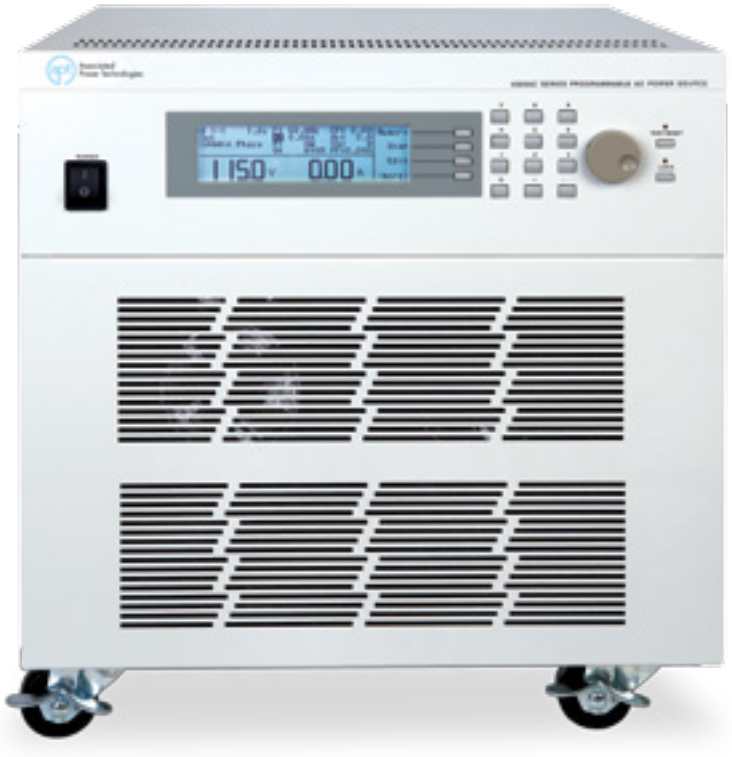
AC Power Sources

Manual • Automated • Modular



Power Redefined

3 Phase AC Power Sources • Modular AC Power Sources • Automated AC Power Sources

Manual AC Power Sources • Linear AC Power Sources • Power Converters

Power Redefined

Our Power Sources are designed and supported in the USA. We're factory direct, so you'll never have to deal with a middle man. Our highly trained sales staff focuses on every customer no matter the size of the order. From our industry-leading warranty to our return and repair policies, we have redefined how the power source industry does business. When you compare our dedicated people and extensive support programs, you'll be sure to choose APT.

CHANGING the way the POWER SOURCE INDUSTRY DOES BUSINESS

When you choose APT, you're choosing a partner that will continue to assist you throughout the life of your product, no matter what the application.

GREEN INITIATIVE

We are committed to responsible manufacturing processes and environmental sustainability. Our Green Initiative is led by individuals throughout our organization who are committed to making day-to-day operations as green as possible.

UNPARALLELED SERVICE & SUPPORT

No competitor can match our dedication to service and support. With 1 business day shipping on all models and 3 business day turnaround on all repairs, APT keeps your business up and running with minimal down-time.

TRADE-IN & TRADE-UP

We are proud to have a generous and responsible trade-in program. It is our little way of saying thanks for continuing to use our instruments. Simply send us your old instrument and we'll give you credit towards your purchase. We accept any brand, make or model towards your trade-in discount off your new APT instrument.*

*Offer only available in North America.

PowerTRAC™ AC Power Source Control and Data Capture Software

Our new PowerTRAC software takes the industry standard Power Source control software to the next level with data capture. Quickly export your test results to an Excel spreadsheet and improve traceabilty.

- Complete control from anywhere
- Real world simulation of voltage and frequency
- Visually see what your output and transients look like

AVAILABLE AS A FREE DOWNLOAD!

3-Year Warranty

Your new instrument includes a standard 3-Year warranty. This guarantees your new product to be free from defects in workmanship for the appropriate warranty period. There is no cost for this warranty and no requirements for calibration or inspection.

Customer Happiness Guarantee

Our Customer Happiness Guarantee ensures we keep you completely satisfied throughout your entire purchasing experience with us. From selecting the right product for your application to support and training, we guarantee your experience will be nothing less than excellent. If for ANY reason you're not completely satisfied with your experience, you can simply return your instrument within 45 days of purchase for a full refund.

10 Day Guaranteed Shipment

Every APT power source ships from our facility within 10 business days of purchase. If we ship late, we will cover ground shipping (Domestic U.S. shipments only).

Quick Turnarounds on Calibrations and Repairs

We offer 2 day turnaround on all calibrations. If your instrument needs service for any reason, we guarantee to have it repaired and shipped out of our facility within 3 business days of receiving it.

Product Reference Chart

	Output Power Capability									Output Configurations		
Model	500 VA	1 kVA	2 kVA	3 kVA	4 kVA	6 kVA	8 kVA	12 kVA	18 kVA	1 Phase	Split 1 Phase (2 Lines/1 Neutral)	3 Phase
105	●									●		
LS500**	●									●		
LS1000**		●								●		
5005	●									●		
5010		●								●		
5020			●							●		
5040					●					●		
6005	●									●		
6010		●								●		
6020			●							●		
6040					●					●		
7004	●									●		
7008		●								●		
7016			●							●		
7040					●					●		
310XAC		●	x2	x3						x1	x2	x3
320XAC			●		x2	x3				x1	x2	x3
340XAC					●		x2	x3		x1	x2	x3
360XAC						●		x2	x3	x1	x2	x3
430XAC				●						●	●	●
460XAC						●				●	●	●

Product Reference Chart

	Output Capabilities of V, Hz & A			General Features		
Model	Voltage Output Max	Frequency Output Range	Max A @ ≤110V/220V (per phase)	PC Control	CE Mark	Free GUI Available
105	300	50/60	4.6A/2.3A			
LS500**	300	40-500	4.2A/2.1A		●	
LS1000**	300	40-500	8.4A/4.2A		●	
5005	300	40-450	4.6A/2.3A			
5010	300	40-450	9.2A/4.6A			
5020	300	40-450	18.4A/9.2A			
5040	300	40-450	36.8A/18.4A			
6005	300	40-500	4.6A/2.3A	●		●
6010	300	40-500	9.2A/4.6A	●		●
6020	300	40-500	18.4A/9.2A	●		●
6040	300	40-500	36.8A/18.4A	●		●
7004	300	40-500	4.6A/2.3A	●	●	●
7008	300	40-500	9.2A/4.6A	●	●	●
7016	300	40-500	18.4A/9.2A	●	●	●
7040	300	40-500	36.8A/18.4A	●	●	●
310XAC	300/600/520*	40-1000	9.2A/4.6A	●	●	●
320XAC	300/600/520*	40-1000	18.4A/9.2A	●	●	●
340XAC	300/600/520*	40-1000	36.8A/18.4A	●	●	●
360XAC	300/600/520*	40-1000	55.2A/27.6A	●	●	●
430XAC	300/600/520*	40-1000	9.2A/4.6A	●	●	●
460XAC	300/600/520*	40-1000	18.4A/9.2A	●	●	●

x2 = the number of sources required to achieve an output rating.
x3 = the number of sources required to achieve an output rating and 3 phase.
300/600/520* = 300V phase 10, 600V split 10, 520V 30
** = Linear power sources

400XAC Series

3 Phase AC Power Sources

With a unique feature set and competitive price point, our 400XAC Series provides 3Ø AC power in a single box. Our exclusive SmartCONFIG feature allows you to switch from 1Ø to 3Ø or DC output with the push of a button. This maximizes your investment while giving you the AC power that your application needs. The 400XAC Series consists of two models: the 430XAC is a 3 kVA AC power source and the 460XAC is a 6 kVA AC power source.

