500/1000 VA PROGRAMMABLE AC POWER SOURCE





The APS-7000 Series is an AC power source, containing abundant features for the testing and characteristic analysis of power supplies, electronic devices, components and modules. The APS-7000 Series is fully programmable to simulate different power outputs. All parameters and values as well as measurement results are displayed simultaneously on the 4.3 inch TFT-LCD screen.

The APS-7000 Series comprises nine measurement functions (Vrms, Irms, F, Ipk, W, VA, PF, Ipk hold, CF), and provides user interface similar to that of AC Power Meter. The APS-7000 Series, internal circuit design 4 sets of current range to improve measurement resolution, is ideal for the LED industry and standby mode power consumption test. Under the ARB (function waveform) mode, the APS-7000 Series provides waveforms, including SINE waveform, Triangle waveform, Staircase waveform, Clipped Sinewave, Crest factor waveform, Surge waveform, and Fourier series to meet the requirement of simulating abnormal input power waveform test of different industry.

Ten sets of Preset allow users to store ten settings; Power ON Output setting allows Sequence, Simulate, and Program to automatically execute output after the equipment power is on.

The APS-7000 Series features five methods to cope with special purpose or abnormal voltage, frequency, and phase; ten sets of the Simulate mode simulate power outage, voltage rise, and voltage fall; ten sets of the Sequence mode allow users to define parameters and produce sine wave by editing steps; Ramp Control allows users to set the variation speed for output voltage rise and fall; Surge/Dip Control simulates DUT's input power producing a Surge or Dip voltage overlapping with output voltage waveform at a specific time. Ethernet Port, on the rear panel of the series, can be used for remote program control; Sync Output Socket provides external 10V sync output; Signal Output Connector provides monitor of Program execution results. the APS-7000 Series also provides Trigger In/Out and Output on/off remote control functions from J1 connector on the rear panel.

APS-7000 Series

FEATURES

- 4.3" large LCD Display
- Measurement Function:
 Voltage, Current, Power, Frequency,
 Power Factor, Crest Factor, Apparent
 Power, Ipeak, Ipk hold
- Surge/Dip Control Mode
- Frequency: 45.0 ~ 500.0Hz (Std);
 45.0 ~ 999.9Hz (Opt)
- Voltage Range (RMS): 155V (Std)/ 310V (Std)/600V (Opt)
- OVP/OCP/OTP Protection
- Simulate Mode, Sequence Mode, Program Mode
- Ramp Control Function
- ARB (Function Waveform) Mode
- Standard Interface: USB/LAN
- Optional Interface : RS-232 & USB CDC/GPIB





APS-7100 Front



APS-7050 Rear Panel



APS-7100 Rear Panel

APPLICATIONS

- The Broad Power Output Range of The Series is Ideal for Various Power Supply Manufacturers
- The Development of Electronic Components and Testing Applications for Manufacturers
- Incoming Quality Control and R & D Applications
- Small AC Current Measurement Applications

