

## APS-7000 Series



**NEW**



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.

### 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-7050 Front



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

SPECIFICATIONS		
Model	APS-7050	APS-7100
<b>Power Rating</b>	500VA	1000VA
<b>Output Voltage</b>	0 ~ 310.0 Vrms	0 ~ 310.0 Vrms
<b>Output Frequency</b>	45.00 ~ 500.0 Hz	45.00 ~ 500.0 Hz
<b>Maximum Current (r.m.s) 0~155Vrms</b>	4.2A	8.4A
<b>0~310Vrms</b>	2.1A	4.2A
<b>Maximum Current (peak) 0~155Vrms</b>	16.8A	33.6A
<b>0~310Vrms</b>	8.4A	16.8A
<b>OPT. APS-003 (r.m.s) 0~600Vrms</b>	1.05A@480V	2.1A@480V
<b>OPT. APS-003 (peak) 0~600Vrms</b>	4.2A	8.4A
<b>Total Harmonic Distortion (THD)</b>	≤0.5% at 45 ~ 500Hz (Resistive Load)	
<b>Crest Factor</b>	≥4	
<b>Line regulation</b>	0.1% (% of full scale)	
<b>Load regulation</b>	0.5% (% of full scale)	
<b>Response time</b>	<100us	
SETTING		
<b>Voltage</b>	<b>Range</b>	155Vrms/310Vrms/Auto
	<b>Resolution</b>	0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms
	<b>Accuracy</b>	±(0.5% of setting+2 counts)
<b>Frequency</b>	<b>Range</b>	45 ~ 500Hz
	<b>Resolution</b>	0.01Hz at 45.00 ~ 99.99Hz/0.1Hz at 100.0 ~ 500.0Hz
	<b>Accuracy</b>	±0.02% of setting
<b>Power On/Off Phase Angle</b>	<b>Range</b>	0 ~ 359°
	<b>Resolution</b>	1°
	<b>Accuracy</b>	±1°(45 ~ 65Hz)
MEASUREMENT		
<b>Voltage(RMS)</b>	<b>Range</b>	0.20 ~ 38.75Vrms/38.76 ~ 77.50 Vrms/77.51 ~ 155.0Vrms/155.1 ~ 310.0Vrms
	<b>Resolution</b>	0.01V at 0.00 ~ 99.99Vrms; 0.1V at 100.0 ~ 310.0Vrms
	<b>Accuracy</b>	±(0.5% of reading + 2 counts)
<b>Frequency</b>	<b>Range</b>	45 ~ 500Hz
	<b>Resolution</b>	0.01Hz (at 45Hz~99.99Hz)/0.1Hz (at 100Hz~500.0Hz)
	<b>Accuracy</b>	±0.1Hz
<b>Current(RMS)</b>	<b>Range</b>	2.00 ~ 70.00mA/60.0 ~ 350.0mA/0.300 ~ 3.500A/3.00 ~ 17.5A
	<b>Resolution</b>	0.01mA, 0.1mA, 0.001A, 0.01A
	<b>Accuracy</b>	±(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
<b>Current(Peak)</b>	<b>Range</b>	0.0 ~ 70.0A
	<b>Resolution</b>	0.1A
	<b>Accuracy</b>	±(1% of reading+1 count)
<b>Power(W)</b>	<b>Resolution</b>	0.01W, 0.1W, 1W
	<b>Accuracy</b>	±(0.6% of reading + 5 counts); 0.20~99.99W; ±(0.6% of reading + 5 counts); 100.0 ~ 999.9W
<b>Apparent(VA)</b>	<b>Resolution</b>	0.01VA, 0.1VA, 1VA,
	<b>Accuracy</b>	±(1% of reading + 5 counts);0.20~99.99VA/±(1% of reading + 5 counts);100.0~999.9VA/±(1% of reading + 2 counts);1000~9999VA
<b>Power Factor</b>	<b>Range</b>	0.000~1.000
	<b>Resolution</b>	0.001
	<b>Accuracy</b>	±(2% of reading + 2 counts)
GENERAL		
<b>Remote Output Signal</b>	Pass, Fail, Test-in Process, Trigger in, Trigger out, OUT ON / OFF	
<b>Sync Output Signal</b>	Output Signal 10V, BNC type	
<b>Number of Preset</b>	10(0~9 Numeric keys)	
<b>Protection</b>	OCP, OPP, OHP and Alarm	
SEQUENCE / SIMULATION / FUNCTION		
<b>Number of Memories</b>	10 (0 ~ 9 Numeric keys)	
<b>Number of Steps</b>	255 max. (For each sequence)	
<b>Step Time Setting</b>	0.01 ~ 99.99S	
<b>Operation Within Step Parameters</b>	Constant / Keep / Linear Sweep	
<b>Sequence Control</b>	Output Range, Frequency, Waveform (Sine Wave Only); On Phase, Off Phase, Term Jump Count (0 ~ 255)	
	jump-to, Branch 1, Branch 2, Trigger Output	
	Start, Stop, Hold, Continue, Branch 1, Branch 2	
ENVIRONMENT CONDITIONS		
<b>Operation Temperature</b>	0 ~ +40°C	
<b>Storage Temperature</b>	-10 ~ +70°C	
<b>Operating Temperature</b>	20 ~ 80% RH (No Condensation)	
<b>Storage Humidity</b>	80% RH or less(No Condensation)	
PC REMOTE CONTROL INTERFACE		
<b>Standard Interface</b>	USB Host/LAN	
<b>Optional Interface</b>	GPIB/RS232 & USB CDC	
<b>Input Power Source</b>	1φ AC 115/230Vac ±15%	
DIMENSIONS		
	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-7000GD1DH

### 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

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