Features

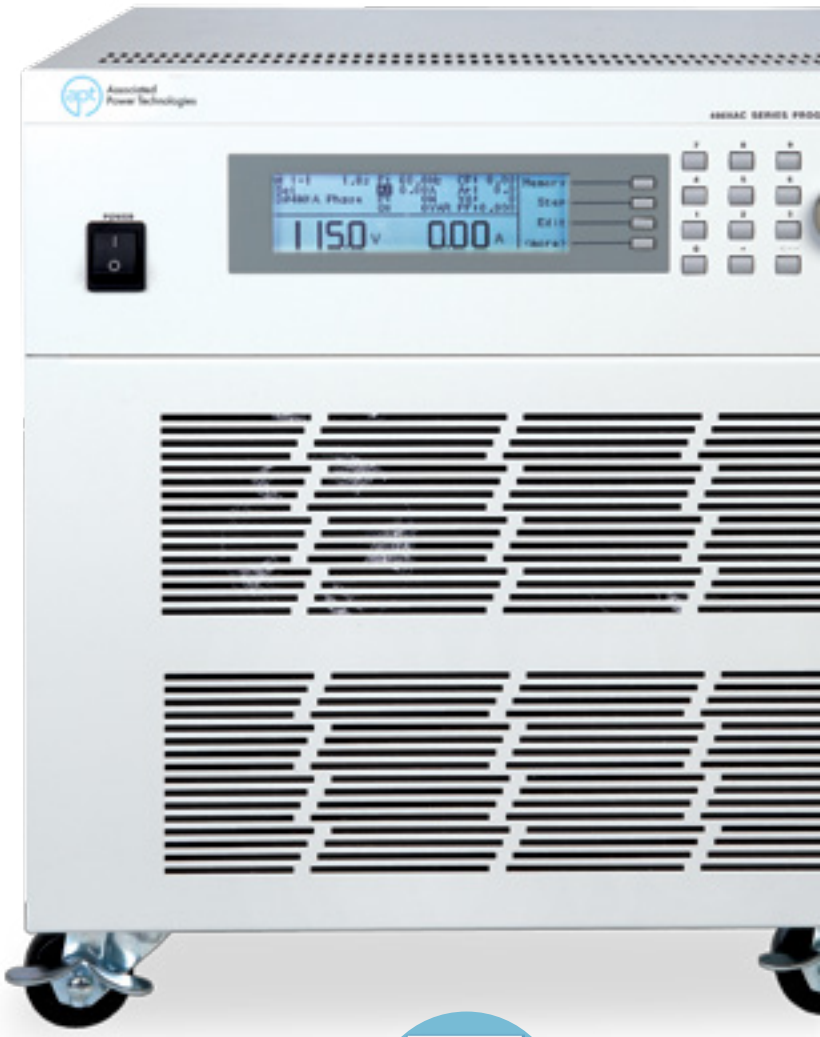
- Exclusive SmartCONFIG feature allows for push button switch of 1Ø, 3Ø or DC output
- Single phase input power requirements
- 50 built-in memory locations with 9 test steps
- Built-in power factor correction (PFC)
- Advanced metering circuits monitor voltage, current, peak current, power, apparent power, 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

Standard

- USB/RS-232 Interface

Options

- GPIB Interface
- Ethernet Interface



IVI DRIVER AVAILABLE

Start Output
PowerTRAC™ AVAILABLE

Applicable Industries

Aerospace | Appliance | Laboratory | Motor

APT Benefits

3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

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)	

Specifications – 400XAC Series

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	A Power + B Power + C Power, Calculated value	
		H		
Power Factor	Range		0 - 1.000	
	Resolution		0.001	
	Accuracy		$\frac{\sum P}{\sum VA}$ 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)	

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

Specifications – 400XAC Series

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	

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	

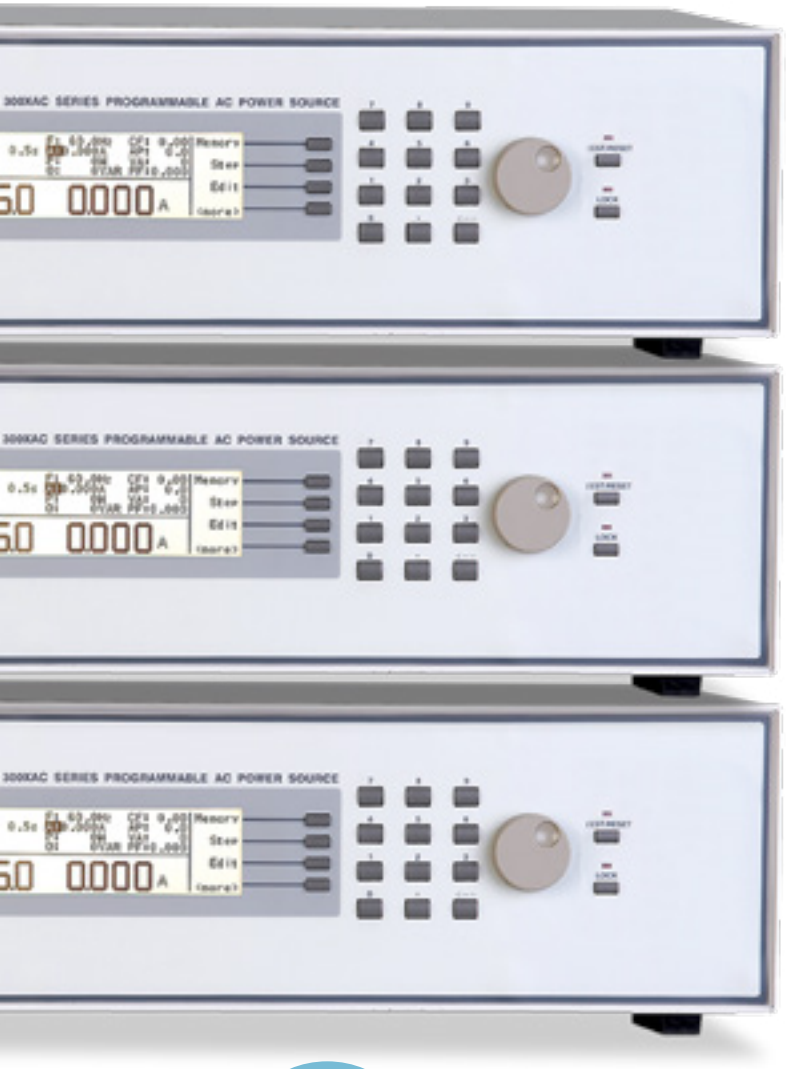
Specifications subject to change

Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester'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 = 2V.

300XAC Series

Modular AC Power Sources

Our 300XAC Series modular AC power sources incorporate the latest in modular technology, making them ideal for the most demanding applications. These versatile AC power sources can be configured for 1Ø stand-alone operation or linked together for up to 16.2 kVA of AC power in 1Ø, or up to 18 kVA of AC power in 3Ø output configurations.



