

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
- 7 Remote Memories
- GPIB Interface
- Ethernet Interface

NI LabVIEW
DRIVER AVAILABLE



Applicable



Aerospace



Appliance



System
Integrator



Lighting



Medical

APT Benefits



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 - 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)

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