9 sec (0=Continuous) 0, 1.0 – 999.9 sec, Low Range is ON
Ramp-HI Selectable	Range:	0 – 20 mA selectable
Charge-LO	Range:	0.0 – 350.0 µA DC or Auto Set
Discharge Time	< 50 ms for no load, < 100 ms for capacitive load	
Maximum Capacitive Load DC Mode	1µF < 1kV 0.75 µF < 2 kV 0.5 µF < 3 kV	0.0 µF < 4 kV 0.04 µF < 5 kV 0.015 µF < 6 kV
Arc Detection	Range:	1 – 9 (9 is most sensitive)

INSULATION RESISTANCE MODE (Models 7800/7804/7850 & 7854 Only)		
Output Voltage, DC	Range: Resolution: Accuracy:	10 – 1,000 VDC 1 VDC ± (1.5% of setting + 2 counts)
	Range: Resolution: Accuracy:	1,001 – 6,000 VDC 1 VDC ± (1.5% of setting + 5 V)

Electrical Safety Tester

ASSOCIATED® RESEARCH AN IKONIX BRAND Authorized Reseller

HypotULTRA®Series Electrical Safety Tester

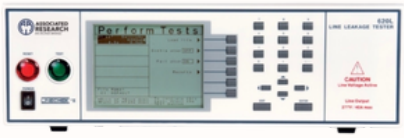
All-in-One Enhanced Simplicity, Safety, and Reliability

INSULATION RESISTANCE MODE (Models 7800/7804/7850 & 7854 Only)		
Charging Current HI and LO-Limit	Maximum > 20 mA peak	
	Range: Resolution: Accuracy:	0.10 MΩ – 99.9 MΩ (HI-Limit: 0=OFF) 0.01 MΩ ± (2% of setting + 2 counts)
	Range: Resolution: Accuracy:	100.0 MΩ – 999.9 MΩ 0.1 MΩ 1,000 – 9,999 ± (5% of setting + 2 counts)
	Range: Resolution: Accuracy:	1,000 MΩ – 50,000 MΩ 1 MΩ 10,000 – 50,000 ± (15% of setting + 2 counts)
Ramp Up Timer	Range:	0.1 – 999.9 sec
Ramp Down Timer	Range:	1.0 – 999.9 sec
Dwell Timer	Range:	0.5 – 999.9 sec (0=Continuous)
Delay Timer	Range:	0.5 – 999.9 sec
Charge-LO	0.000 – 3.500 µA or Auto Set	
CONTINUITY TEST MODE (All Models)		
Output Current, DC	1 A for 0.000 – 1.000 Ω, 0.1 A for 1.01 – 10.00 Ω 0.01 A for 10.01 – 100 Ω, 0.001 A for 101 – 1,000 Ω 0.0001 A for 1001 – 10,000 Ω, 1 A is Max	
Resistance Display Max & Min Max-Lmt	Range: Resolution: Accuracy:	0.000 – 1.000 Ω 0.001 Ω ± (1% of setting + 3 counts)
	Range: Resolution: Accuracy:	1.01 – 10.00 Ω 0.01 Ω ± (1% of setting + 3 counts)
	Range: Resolution: Accuracy:	10.1 – 100.0 Ω 0.1 Ω ± (1% of setting + 3 counts)
	Range: Resolution: Accuracy:	101 – 1,000 Ω 1 Ω ± (1% of setting + 3 counts)
	Range: Resolution: Accuracy:	1,001 – 10,000 Ω 1 Ω ± (1% of setting + 10 counts)
Dwell Timer	Range:	0, 0.4 – 999.9 sec (0=Continuous)
Resistance Offset	Range:	0.000 – 10.00 Ω