Features

- Modular design allows operator to connect up to 3 instruments together for 1Ø or 3Ø applications requiring up to 18kVA of AC power
- Configure 2 sources for 1Ø/2W output voltages up to 600VAC
- 50 built-in memory locations with 9 test steps
- Standard DC output capability
- Transient feature simulates voltage variations, brownouts and transient voltage conditions
- Constant current output with over current fold back feature
- Rack mount handle kit included

Standard

- USB/RS-232 Interface

Options

- Grounded Neutral
- GPIB Interface
- 7 Remote Memories
- Ethernet Interface
- Linking Card

Start Output
PowerTRAC™ AVAILABLE

NI LabVIEW
DRIVER AVAILABLE

Applicable

Aerospace | Appliance | Laboratory | Networking | System Integrator

APT Benefits

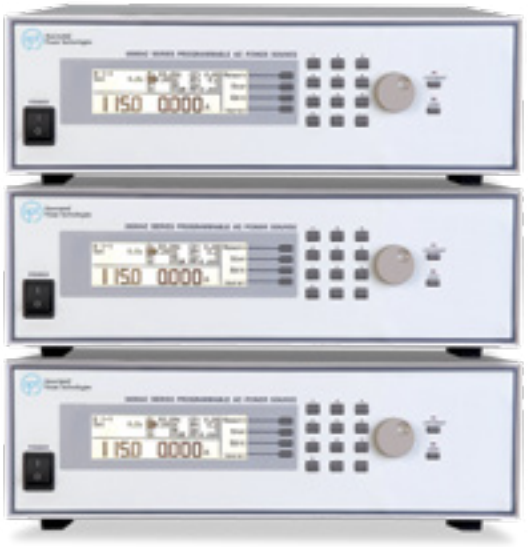
WARRANTY 3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

The Modular AC Source Advantage

What is a modular AC power source?

We use the term modular to define the capability of our 300XAC Series to be interconnected. The interconnection among up to three individual 300XAC Series Power Sources, allows for higher power outputs and different power configurations than an individual instrument could allow for Parallel or Polyphase modes.



What is Parallel mode?

Parallel mode allows the operator to increase the output current of the system by a factor of 2 or 3 depending on the number of sources that are interconnected.

What is Polyphase mode?

Polyphase mode allows the operator to increase the total power output of the system as well as change the output power configuration of the system.

Advantages

SmartDETECT

This exclusive feature automatically determines how many power sources are linked together. After the check is completed the 300XAC Series will automatically change the programming output function based on the number of linked sources.

SmartCONFIG Feature

This exclusive feature allows the operator to easily change the output of the linked sources to Parallel or Polyphase mode with the push of a button.

Master/Slave Relationship

The master/slave relationship between linked 300XAC instruments synchronizes the firmware of each power source so the output and phase angle separation is regulated. It also gives the operator the capability to program parameters for all linked sources from the front panel of the master instrument.

Exclusive Linking Card (option 08)

With the Linking Card option installed, up to three 300XAC instruments can be interconnected for Parallel or Polyphase output.

Benefits

- Easy to change from 1Ø to 3Ø output
- No need to have separate sources for 1Ø to 3Ø applications
- Allows for future expansion if power requirements change
- Greater mobility of the AC power sources
- Ability to generate 3Ø power if only 1Ø is available

Make Linking Your 300XAC A Breeze.

Download our Linking Guide at aptsources.com/300XAC ▶

Specifications – 300XAC Series

INPUT			310XAC	320XAC	340XAC	360XAC
Phase			1Ø			1Ø or 3Ø
Voltage			100 - 240 VAC ±10%		200 - 240 VAC ±10%	1Ø: 200 - 240 VAC ±10% 3Ø3W: 200 - 240 VAC ±10% 3Ø4W: 346 - 416 VAC ±10%
Frequency			47 - 63 Hz			
OUTPUT						
Voltage			5 - 300 V			
Max Power			1 kVA	2 kVA	4 kVA	6 kVA
Max Current 1Ø	0 - 150 V		9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V	55.2 A @ ≤110 V
	0 - 300 V		4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V	27.6A @ ≤220 V
Phase			1Ø (Parallel/Poly-Phase Linking for 1Ø3W or 3Ø4W)			
Frequency			40.0 - 1000 Hz			
THD			<1% (Resistive Load)			
Crest Factor			Inrush CF ≥3 at 110 V, Continuous Current CF ≥3 at 110 V			
Line Regulation			± 0.1 V			
Load Regulation			± 0.5 V			
DC OUTPUT VOLTAGE						
Voltage			5 - 420 V			
Max Power			1000 W	2000 W	4000 W	6000 W
Max Current 1Ø	0 - 210 V		4.8 A	9.6 A	19.2 A	28.8 A
	0 - 420 V		2.4 A	4.8 A	9.6 A	14.4 A
Ripple & Noise (Peak to Peak)			<3.0 V		<4.0 V	
MEASUREMENT						
Voltage	Range		0.0 - 400.0 V			
	Accuracy		± (1% of reading + 2 counts) >5 V		± (1% of reading + 5 counts) >5 V	
Frequency	Range		0.0 - 1000 Hz			
	Accuracy		0.0 - 500 Hz ± 0.1 Hz, 501 - 1000 Hz ± 0.2 Hz			
Current (RMS)	Range		0.005 A - 13.00 A	0.005 A - 26.00 A	0.05 A - 52.00 A	0.05 A - 78.00 A
	Accuracy		± (1% of reading + 5 counts)		± (1% of reading + 5 counts) @ 40 - 100 Hz, ± (1% of reading + 5 counts) @ 101 - 500 Hz >0.1 A, ± (1% of reading + 5 counts) @ 501 - 1000 Hz >0.2 A	
Current Peak	Range		0.0 A - 38.0 A	0.0 A - 76.0 A	0.0 A - 152 A	0.0 A - 228 A
	Accuracy		± (1% of reading + 5 counts)			
Power	Range		0.0 W - 1300 W	0.0 W - 2600 W	0.0 W - 5200 W	0.0 W - 7800 W
	Accuracy	L	± (2% of reading + 15 counts) at PF ≥0.2		± (2% of reading + 5 counts) at PF ≥0.2	
		H	± (2% of reading + 5 counts) at PF ≥0.2			
Power Apparent (VA)	Range		0.0 VA - 1300 VA	0.0 VA - 2600 VA	0.0 VA - 5200 VA	0.0 VA - 7800 VA
	Calculated Formula		V×A, Calculated value			
Power Reactive (Q)	Range		0.0 VAR - 1300 VAR	0.0 VAR - 2600 VAR	0.0 VAR - 5200 VAR	0.0 VAR - 7800 VAR
	Calculated Formula		$\sqrt{(VA)^2-(W)^2}$, Calculated value			
Power Factor	Range		0.000 - 1.000			
	Calculated Formula		W/VA, Calculated and displayed to three significant digits			
Crest Factor	Range		0.0 - 10.0			
	Accuracy		A peak / Arms, Calculated and displayed to two significant digits			
OPTIONS						
Grounded Neutral	Option 2		All Models			
GPIB Interface	Option 3		All Models			
7 Remote Memory	Option 4		All Models			
Ethernet Interface	Option 6		All Models			
Linking Card	Option 8		All Models			
GENERAL						
Operation Environment			0 - 40°C / 20 - 80% RH			
Dimensions (W x H x D)			16.92 x 5.26 x 20.87 in	16.92 x 5.26 x 20.87 in	16.92 x 10.51 x 19.69 in	16.92 x 15.77 x 19.69 in
			430 x 133.5 x 530 mm	430 x 133.5 x 530 mm	430 x 267 x 500 mm	430 x 400.5 x 500 mm
Net Weight			47.16 lbs (21 kg)	49 lbs (22 kg)	82 lbs (37 kg)	117 lbs (53 kg)

