



**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.

## 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-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
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
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 Distortion (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	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	±(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 each 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)		
Sequence Control	jump-to, Branch 1, Branch 2, Trigger Output		
	Start, Stop, Hold, Continue, Branch 1, Branch 2		
ENVIRONMENT CONDITIONS			
Operation Temperature	0 ~ +40°C		
Storage Temperature	-10 ~ +70°C		
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.

PA-7000GD1DH

ORDERING INFORMATION		OPTIONAL ASSESSORIES	
APS-7050	500VA Programmable AC Power Source	APS-001	GPIB Interface Card
APS-7100	1000VA Programmable AC Power Source	APS-002	RS-232/USB Interface Card
ACCESSORIES		GRA-423	APS-7000 Rack Mount Kit
CD ROM (User Manual, Programming Manual) x 1, Power Cord (Region Dependent), Mains Terminal Cover Set, GTL-123 Test Lead		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](http://www.gwinstek.com)

**Available from**



**CALTEST  
Instruments Ltd**

Specialists in power  
and instrumentation

## **Power sources and test instrumentation solutions**

Caltest have been providing power sources and test instrumentation solutions for over 20 years and are proud to represent a number of industry leading manufacturers.

As well as supplying world class power sources and test instrumentation Caltest also has a service centre and UKAS calibration laboratory.

## **NEED HELP?**

**CALL US:**

**01483 302 700**

**or visit our website for  
more details**

Caltest Instruments Ltd  
4 Riverside Business Centre  
Walnut Tree Close  
Guildford  
Surrey GU1 4UG  
United Kingdom

Tel: +44 (0) 1483 302 700

Fax: +44 (0) 1483 300 562

**[sales@caltest.co.uk](mailto:sales@caltest.co.uk)**

**[www.caltest.co.uk](http://www.caltest.co.uk)**

**Sales • Rentals • Service • UKAS Calibration**