GROUND BOND TEST MODE (Models 7804 & 7854 Only)		
Output Voltage (Open Circuit Voltage)	Range: Resolution: Accuracy:	3.00 – 8.00 VAC 0.01 VAC ± (2% of setting + 3 counts) Open Circuit
Output Current	Range: Resolution: Accuracy:	1.00 – 40.00 A 0.01 A ± (2% of setting + 2 counts)
Maximum Loading	1.00 – 10.00 A, 0 – 600 mΩ 10.01 – 30.00 A, 0 – 200 mΩ 30.01 – 40.00 A, 0 – 150 mΩ	
HI and LO-Limit	Range: Resolution: Accuracy:	0 – 150 mΩ for 30.01 – 40.00 A 0 – 200 mΩ for 10.01 – 30.00 A 0 – 600 mΩ for 1.00 – 10.01 A 1 mΩ ± (2% of setting + 2 counts)
	Range: Resolution: Accuracy:	0 – 600 mΩ 1 mΩ ± (3% of setting + 3 counts)
Dwell Timer	Range:	0, 0.5 – 999.9 sec (0=Continuous)
Milliohm Offset	0 – 200 mΩ	
Voltage Offset	0.0 - 6.0 V	
GENERAL SPECIFICATIONS		
Memory	2,000 steps, 200 steps per test file max 100,000 test results	
Mechanical	Bench or rackmount (2U height) with feet	
Interface	Standard: USB, RS-232 Optional: GPIB (IEEE-488.2), Ethernet or USB Printer	
SmartGFI®	0, 0.4 – 5.0 mA (0=OFF)	
Dimensions (W x H x D)	16.92" x 3.50" x 15.75" (430 x 88.1 x 400mm)	
Weight	7800: 7804: 7820: 7850: 7854:	45 lbs (20.4 kg) 41 lbs (18.6 kg) 34 lbs (15.4 kg) 35 lbs (15.9 kg) 46.3 lbs (21 kg)

Electrical Safety Tester

ASSOCIATED® RESEARCH
AN IKONIX BRAND
Authorized Reseller



LINECHEK® II Leakage Current Tester

The Analyzer That Exceeds The Results

The LINECHEK II Leakage Current Tester offers complete set of touch current analyzer options. The LINECHEK II features a variety of built-in measuring devices (MD) and testing conditions to simulate any environmental circumstances. The 620L also integrates dynamic load monitoring capable of handling up to 40A DUT power. Remotely control the 620L via RS-232 to form an automated testing system.

INPUT SPECIFICATIONS	
Voltage	115/230 VAC ± 10%, User Selection
Frequency	50/60 Hz ± 5%
Fuse	2 A Slow Blow 250 VAC
LINE CONDITIONS	
Reverse Power Switch	Switch for power polarity reversal
Neutral Switch	Neutral switch on/off selection for single fault
Ground Switch	Ground switch on/off selection for class I single fault
PROBE SETTINGS	
Surface to Surface	(PH – PL)
Surface to Line	(PH – L)
Ground to Line	(G – L)

LEAKAGE LIMIT SETTINGS		
Touch Current High/Low Limit (rms)	Range: Resolution:	0.0 µA – 999.9 µA / 1,000 µA – 9,999 µA / 10.00 mA – 20.00 mA 0.1 µA / 1 µA / 0.01 mA
Touch Current High/Low Limit (Peak)	Range: Resolution:	0.0 µA -999.9 µA / 1,000 uA – 9,999 µA / 10.00 mA – 30.00 mA 0.1 µA / 1 µA / 0.01 mA
DISPLAY		
Touch Current Display (rms)	Range: Resolution: Accuracy:	0.0 µA – 550 µA, frequency DC, 15 Hz – 1 MHz 0.1 µA DC: 15 Hz ≤ f ≤ 100 kHz: ± (2% of reading + 3 counts) 100 kHz ≤ f ≤ 1 MHz: ± 5% of reading (10.0 µA – 999.9 µA)
	Range: Resolution: Accuracy:	400 µA – 8,500 µA, frequency DC, 15 Hz – 1 MHz 1 µA DC: 15 Hz ≤ f ≤ 100 kHz: ± (2% of reading + 3 counts) 100 kHz ≤ f ≤ 1 MHz: ± 5% of reading, (10.0 µA – 8,500 µA)
	Range: Resolution: Accuracy:	8.00 mA – 20.00 mA, frequency DC, 15 Hz – 100 KHz 0.01 mA DC: 15 Hz ≤ f ≤ 100 MHz: ± 5% of reading (0.01 mA – 20.00 mA)
Touch Current Display (peak)	Range: Resolution: Accuracy:	0.0 µA – 550 µA, frequency DC – 1 MHz 0.1 µA ± (2% of reading + 2 µA) 15 Hz ≤ f ≤ 1 MHz, ± 10% of reading + 2 µA
	Range: Resolution: Accuracy:	400 µA – 8,500 µA, frequency DC – 1 MHz 1 µA ± (2% of reading + 2 µA) 15 Hz ≤ f ≤ 1 MHz, ± 10% of reading + 2 µA
	Range: Resolution: Accuracy:	8.00 mA – 30.00 mA, frequency DC – 100 kHz 0.01 mA ± (2% of reading + 3 counts) 15 Hz ≤ f ≤ 100 kHz, ± 10% of reading + 2 counts