Linking Parallel Output 1Ø2W			310XAC	320XAC	340XAC	360XAC
Linked Unit			2 - 3 Units, 1Ø2W (L1 - N)			
Voltage	Phase		5 - 300 V			
Power Max	# Units	2	1.8 kVA	3.6 kVA	7.2 kVA	10.8 kVA
		3	2.7 kVA	5.4 kVA	10.8 K 10.8 kVAA A	16.2 kVA
Max Current Line (RMS)	0 - 150 V	L(2)	14.72 A @ 20 V -110 V	29.44 A @ 20 V -110 V	58.88 A @ 20V - 110 V	88.32 A @ 20 V - 110 V
		L(3)	22.08 A @ 20 V - 110 V	44.16 A @ 20 V - 110 V	88.32 A @ 20 V - 110 V	132.48 A @ 20 V - 110 V
	0 - 300 V	H(2)	7.36 A @ 20 V - 220 V	14.72 A @ 20 V - 220 V	29.44 A @ 20 V - 220 V	44.16 A @ 20 V - 220 V
		H(3)	11.04 A @ 20 V - 220 V	22.08 A @ 20 V - 220 V	44.16 A @ 20 V - 220 V	66.24 A @ 20 V - 220 V
Linking Polyphase Output 1Ø3W			**310XAC**	**320XAC**	**340XAC**	**360XAC**
Linked Units			2 Units @ 180°, 1Ø3W (L1-L2 - N)			
Voltage	Phase		10 - 600 V			
	Line		5 - 300 V			
Power	Max		2 kVA	4 kVA	8 kVA	12 kVA
Max Current Phase	0 - 300 V	L(1)	9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V	55.2 A @ ≤110 V
	0 - 600 V	H(1)	4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V	27.6 A @ ≤220 V
Max Current Line	0 - 300 V	L(2)	9.2 A @ ≤220 V	18.4 A @ ≤220 V	36.8 A @ ≤220 V	55.2 A @ ≤220 V
	0 - 600 V	H(2)	4.6 A @ ≤440 V	9.2 A @ ≤440 V	18.4 A @ ≤440 V	27.6 A @ ≤440 V
Linking Polyphase Output 3Ø4W			**310XAC**	**320XAC**	**340XAC**	**360XAC**
Linked Units			3 Units @ 120°, 3Ø4W (L1-L2-L3 - N)			
Voltage	Phase		5 - 300 V			
	Line		5 - 520 V			
Power	Max		3 kVA	6 kVA	12 kVA	18 kVA
Max Current Phase	0 - 150 V	L(1)	9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V	55.2 A @ ≤110 V
	0 - 300 V	H(1)	4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V	27.6 A @ ≤220 V
Max Current Line	0 - 150 V	L(3)	9.2 A @ ≤190.5 V	18.4 A @ ≤190.5 V	36.8 A @ ≤190.5 V	55.2 A @ ≤190.5 V
	0 - 300 V	H(3)	4.6 A @ ≤381 V	9.2 A @ ≤381 V	18.4 A @ ≤381 V	27.6 A @ ≤381 V
Max Current Phase Delta	0 - 260 V	L(3)	5.31 A @ ≤190.5 V	10.62 A @ ≤190.5 V	21.24 A @ ≤190.5 V	31.87 A @ ≤190.5 V
	0 - 520 V	H(3)	2.65 A @ ≤381 V	5.31 A @ ≤381 V	10.62 A @ ≤381 V	15.93 A @ ≤381 V
Linking Parallel DC Output 1Ø2W			**310XAC**	**320XAC**	**340XAC**	**360XAC**
Linked Units			2 - 3 Units, 1Ø2W (L1 - N)			
Voltage Power	Line		5 - 420 V			
Power Max	# Units	2	1.8 kVA	3.6 kVA	7.2 kVA	10.8 kVA
		3	2.7 kVA	5.4 kVA	10.8 kVA	16.2 kVA
Max Current Line	0 - 210 V	L(2)	7.68 A @ 50 V - 210 V	15.36 A @ 50 V - 210 V	30.72 A @ 50 V - 210 V	46.08 A @ 50 V - 210 V
		L(3)	11.52 A @ 50 V - 210 V	23.04 A @ 50 V - 210 V	46.08 A @ 50 V - 210 V	69.12 A @ 50 V - 210 V
	0 - 420 V	H(2)	3.84 A @ 50 V - 420 V	7.68 A @ 50 V - 420 V	15.36 A @ 50 V - 420 V	23.04 A @ 50 V - 420 V
		H(3)	5.76 A @ 50 V - 420 V	11.52 A @ 50 V - 420 V	23.04 A @ 50 V - 420 V	34.56 A @ 50 V - 420 V

Specifications – 300XAC Series

Measurement (Total) Linking Parallel 1Ø2W			310XAC	320XAC	340XAC	360XAC
Voltage	Range		0.0 - 400.0 V			
	Accuracy		± (1% of reading + 2 counts) >5 V		± (1% of reading + 5 counts) >5 V	
Frequency	Range		0.0 - 1000.0 Hz			
	Accuracy	L	± 0.1 Hz @ 0.0 - 500 Hz			
		H	± 0.2 Hz @ 501 - 1000 Hz			
Current (RMS)	Range	2	0.00 A - 26.00 A	0.00 A - 52.00 A	0.00 A - 104.0 A	0.00 A - 156.0 A
		3	0.00 A - 39.00 A	0.00 A - 78.00 A	0.00 A - 156.0 A	0.00 A - 234.0 A
	Accuracy	L	± (1.5% of reading +15 counts) x # of Linked Units @ 40.0 - 70.0 Hz & Current is >1.0 A		± (1.5% of reading +15 counts) x Link Units @ 40.0 - 70.0 Hz and Current (RMS) >2.00 A, ± (1.5% of reading +15 counts) x Link Units @ 70.1 - 1000 Hz, and Current (RMS) >10.00 A	± (1.5% of reading +15 counts) x Link Units @ 40.0 - 70.0 Hz and Current (RMS) >3.00 A, ± (1.5% of reading +15 counts) x Link Units @ 70.1 - 1000 Hz, and Current (RMS) >15.00 A
		H	± (1.5% of reading +15 counts) x # of Linked Units @ 70.1- 1000 Hz & Current is >5.00 A			
Power (W)	Range	2	0 W - 2600 W	0 W - 5200 W	0 W -10400 W	0 W - 15600 W
		3	0 W - 3900 W	0 W - 7800 W	0 W - 15600 W	0 W - 23400 W
	Accuracy		± (2% of reading + 10 counts) x (# of Linked Units) at PF ≥0.2, 40 - 500 Hz, and Current >5.0 A ± (2% of reading + 10 counts) x (# of Linked Units) at PF ≥0.3, 501 - 1000 Hz, and Current >5.0 A			
Power Apparent (VA)	Range	2	0 W - 2600 VA	0 W - 5200 VA	0 W -10400 VA	0 W - 15600 VA
		3	0 W - 3900 VA	0 W - 7800 VA	0 W - 15600 VA	0 W - 23400 VA
	Accuracy		V x A, Calculated Value			
Power Reactive (Q)	Range	2	0 W - 2600 VA	0 W - 5200 VA	0 W -10400 VA	0 W - 15600 VA
		3	0 W - 3900 VA	0 W - 7800 VA	0 W - 15600 VA	0 W - 23400 VA
	Accuracy		$\sqrt{(VA)^2 - (W)^2}$, Calculated Value			
Power Factor	Range		0 - 1.000			
	Accuracy		W / VA, Calculated and displayed to three significant digits			

Measurement (Total) Linking Polyphase 1Ø3W			310XAC	320XAC	340XAC	360XAC
Voltage	Range	2	L1 Voltage + L2 Voltage			
	Accuracy		Summation of linked sources, Calculated and displayed to one significant digit			
Frequency	Range		0.0 - 1000.0 Hz			
	Accuracy	L	± 0.1 Hz @ 0.0 - 500 Hz			
		H	± 0.2 Hz @ 501 - 1000 Hz			
Current (RMS)	Range	2	(L1 Current + L2 Current)/2			
	Accuracy		± (1% of reading + 5 counts) at 40 - 70 Hz ± (1% of reading + 5 counts) at 70.1 - 500 Hz, and output current (RMS) >0.200 A ± (1% of reading + 5 counts) at 501 - 1000 Hz, and output current (RMS) >0.300 A			
Power (W)	Range	2	L1 Power + L2 Power			
	Accuracy	2	L1 Power + L2 Power, Calculated Value			
Power Apparent (VA)	Range	2	L1 VA + L2 VA			
	Accuracy	2	L1 VA + L2 VA, Calculated Value			
Power Reactive (Q)	Range	2	L1 VAR + L2 VAR			
	Accuracy	2	L1 VAR + L2 VAR, Calculated Value			
Power Factor	Range		0 - 1.000			
	Accuracy		(L1 P + L2 P) / (L1 VA + L2 VA), Calculated and displayed to three significant digits			

