500/1000 VA PROGRAMMABLE AC POWER SOURCE

APS-7000 Series

NEW

CE USB GPIB LAN RS-232

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)
- OCP/OTP/OHP 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

GW INSTEK
Simply Reliable

SPECIFICATIONS

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)	0~155Vrms	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
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	
	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	
	Resolution	0.01Hz at 45.00 ~ 99.99Hz/0.1Hz at 100.0 ~ 500.0Hz	
	Accuracy	±0.02% of setting	
Power On/Off Phase Angle	Range	0 ~ 359°	
	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	±(0.5% of reading + 2 counts)	
Frequency	Range	45 ~ 500Hz	
	Resolution	0.01Hz (at 45Hz~99.99Hz)/0.1Hz (at 100Hz~500.0Hz)	
	Accuracy	±0.1Hz	
Current(RMS)	Range	2.00 ~ 70.00mA/60.0 ~ 350.0mA/0.300 ~ 3.500A/3.00 ~ 17.5A	
	Resolution	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	±(0.6% of reading + 5 counts); 0.20~99.99W; ±(0.6% of reading + 5 counts); 100.0 ~ 999.9W ±(0.6% of reading + 2 counts); 1000~9999W	
Apparent(VA)	Resolution	0.01VA, 0.1VA, 1VA,	
	Accuracy	±(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	
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 / OFF	
Sync Output Signal		Output Signal 10V, BNC type	
Number of Preset		10(0~9 Numeric keys)	
Protection		OCP, OPP, OHP and Alarm	
SEQUENCE / SIMULATION / FUNCTION			
Number of Memories		10 (0 ~ 9 Numeric keys)	
Number of Steps		255 max. (For 1 sequence)	
Step Time Setting		0.01 ~ 99.99S	
Operation Within Step		Constant / Keep / Linear Sweep	
Parameters		Output Range, Frequency, Waveform (Sine Wave Only); On Phase, Off Phase, Term Jump Count (0 ~ 255) jump-to, Branch 1, Branch 2, Trigger Output	
Sequence Control		Start, Stop, Hold, Continue, Branch 1, Branch 2	
ENVIRONMENT CONDITIONS			
Operation Temperature		0 ~ +40℃	
Storage Temperature		-10 ~ +70℃	
Operating Temperature		20 ~ 80% RH (No Condensation)	
Storage Humidity		80% RH or less(No Condensation)	
PC REMOTE CONTROL INTERFACE			
Standard Interface		USB Host/LAN	
Optional Interface		GPIB/RS232 & USB CDC	
Input Power Source		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. APS-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 Leads

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

Global Headquarters
GOOD WILL INSTRUMENT CO., LTD.
T +886-2-2268-0389 F +886-2-2268-0639

China Subsidiary
GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.
T +86-512-6661-7177 F +86-512-6661-7277

Malaysia Subsidiary
GOOD WILL INSTRUMENT (M) SDN. BHD.
T +604-6309988 F +604-6309989

Europe Subsidiary
GOOD WILL INSTRUMENT EURO B.V.
T +31 (0)40-2557790 F +31 (0)40-2541194

U.S.A. Subsidiary
INSTEK AMERICA CORP.
T +1-909-399-3535 F +1-909-399-0819

Japan Subsidiary
TEXIO TECHNOLOGY CORPORATION.
T +81-45-620-2305 F +81-45-534-7181

Korea Subsidiary
GOOD WILL INSTRUMENT KOREA CO., LTD.
T +82-2-3439-2205 F +82-2-3439-2207

GW INSTEK
Simply Reliable

www.gwinstek.com