MEASURING DEVICE MODULE	
MD1	UL544NP, UL484 , UL923, UL471, UL867, UL697
MD2	UL544P
MD3	IEC 60601-1
MD4	UL1563
MD5	IEC60990 Fig4 U2, 62368-1, IEC60335-1, IEC60598-1,IEC60065, IEC61010
MD6	IEC60990 Fig5 U3, IEC60598-1
MD7	62368-1, IEC61010-1 FigA.2 (2 kohm) for Run function
External MD	Basic measuring element 1 kohm
MD Voltage Limit	70 VDC

DUT POWER		
AC Voltage	0.0 – 277.0 V	
AC Current	40 A max continuous	
AC Voltage High/Low Limit	Range: Resolution:	0.0 – 277.0 V 0.1 V/step
AC Voltage Display	Range: Resolution: Accuracy:	0.0 – 277.0 V 0.1 V/step ± (1.5% of reading + 2 counts), 30.0 – 277.0 V
Delay Time Setting	Range: Resolution:	0.5 – 999.9 sec 0.1 sec
Dwell Time Setting	Range: Resolution: Accuracy:	0, 0.5 – 999.9 sec (0=Continuous) 0.1 sec ± (0.1% of reading + 0.05 seconds)
Failure Protection	On Start-Up – Neutral Voltage Check (Neutral – V) Over current and ground current check (Line – OC)	

GENERAL SPECIFICATIONS	
Memory	50 Memories, 30 steps per each memory File locations can link 900 steps max
Mechanical	Bench or rackmount with tilt-up feet
Interface	Standard: USB, RS-232 Optional: Ethernet, GPIB
Dimensions (W x H x D)	16.93" x 5.24" x 11.81" (430 x 133 x 300 mm)
Weight	26.45 lbs (12 kg)

Why We Use Counts
Associated Research publishes some specifications using "counts" which allows us to provide a better indication of the instrument's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts = 2 V.

Specifications subject to change without notice.

Electrical Safety Tester

SCI AN IKONIX BRAND

SCI 260 Series Ground Bond Testers

Safety made Simple

Our 260 Series makes Ground Bond testing simple. Choose between two easy-to-use Ground Bond testers that provide the output current to satisfy standard specifications. With an intuitive interface that allows you to set-up a test in seconds and practical security settings, our 260 Series can easily be deployed in both laboratory and production line environments.

INPUT		
Voltage	264	100 - 120 VAC / 200 - 240 VAC ± 10% Auto Range
	266	100 - 240 VAC ± 10% Full Range
Frequency	50/60 Hz ± 5%	
Fuse	264	10A / 250 VAC Slow-Blow
	266	12A / 250 VAC Slow-Blow

GROUND BOND TEST MODE		
Output Rating	264	3.0 - 40.0 AAC
	266	3.0 - 60.0 AAC
	Resolution: 0.1 A	
	Accuracy: ± (2% of setting + 0.1A)	
	264	Voltage 8 VAC (fixed)
	266	Voltage 12 VAC (fixed)
Output Frequency	50/60 Hz user selectable Accuracy: ± 0.1%	
Resistance Limit Settings	264	0 - 150 mΩ for 30.1 - 40.0 A 0 - 200 mΩ for 10.1 - 30.0 A 0 - 600 mΩ for 3.0 - 10.0 A
	266	0 - 150 mΩ for 30.1 - 60.0 A 0 - 200 mΩ for 15.1 - 30.0 A 0 - 600 mΩ for 3.0 - 15.0 A
	Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)	
Offset Limit Settings	0 - 100 mΩ Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)	
Dwell Timer	0, 0.5 - 240.0 sec, (0=continuous), 0.1 sec/step	
Ramp Timer	0.1 sec fixed	
Measurement Current	264	0.0 - 40.0 AAC
	266	0.0 - 60.0 AAC
	Resolution: 0.1 A Accuracy: ± (3% of reading + 0.1 A)	
Ohmmeter	264	0 - 600 mΩ
		Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ) for 3 - 5.9 A, ± (2% of reading + 2 counts) for 6 - 40A
	266	0 - 600 mΩ
		Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ) for 3 - 5.9 A ± (2% of reading + 2 mΩ) for 6 - 60 A