Measurement (Total) Linking Polyphase 3Ø4W			310XAC	320XAC	340XAC	360XAC
Voltage	Range		(A+B+C)/3			
	Accuracy		(A+B+C)/3 , Calculated and displayed to one significant digit			
Frequency	Range		0.0 - 1000.0 Hz			
	Accuracy	L	± 0.1 Hz @ 0.0 - 500 Hz			
		H	± 0.2 Hz @ 501 - 1000 Hz			
Current (RMS)	Range		(A+B+C)/3			
	Accuracy		± (1% of reading + 5 counts) at 40 - 70 Hz ± (1% of reading + 5 counts) at 70.1 - 500 Hz, and output current (RMS) >0.200 A ± (1% of reading + 5 counts) at 501 - 1000 Hz, and output current (RMS) >0.300 A			
Power (W)	Range		A Power + B Power + C Power			
	Accuracy		Calculated Value			
Power Apparent (VA)	Range		A VA + B VA + C VA			
	Accuracy		Calculated Value			
Power Reactive (Q)	Range		A VAR + B VAR + C VAR			
	Accuracy		Calculated Value			
Power Factor	Range		0 - 1.000			
	Accuracy		Sum P / Sum VA, Calculated and displayed to three significant digits			

Measurement (Total) Linking Parallel DC			310XAC	320XAC	340XAC	360XAC
Voltage	Range		0.0 - 420.0 V			
	Accuracy		± (1% of reading + 2 counts) >5 V		± (1% of reading + 5 counts) >5 V	
Current (RMS)	Range	2	0.05 A - 26.00 A	0.05 A - 52.00 A	0.05 A - 104.00 A	0.05 A - 156.00 A
		3	0.05 A - 39.00 A	0.05 A - 78.00 A	0.05 A - 156.00 A	0.05 A - 234.00 A
	Accuracy		± (1% of reading + 5 counts) x # of Linked Units, Current >1.00 A		± (1% of reading + 5 counts) x # of Linked Units, Current >2.00 A	± (1% of reading + 5 counts) x # of Linked Units, Current >3.00 A
Power (W)	Range	2	0 W - 2600 W	0 W - 25200 W	0 W -10400 W	0 W - 15600 W
		3	0 W - 3900 W	0 W - 7800 W	0 W - 15600 W	0 W - 23400 W
	Accuracy		± (2% of reading + 5 counts) x # of Linked Units			

Specifications subject to change

Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester'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 = 2V.

Key

L = Low Limit Range	L (2) = Low Limit Range 2 Units Linked	H (2) = High Limit Range 2 Units Linked	2 = 2 Units Linked
H = High Limit Range	L (3) = Low Limit Range 3 Units Linked	H (3) = High Limit Range 3 Units Linked	3 = 3 Units Linked

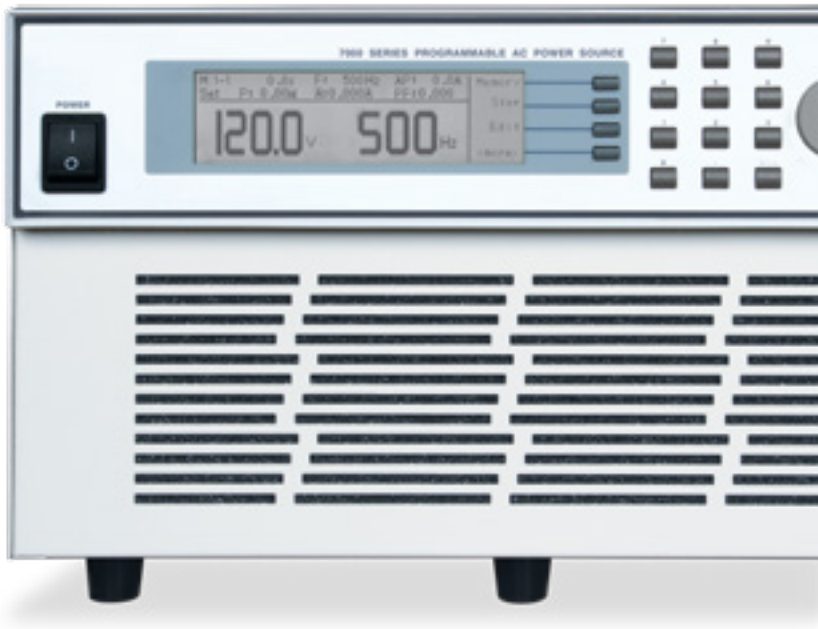
7000 Series

Automated AC Power Sources

Our 7000 Series automated AC power sources are ideal for advanced applications at a competitive price. Switch-mode technology and a direct coupled output make these sources lightweight and efficient for use on the bench-top or in a rack mount system. The graphic LCD display provides metering data on the front panel and the easy-to-use local interface allows operators to get tests up and running quickly.

Features

- 50 built-in memory locations with 9 test steps
- Surge/Drop features simulate voltage variations, brownouts and transient voltage conditions
- Programmable starting and ending angle of the output sine wave
- Metering circuits monitor voltage, current, peak current, power, apparent power, reactive power, power factor, and crest factor
- Constant current output with over current fold back feature
- Front panel lockout via password protection
- Rack mount handle kit included



Options

- Grounded Neutral
- GPIB Interface
- 7 Remote Memories
- Ethernet Interface

NI LabVIEW DRIVER AVAILABLE

Start Output
PowerTRAC™ AVAILABLE

Applicable

Aerospace | Appliance | System Integrator | Lighting | Medical

APT Benefits

WARRANTY 3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

INPUT			7004	7008	7016	7040
Phase			1Ø			
Voltage			115/230 VAC ± 10%		230 VAC ± 10%	
Frequency			47 – 500 Hz			
OUTPUT						
Voltage			0 - 300 V		5 - 300 V	
Max Power			400 VA*	800 VA*	1600 VA*	4000 VA
Max Current 1Ø	0 - 150 V		4.6 A @ ≤110 V	9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V
	0 - 300 V		2.3 A @ ≤220 V	4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V
Phase			1Ø			
Frequency			40.0 - 500 Hz			
THD			< 1% (Resistive Load)			
Crest Factor			≥3			
Line Regulation			± 0.1 V			
Load Regulation			± (0.5% of output + 0.5 V) at Resistive Load			
MEASUREMENT						
Voltage	Range		0.0 - 400.0 V			
	Accuracy		± (1% of reading + 2 counts)		± (1% of reading + 5 counts) >5V	
Frequency	Range		0.0 - 500 Hz			
	Accuracy		± 0.1 Hz			
Current (RMS)	Range		0.005 A - 6.50 A	0.005 A - 13.00 A	0.05 A - 26.00 A	0.05 A - 52.00 A
	Accuracy		± (1% of reading + 5 counts)			
Current Peak	Range		0.0 A - 19.0 A	0.0 A - 38.0 A	0.0 A - 76.0 A	0.0 A - 152.0 A
	Accuracy		± (1% of reading + 5 counts)			
Power	Range		0.0 W - 650 W	0.0 W - 1300 W	0.0 W - 2600 W	0.0 W - 5200 W
	Accuracy	L	± (2% of reading + 15 counts) at PF >0.2		± (2% of reading + 30 counts) at PF >0.2	± (2% of reading + 5 counts) at PF ≥0.2 Voltage >5 V Current >0.05 A
		H	± (2% of reading + 5 counts) at PF >0.2		± (2% of reading + 10 counts) at PF >0.2	
Power Factor	Range		0.000 - 1.000			
	Accuracy		W/VA, Calculated and displayed to three significant digits			
GENERAL						
Rackmount Handles			Standard			
USB/RS-232 Interface			Standard			
Lockout			Key lockout or password protection			
Front Output			Universal Receptacle	Universal Receptacle	Universal Receptacle	–
Efficiency			≥80% (at Full Load)			
Operation Environment			0 - 40ºC / 20 - 80% RH			
Dimensions (W x H x D)			16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 19.69 in	16.92 x 8.74 x 19.69 in
			430 x 89 x 400 mm	430 x 89 x 400 mm	430 x 89 x 500 mm	430 x 222 x 500 mm
Net Weight			36.4 lbs (16.5 kg)	40 lbs (18.2 kg)	66 lbs (30 kg)	143.3 lbs (65 kg)