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SPECIFICATIONS	s			
Model		APS-7050	APS-7100	
Power Rating		500VA	1000VA	
Output Voltage		0 ~ 310.0 Vrms	0 ~ 310.0 Vrms	
Output Frequency		45.00 ~ 500.0 Hz	45.00 ~ 500.0 Hz	
Maximum Current (r.m.s		4.2A	8.4A	
	0~310Vrms	2.1A	4.2A	
Maximum Current (peak	0~155Vrms	16.8A	33.6A	
	0~310Vrms	8.4A	16.8A	
OPT. APS-003 (r.m.s)	0~600Vrms	1.05A@480V	2.1A@480V	
OPT. APS-003 (peak)	0~600Vrms	4.2A	8.4A	
Total Harmonic Distoration (THD)		≤0.5% at 45 ~ 500Hz (Resistive Load)		
Crest Factor		≥4		
Line regulation		0.1% (% of full scale)		
Load regulation		0.5% (% of full scale)		
Response time		<100us		
SETTING				
Voltage	Range	155Vrms/310Vrms/Auto		
Tomage	Resolution	0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms		
	Accuracy	±(0.5% of setting+2 counts)		
Frequency Range		45 ~ 500Hz		
11.1.7	Resolution	0.01Hz at 45.00 ~ 99.99Hz/0.1Hz at 100.0 ~ 500.0Hz		
	Accuracy	±0.02% of setting		
Power On/Off Phase	Range	0 ~ 359°		
Angle	Resolution	1°		
	Accuracy	±1°(45 ~ 65Hz)		
MEASUREMENT				
Voltage(RMS)	Range	0.20 ~ 38.75Vrms/38.76 ~ 77.50 Vrms/77.51 ~ 155.0Vrms/155.1 ~ 310.0Vrms		
	Resolution	0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms		
	Accuracy	$\pm (0.5\% \text{ of reading} + 2 \text{ counts})$		
Frequency Range Resoluti		45~500Hz		
		0.01Hz (at 45Hz~99.99Hz)/0.1Hz (at 100Hz~500.0Hz)		
	Accuracy	±0.1Hz		
Current(RMS) Range Resolution		2.00 ~ 70.00mA/60.0 ~ 350.0mA/0.300 ~ 3.500A/3.00 ~ 17.5A		
		0.01mA, 0.1mA, 0.001A, 0.01A		
	Accuracy	±(0.6% of reading+5 counts); 2.00~350.0mA/±(0.5% of reading+5 counts); 0.350~3.500A/±(0.5% of reading+3 counts); 3.500~17.50A		
Current(Peak) Range		0.0 ~ 70.0A	, , , , , , , , , , , , , , , , , , , ,	
, ,	Resolution	0.1A		
	Accuracy	±(1% of reading+1 count)		
Power(W) Resolution		0.01W, 0.1W, 1W		
` '	Accuracy	$\pm (0.6\% \text{ of reading} + 5 \text{ counts}); 0.20 \sim 99.99\text{W}; \pm (0.6\% \text{ of reading} + 5 \text{ counts}); 100.0 \sim 999.9\text{W}$		
		±(0.6% of reading + 2 counts); 1000~9999W		
Apparent(VA)	Resolution	0.01VA, 0.1VA, 1VA,		
	Accuracy	$\pm (1\% \text{ of reading} + 5 \text{ counts}); 0.20~99.99VA/\pm (1\% \text{ of reading} + 5 \text{ counts})$	counts);100.0~999.9VA/±(1% of reading + 2 counts);1000~9999VA	
Power Factor	Range	0.000~1.000		
	Resolution	0.001		
	Accuracy	±(2% of reading + 2 counts)		
GENERAL				
Remote Output Signal		Pass , Fail, Test-in Process, Trigger in, Trigger out , OUT ON / OF	F	
Sync Output Signal Number of Preset		Output Signal 10V, BNC type 10(0~9 Numeric keys)		
Protection		OCP, OPP, OHP and Alarm		
SEQUENCE / SIMUL	ATION / FUI			
Number of Memories	, . 0.	10 (0 ~ 9 Numeric keys)		
Number of Steps		255 max. (For each sequence)		
Step Time Setting		0.01 ~ 99.99S		
Operation Within Step Parameters		Constant / Keep / Linear Sweep	a Off Phase Term Jump Count (0 255)	
rardificiers		Output Range, Frequency, Waveform (Sine Wave Only); On Phas jump-to, Branch 1, Branch 2, Trigger Output	e, On Friase, Terrii Juriip Courit (0 ~ 255)	
Sequence Control		Start, Stop, Hold, Continue, Branch 1, Branch 2		
ENVIRONMENT CO	NDITIONS	· · · · · · · · · · · · · · · · · · ·		
Operation Temperature		0 ~ +40°C		
Storage Temperature		-10 ~ +70°C		
Operating Temperature		20 ~ 80% RH (No Condensation)		
Storage Humidity	OL INTERES	80% RH or less (No Condensation)		
PC REMOTE CONTR	OLINIERFA			
Standard Interface		USB Host/LAN		
Optional Interface Input Power Source		GPIB/RS232 & USB CDC 1φ AC 115/230Vac ±15%		
		1Ψ πC 113/230VaC ±13/0		
DIMENSIONS		4200V0 997(1) 4007(D) A 0777	4200V0 99 (LI) - ECO(D) - A	
		430(W) x 88(H) x 400(D) mm; Approx. 24Kg	430(W) x 88(H) x 560(D) mm; Approx. 38Kg	
			Specifications subject to change without notice. PA-7000GD1[

ORDERING INFORMATION

APS-7050 500VA Programmable AC Power Source APS-7100 1000VA Programmable AC Power Source

ACCESSORIES

CD ROM (User Manual, Programming Manual) x 1, Power Cord (Region Dependent), Mains Terminal Cover Set, GTL-123 Test Lead

OPTIONAL ASSESSORIES

APS-001 GPIB Interface Card
APS-002 RS-232/USB Interface Card
GRA-423 APS-7000 Rack Mount Kit

APS-003 Output Voltage Capacity : 0 ~ 600Vrms APS-004 Output Frequency Capacity : 45~999.9Hz