GENERAL SPECIFICATIONS		
Memories	5	
Remote I/O	Input:	Test, Reset, Interlock
	Output:	Pass, Fail, Test-in-Process
	Hardware Interlock - a relay on the high voltage output opens when the Interlock signal is disabled.	
Voltage Drop Display (optional)	Display the voltage drop across the circuit instead of the resistance measurement.	
Voltage Limit Settings	264	0.00 - 6.00 VAC
	266	0.00 - 9.00 VAC
	Resolution: 0.01 V Accuracy: ± (2% of setting + 0.02 V)	
Offset Limit Settings	264	0.00 - 4.00 VAC
	266	0.00 - 6.00 VAC
	Resolution: 0.01 V Accuracy: ± (2% of setting + 0.02 V)	
Security	Option to turn On or Off, when On you can switch between two security levels: 1. Run - Operator can only run a test. No ability to change memory locations or edit test parameters. 2. Mem - Operator can run a test and change memory locations. No ability to edit test parameters.	
Safety Mark	CE/cTUVus	
Dimensions (W x H x D)	264	8.5" x 3.5" x 11.81" (215 x 88 x 300 mm)
	266	16.93" x 5.20" x 11.81" (430 x 132 x 300 mm
Weight	264	9.25 lbs. (4.3 Kg)
	266	20.25 lbs. (9 Kg)

Specifications subject to change without notice.

Electrical Safety Tester

SCI AN IKONIX BRAND

SCI 290 Series Hipot Tester

Safety made Simple

The SCI 290 series hipot tester is designed to make testing as simple as it can get. Combining straightforward controls, user-friendly display in a rugged, lightweight and durable package, the SCI 290 series provides all the basics and helps taking the hassle out of the testing process. From quality assurance to field tests, the compactness and easy-to-use nature make the SCI 290 series a perfect choice for front line operators and engineers.

INPUT		
Voltage	264	100 - 120 VAC / 200 - 240 VAC ± 10% Auto Range
	266	100 - 240 VAC ± 10% Full Range
Frequency	50/60 Hz ± 5%	
Fuse	264	10A / 250 VAC Slow-Blow
	266	12A / 250 VAC Slow-Blow

GROUND BOND TEST MODE		
Output Rating	264	3.0 - 40.0 AAC
	266	3.0 - 60.0 AAC
	Resolution: 0.1 A	
	Accuracy: ± (2% of setting + 0.1A)	
	264	Voltage 8 VAC (fixed)
	266	Voltage 12 VAC (fixed)
Output Frequency	50/60 Hz user selectable Accuracy: ± 0.1%	
Resistance Limit Settings	264	0 - 150 mΩ for 30.1 - 40.0 A 0 - 200 mΩ for 10.1 - 30.0 A 0 - 600 mΩ for 3.0 - 10.0 A
	266	0 - 150 mΩ for 30.1 - 60.0 A 0 - 200 mΩ for 15.1 - 30.0 A 0 - 600 mΩ for 3.0 - 15.0 A
	Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)	
Offset Limit Settings	0 - 100 mΩ Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)	
Dwell Timer	0, 0.5 - 240.0 sec, (0=continuous), 0.1 sec/step	
Ramp Timer	0.1 sec fixed	
Measurement Current	264	0.0 - 40.0 AAC
	266	0.0 - 60.0 AAC
	Resolution: 0.1 A Accuracy: ± (3% of reading + 0.1 A)	
Ohmmeter	264	0 - 600 mΩ
		Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ) for 3 - 5.9 A, ± (2% of reading + 2 counts) for 6 - 40A
	266	0 - 600 mΩ
		Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ) for 3 - 5.9 A ± (2% of reading + 2 mΩ) for 6 - 60 A

GENERAL SPECIFICATIONS		
Memories	5	
Remote I/O	Input:	Test, Reset, Interlock
	Output:	Pass, Fail, Test-in-Process
	Hardware Interlock - a relay on the high voltage output opens when the Interlock signal is disabled.	
Voltage Drop Display (optional)	Display the voltage drop across the circuit instead of the resistance measurement.	
Voltage Limit Settings	264	0.00 - 6.00 VAC
	266	0.00 - 9.00 VAC
	Resolution: 0.01 V Accuracy: ± (2% of setting + 0.02 V)	
Offset Limit Settings	264	0.00 - 4.00 VAC
	266	0.00 - 6.00 VAC
	Resolution: 0.01 V Accuracy: ± (2% of setting + 0.02 V)	
Security	Option to turn On or Off, when On you can switch between two security levels: 1. Run - Operator can only run a test. No ability to change memory locations or edit test parameters. 2. Mem - Operator can run a test and change memory locations. No ability to edit test parameters.	
Safety Mark	CE/cTUVus	
Dimensions (W x H x D)	264	8.5" x 3.5" x 11.81" (215 x 88 x 300 mm)
	266	16.93" x 5.20" x 11.81" (430 x 132 x 300 mm
Weight	264	9.25 lbs. (4.3 Kg)
	266	20.25 lbs. (9 Kg)

Specifications subject to change without notice.