Specifications subject to change

***Output Power and Power Factor Considerations**

The reactive output power specification of models 7004, 7008, and 7016 change depending on the power factor of the load. While the 7004, 7008, and 7016 are specified as 400 VA, 800 VA, and 1.6 kVA units respectively, they can actually output up to 25% more reactive power based on the power factor of the load, thus keeping the real power under the specified limit. The reactive power is at its peak when the power factor = 0.8. See chart below for more information:

Why We Use Counts

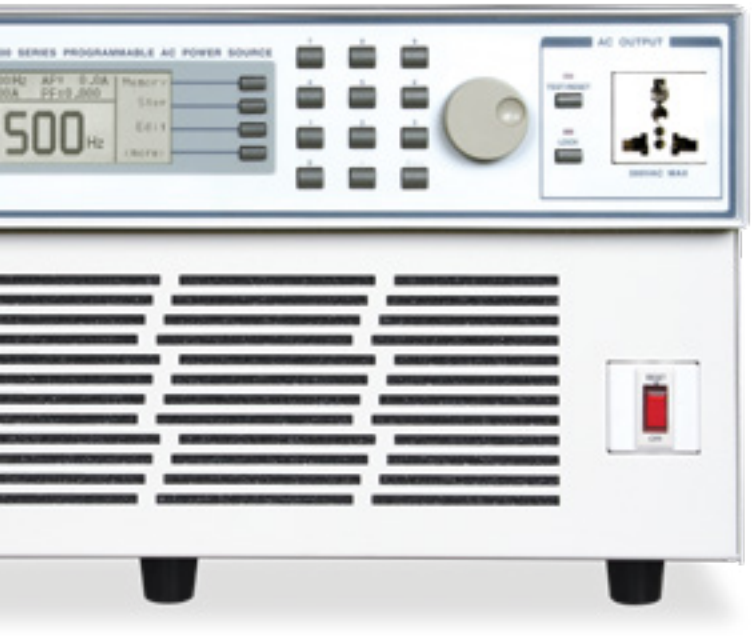
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts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

	7004	7008	7016
Output Power at pf ≤ 0.8	500 VA @ ≤400 W	1000 VA @ ≤800 W	2000 VA @ ≤1600 W
Output Power at pf > 0.8	400 VA @ ≤400 W	800 VA @ ≤800 W	1600 VA @ ≤1600 W

6000 Series

Automated AC Power Sources

Our 6000 Series of automated AC power sources are ideal for applications where PC control is ideal to capture metering and testing results from the source. We provide LabView drivers and a free GUI interface to assist in getting you up and running in no time. Our simple to use front panel interface is ideal for customers that are not interested in using a PC and need the flexibility to operate the source at a moments notice for quick testing.



Start Output
PowerTRAC™ AVAILABLE

NI LabVIEW
DRIVER AVAILABLE

Features

- 50 built-in memory locations with 9 test steps
- DC output capability (optional)
- Surge/Drop features simulate voltage variations, brownouts and transient voltage conditions
- Programmable starting and ending angle of the output sine wave
- Metering circuits monitor voltage, current, peak current, power, apparent power, reactive power, power factor, and crest factor
- Constant current output with over current fold back feature
- Front panel lockout via password protection
- Rack mount handle kit included

Standard

- USB/RS-232 Interface

Options

- 230 VAC ± 10%
- Grounded Neutral
- GPIB Interface
- 7 Remote Memories
- Ethernet Interface
- DC Output

Applicable

Aerospace | Appliance | Laboratory | Lighting | Medical

APT Benefits

WARRANTY 3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

INPUT			6005	6010	6020	6040
Phase			1Ø			
Voltage			115/230 VAC ± 10%		208 VAC ± 10%	
Frequency			47 – 500 Hz			
OUTPUT						
Voltage			0 - 300 V		5 - 300 V	
Max Power			500 VA	1 kVA	2 kVA	4 kVA
Max Current 1Ø	0 - 150 V		4.6 A @ ≤110 V	9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V
	0 - 300 V		2.3 A @ ≤220 V	4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V
Phase			1Ø			
Frequency			47 - 500 Hz			
THD			<1% (Resistive Load)			
Crest Factor			≥3			
Line Regulation			± 0.1 V			
Load Regulation			± (0.5% of output + 0.5 V) at Resistive Load			
MEASUREMENT						
Voltage	Range		0.0 - 400.0 V			
	Accuracy		± (1% of reading + 2 counts)		± (1% of reading + 5 counts) >5 V	
Frequency	Range		0.0 - 500 Hz			
	Accuracy		± 0.1 Hz			
Current (RMS)	Range		0.005 A - 6.50 A	0.005 A - 13.00 A	0.05 A - 26.00 A	0.05 A - 52.00 A
	Accuracy		± (1% of reading + 5 counts)			
Current Peak	Range		0.0 A - 19.0 A	0.0 A - 38.0 A	0.0 A - 76.0 A	0.0 A - 152.0 A
	Accuracy		± (1% of reading + 5 counts)			
Power	Range		0.0 W - 650 W	0.0 W - 1300 W	0.0 W - 2600 W	0.0 W - 5200 W
	Accuracy	L	± (2% of reading + 15 counts)	± (2% of reading + 30 counts)	± (2% of reading + 5 counts)	
		H	± (2% of reading + 5 counts)	± (2% of reading + 10 counts)		
Power Factor	Range		0.000 - 1.000			
	Accuracy		W/VA, Calculated and displayed to three significant digits			
GENERAL						
Rack Mount Kit			Standard			
USB/RS-232 Interface			Standard			
Lockout			Key lockout or password protection			
Efficiency			≥80% (at Full Load)			
Operation Environment			0 - 40°C / 20 - 80% RH			
Dimensions (W x H x D)			16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 19.69 in	16.92 x 8.74 x 19.69 in
			430 x 89 x 400 mm	430 x 89 x 400 mm	430 x 89 x 500 mm	430 x 222 x 500 mm
Net Weight			36.4 lbs (16.5 kg)	40 lbs (18.2 kg)	66 lbs (30 kg)	143.3 lbs (65 kg)
DC OUTPUT VOLTAGE						
Voltage			0 - 400 V			
Max Power			250 W	500 W	1000 W	2000 W
Max Current	0 - 200 V		2.3 A	4.6 A	9.2 A	18.4 A
	0 - 400 V		1.5 A	2.3 A	4.6 A	9.2 A
Ripple & Noise (RMS)			0 - 200 V <250 mV & 0 - 400 V <400 mV		0 - 200 V <350 mV & 0 - 400 V <400 mV	

Specifications subject to change

Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester'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 = 2V.