Electrical Safety Tester

SCI AN IKONIX BRAND

SCI 440 Series Electrical Safety Testers

Safety made Simple

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.

INPUT (446 and 448)		
Voltage	100 - 120Vac / 200 - 240Vac±10% Auto Range	
Frequency	50/60Hz ± 5%	
Fuse	446	10A / 250Vac Slow-Blow
	448	15A / 250Vac Fast-Blow

DIELECTRIC WITHSTAND TEST MODE		
Output Rating	446	5 KV @ 20 mA AC 6 KV @ 5 mA DC
	448	5 KV @ 99.99 mA AC 6 KV @ 10 mA DC
Voltage Setting/Display	Range	0 – 5.00 KV AC 0 – 6.00 KV DC
	Resolution	0.01
	Accuracy	± (2% of setting + 5V)
Current Display	446	Range: 0 - 20.00 mA AC, 0 - 5.00 mA DC Resolution: 0.01 mA Accuracy: ± (2% of reading + 0.02 mA)
	448	Range: 0 - 99.99 mA AC, 0 - 10.00 mA DC Resolution: 0.01 mA Accuracy: ± (2% of reading + 0.06 mA)
Hi-Limit Lo-Limit	446 AC	Range: Lo-Limit 0 - 20.00 mA, Hi-Limit 0.10 – 20.00 mA Resolution: 0.01 mA Accuracy: ± (2% of setting + 2 counts)
	446 DC	Range: Lo-Limit 0 - 5.00 mA, Hi-Limit 0.02 – 5.00 mA Resolution: 0.01 mA Accuracy: ± (2% of setting + 2 counts)
	448 AC	Range: Lo-limit 0 - 99.99 mA, Hi-Limit 0.10 – 99.99 mA Resolution: 0.01 mA Accuracy: ± (2% of reading + 6 counts)
	448 DC	Range: Lo-Limit 0 - 10.00 mA, Hi-Limit 0.02 – 10.00mA Resolution: 0.01 mA Accuracy: ± (2% of reading + 6 counts)
Failure Detector	Audible and Visual	
DC Output Ripple	446	<5 % (6KV / 5mA at Resistive Load)
	448	<5 % (6KV / 10mA at Resistive Load)
Discharge Time	446	< 50 ms for no load, < 200 ms for capacitor load
	448	< 50 ms for no load, < 100 ms for capacitor load
Max. Capacitive Load in DC Mode	1μF < 1KV 0.75μF < 2KV 0.5μF < 3KV	0.08μF < 4KV 0.04μF < 5KV 0.015uF < 6KV
AC Wave Form	Sine Wave, Crest Factor = 1.3 - 1.5 and output voltage > 300V	
AC Output Frequency	50Hz/60Hz ± 0.1%, User Selection	

DIELECTRIC WITHSTAND TEST MODE (Cont.)		
Output Regulation	± (1% of output + 5V), From no load to full load	
Dwell Timer	Range: Resolution: Accuracy:	0, 0.2 - 60.0 (0=continuous) 0.1 ± (0.1% of setting + 0.05 sec)
Ramp Timer	Range: Resolution: Accuracy:	0.2-180.0 0.1 ± (0.1% of setting + 0.05 sec)

INSULATION RESISTANCE TEST MODE		
Output Voltage, VDC	Range: Resolution: Accuracy:	100 - 1000 1 ± (2% of setting + 5V)
Hi-Limit resistance, MΩ	Range: Resolution: Accuracy:	0, 1 - 1000 (0 = OFF) 1 100-499V ± (7% of setting + 2 counts)
Lo-Limit resistance, MΩ	Range: Resolution: Accuracy:	1 - 1000 1 500-1000V ± (3% of setting + 2 counts)
Ramp Time , second	Range: Resolution: Accuracy:	0.1 or 2.0 0.1 ± (0.1% of setting + 0.05 sec)
Delay Time, second	Range: Resolution: Accuracy:	0, 0.5 - 999.9 (0=continuous) 0.1 ± (0.1% of setting + 0.05 sec)

Specifications subject to change without notice.