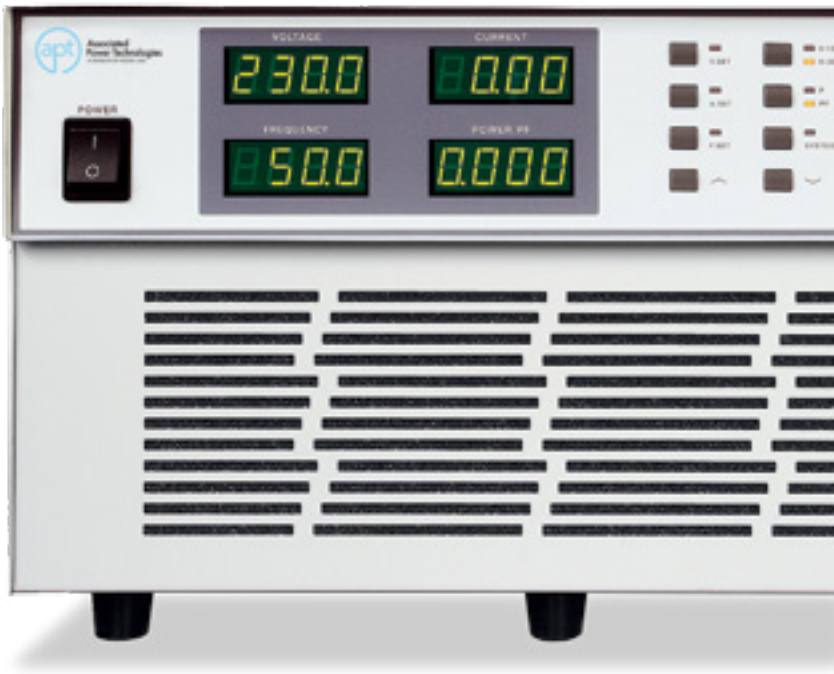
5000 Series

Manual AC Power Sources

Our 5000 Series manual AC Power sources are lightweight and efficient while providing a robust feature set. Ideal for bench-top applications, they feature four LED displays that monitor voltage, current, frequency, power and power factor. The easy-to-use local push-button interface allows you to quickly set-up and change parameters with ease while built-in safety features protect the instrument, the operator, and the DUT ensuring a safe work environment.

Features

- 3 built-in memory locations to store and quickly recall test parameters
- LED displays monitor voltage, current, frequency, and power / power factor
- Independent, adjustable high and low limits for voltage, current, and frequency
- Power Up feature configures the output relay for quick and efficient testing
- Constant current output with over current fold back feature
- Front panel lockout



Options

- 230 VAC ± 10%
- Grounded Neutral

Applicable

Aerospace | Laboratory | Lighting | Medical

APT Benefits

3 YEAR WARRANTY | 10 DAY GUARANTEED SHIPMENT

INPUT		5005	5010	5020	5040
Phase		1Ø			
Voltage		115/230 VAC ± 10%		208 VAC ± 10%	
Frequency		47 - 500 Hz			
OUTPUT					
Voltage		0 - 300 V		5 - 300 V	
Max Power		500 VA	1 kVA	2 kVA	4 kVA
Max Current 1Ø	0 - 150 V	4.6 A @ ≤110 V	9.2 A @ ≤110 V	18.4 A @ ≤110 V	36.8 A @ ≤110 V
	0 - 300 V	2.3 A @ ≤220 V	4.6 A @ ≤220 V	9.2 A @ ≤220 V	18.4 A @ ≤220 V
Phase		1Ø			
Frequency		40.0 - 450 Hz			
THD		<1% (Resistive Load)			
Crest Factor		≥ 3			
Line Regulation		± 0.1 V			
Load Regulation		± (0.5% of output + 0.5 V) at Resistive Load			
MEASUREMENT					
Voltage	Range	0.0 - 400.0 V			
	Accuracy	± (1% of reading + 2 counts)		± (1% of reading + 5 counts) >5V	
Frequency	Range	0.0 - 500 Hz			
	Accuracy	± 0.1 Hz			
Current (RMS)	Range	0.00 A - 6.50 A	0.00 A - 13.00 A	0.00 A - 26.00 A	0.05 A - 52.00 A
	Accuracy	± (1% of reading + 5 counts)			
Power	Range	0.0 W - 650 W	0.0 W - 1300 W	0.0 W - 2600 W	0.0 W - 5200 W
	Accuracy	± (2% of reading + 10 counts) at PF ≥0.2			
Power Factor	Range	0.000 - 1.000			
	Accuracy	W/VA, Calculated and displayed to three significant digits			
GENERAL					
Lockout		Key lockout			
Inrush Current		4 times the max rated current			
Enhanced Over Load Protection		4 times of rating current, Over Current 110% can be held for 1000ms w/o shutdown of output			
Over Current Foldback		Constant Current Mode (Voltage output varies to maintain current output based on load)			
Memories		3 Programmable Memory Locations			
Front Output		Universal Receptacle			
Rear Output		–	–	Universal Receptacle	Terminal Block
Displays		4 LED Displays			
Operation Key Feature		Up/Down Arrow Keys			
Voltage Limits		Programmable High & Low Limits			
Frequency Limits		Programmable High & Low Limits			
Power Up Settings		Specify Output Power Condition on Power Up (On, Off, Last)			
Protection Circuits		Over Current, Over Voltage, Over Power, Over Temperature			
Efficiency		≥80% (at Full Load)			
Operation Environment		0 - 40°C / 20 - 80% RH			
Dimensions (W x H x D)		16.92 x 3.50 x 11.81 in	16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 19.69 in	16.92 x 8.74 x 19.69 in
		430 x 89 x 300 mm	430 x 89 x 400 mm	430 x 89 x 500 mm	430 x 222 x 500 mm
Net Weight		36.4 lbs (16.5 kg)	40 lbs (18.2 kg)	66 lbs (30 kg)	143.3 lbs (65 kg)

Specifications subject to change

Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester'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 = 2V.

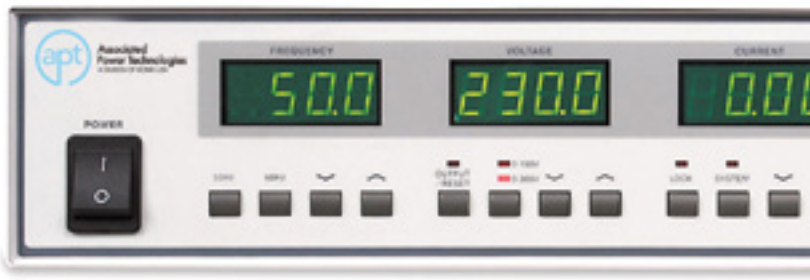
LS Series

Linear AC Power Sources

Our LS Series linear AC power sources provide clean, regulated power at competitive prices. Linear technology reduces total harmonic distortion (THD) across the instrument's output frequency range and improves performance for high crest factor loads. Four LED displays monitor voltage, current, frequency, power and power factor while the easy-to-use local push-button interface allows operators to quickly set and change test parameters with ease. Built-in safety features protect the instrument, the operator, and the DUT ensuring a safe work environment.

Features

- 3 built-in memory locations
- 50/60 Hz quick selection keys
- Metering circuits monitor voltage, current, frequency and power
- Constant current output with over current fold back feature
- Front panel lockout
- Programmable high and low limits for voltage, current and frequency
- Low range metering into milliwatts for power (optional)
- Push-button interface for easy setup
- Test/Reset key quickly disables output voltage
- Front panel calibration



Options

- Grounded Neutral
- 7 Remote Memories
- Low Range .1mA/.01W Resolution

Applicable

Aerospace | Laboratory | Lighting | Medical

APT Benefits

3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

INPUT			LS 500	LS 1000
Phase			1Ø	
Voltage			115/230 VAC Selectable ± 10% Variation	
Frequency			50/60 Hz ± 5%	
OUTPUT				
Voltage			0 - 300 VAC	
Max Power			500 VA	1 kVA
Max Current 1Ø	0 - 150 V		4.2 A @ ≤120 V	8.4 A @ ≤120 V
	0 - 300 V		2.1 A @ ≤240 V	4.2 A @ ≤240 V
Phase			1Ø	
Frequency			45 - 500 Hz	
THD			<0.5% @ 45-500 Hz (Resistive Load)	
Crest Factor			≥4	
Line Regulation			± 0.1 V	
Load Regulation			± 0.5% (Resistive Load)	
MEASUREMENT				
Voltage	Range		0.0 - 300.0 V	
	Accuracy		± (1.5% of reading + 2 counts)	
Frequency	Range		0.0 - 500.0 Hz	
	Accuracy		± 0.1 Hz	
Current (RMS)	Range	L	0.000 - 3.500 A (2.0 mA - 350.0 mA)	
		H	3.0 - 35.00 A	
	Accuracy		± (2.0% of reading + 3 counts) for high range ± (2.0% of reading + 5 counts) for low range (± 0.6% of reading + 5 counts Option 5)	
Power	Range	L	0.0 - 350.0 W (0.20 - 3500 W Option 5)	
		H	300 - 4000 W	
	Accuracy		± (5.0% of reading + 3 counts) for high range ± (5.0% of reading + 5 counts) for low range (± 0.6% of reading + 5 counts Option 5)	
Power Factor	Range		0.000 - 1.000	
	Accuracy		W/VA, Calculated value	
GENERAL				
Inrush Current			4 times the current rating	
Enhanced Over Load Capacity			105% overcurrent can hold for 500 ms w/o protection	
Operation Key Feature			Up/Down Arrow Key	
Memory			3 Memories (M1, M2, M3), (7 Memories Option 4)	
PLC Remote Interface			Input: Test, Reset Recall Memories 1-3 (1-7 Option 4), Output: Fail, Test-in-Process	
Fan			Yes	
Front Output			Universal Receptacle	
Rear Output			Universal Receptacle	Terminal Block
Displays			4 LED Displays	
Rack Mount Kit			Standard	
Protection Circuits			Over Current, Over Voltage, Over Temperature	
Calibration			Front panel software	
Dimensions (W x H x D)			16.92 x 3.50 x 15.75 in	16.92 x 3.50 x 22.05 in
			430 x 89 x 400 mm	430 x 89 x 560 mm
Net Weight			55 lbs (25 kg)	79.4 lbs (36 kg)

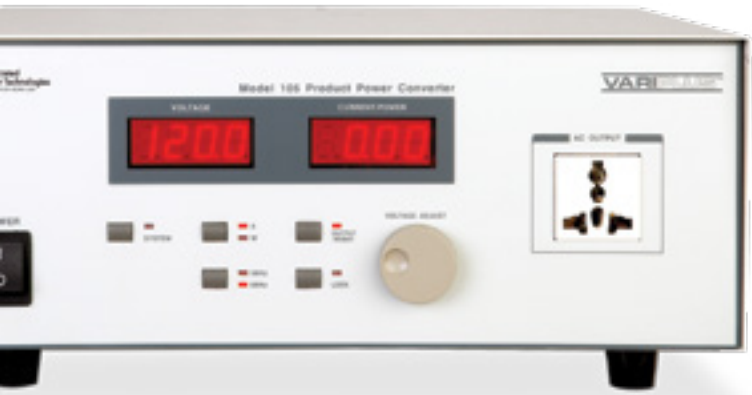
Specifications subject to change

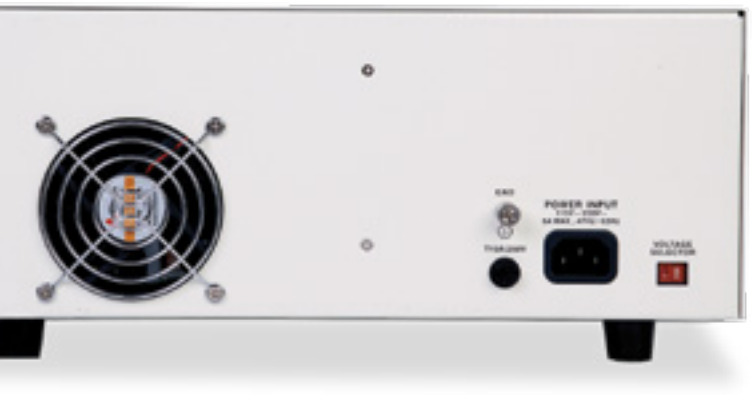
Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is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

VariPLUS®

Power Converter

The VariPLUS® is a power converter specifically designed for testing in the production line or laboratory environment. The VariPLUS out performs the traditional variable transformer on multiple levels that include metering, automatic voltage and frequency adjustments to the load. Easily produce variable output voltages between 0-300 VAC with selectable frequency at 50/60 Hz to satisfy your product testing requirements. Simple adjustments are made through dedicated keys and a rotary knob. The universal receptacle provides multi-national connections while providing operator protection.





Features

- Isolated output ensures the power provided to the DUT is free from distortion, voltage spikes and other transients
- Push-button interface for 50/60 Hz output
- SmartVOLT feature allows the operator to configure the instrument to power up at 0 volts or the previously used voltage before the instrument was turned off
- Metering circuits monitor voltage, current, frequency and power
- Output/Reset key maximizes operator safety by enabling and disabling the output with a simple push-button
- Power Up feature configures the output relay for quick and efficient testing
- Front panel lockout

Options

- Grounded Neutral

Applicable

Laboratory | Lighting | Medical | Test & Measurement

APT Benefits

3 YEAR WARRANTY

10 DAY GUARANTEED SHIPMENT

INPUT		105
Phase		1Ø
Voltage		115/230 VAC Selectable ± 10% Variation
Frequency		47 – 63 Hz
OUTPUT		
Voltage		0 - 300 VAC
Max Power		500 VA
Max Current (RMS)		2.3 A @ <220 V, 4.6 A @ <110 V
Phase		1Ø2W
Frequency		50, 60 Hz Selectable
THD		<1% (Resistive Load)
Crest Factor		≥ 3
Line Regulation		± 0.1 V
Load Regulation		± (0.5% of output + 0.5 V) at Resistive Load
Response Time		<400 µsec
MEASUREMENT		
Voltage	Range	0.0 - 400.0 V
	Accuracy	± (1% of reading + 2 counts)
Frequency	Range	50, 60 Hz Selectable
	Accuracy	± 0.1% Hz of setting ± .03%
Current (RMS)	Range	0.0 – 6.50 A
	Accuracy	± (1% of reading + 5 counts)
Power	Range	0 - 650 W
	Accuracy	± (2% of reading + 10 counts) at PF ≥ 0.2
GENERAL		
Inrush Current		4 times the current rating
Enhanced Over Load Capacity		4 times of rating current, Over Current 110% can hold for 1000 ms w/o Protection
Operation Key Feature		Frequency, Display, System, Lock, Output
Digital Encoder		Adjusts output voltage and system parameter values
Fan		Temp. Control Two Fan Speed
Front Output		Universal Receptacle
Rear Output		–
Displays		LED
Efficiency		≥ 80% (at full load)
Protection Circuits		Over Current, Over Voltage, Over PP, Over Temperature
Calibration		Front Panel Calibration
Dimensions (W x H x D)		14 x 5.25 x 12 in
		355 x 133 x 300 mm
Net Weight		28 lbs (13 kg)

Specifications subject to change

Why We Use Counts
APT publishes some specifications using "counts" which allows us to provide a better indication of the tester'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 = 2V.

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