

## APS-7000 Specifications

The specifications apply when the APS-7000 is powered on for at least 30 minutes under +20°C~+30°C.

Model		APS-7050	APS-7100	APS-7200	APS-7300
Power Rating		500VA	1000VA	2000VA	3000VA
Output Voltage		0 ~ 155Vrms, 0 ~ 310Vrms			
Output Frequency		45.00 ~ 500.0 Hz			
Max. Current(rms) *1	0 ~ 155 Vrms	4.2A	8.4A	16.8A	25.2A
	0 ~ 310 Vrms	2.1A	4.2A	8.4A	12.6A
Max. Current (peak)	0 ~ 155 Vrms	Peak value which is four times of the maximum current(rms)			
	0 ~ 310 Vrms				
OPT. APS-003(rms)	0 ~ 600 Vrms	1.05A	2.1A	4.2A	6.3A
OPT. APS-003(peak)	0 ~ 600 Vrms	Peak value which is four times of the maximum current			
Total Harmonic Distortion (THD) *2		≤ 0.5% at 45 ~ 500.0Hz (Resistive Load)			
Crest factor		≤ 4			
Line regulation		0.1% (% of full scale)			
Load regulation		0.5% (% of full scale)			
Response time		< 100μS			
Reverse current		30% of Maximum Output RMS Current (Continue) 100% of Maximum Output RMS Current (Within 3 minutes)			
<b>Setting</b>					
Voltage	Range	0 ~ 155Vrms, 0 ~ 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 ~ 500 Hz			
	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° (Only 45 ~ 65Hz)			
<b>Measurement *3</b>					

Voltage (rms)	Range	0.20 ~ 38.75Vrms 38.76 ~ 77.50Vrms 77.51 ~ 155.0Vrms 155.1 ~ 310.0Vrms	
	Resolution	0.01V at 0.00 ~ 99.99Vrms 0.1V at 100.0 ~ 310.0Vrms	
	Accuracy *4	± (0.5% of reading + 2 counts)	
Frequency	Range	45 ~ 500Hz	
	Resolution	0.01Hz at 45.00 ~ 99.99Hz 0.1Hz at 100.0 ~ 500.0Hz	
	Accuracy	± 0.1Hz	
Current (rms)	Range	2.00 ~ 70.00mA 60.0 ~ 350.0mA 0.300 ~ 3.500A 3.00 ~ 17.50A	0.200 ~ 3.500A 3.00 ~ 35.00A
	Resolution	0.01mA 0.1mA 0.001A 0.01A	0.001A 0.01A
	Accuracy	± (0.6% of reading + 5 counts) , 2.00 ~ 350.0mA ± (0.5% of reading + 5 counts) , 0.300 ~ 3.500A ± (0.5% of reading + 3 counts) , 3.000 ~ 17.50A	± (0.5% of reading + 5 counts) , 0.200 ~ 3.500A ± (0.5% of reading + 3 counts) , 3.00 ~ 35.00A
Current (peak)	Range	0.0 ~ 70.0A	0.0 ~ 140.0A
	Resolution	0.1A	0.1A
	Accuracy	± (1% of reading + 1 counts)	± (1% of reading + 1 counts)
Power (W)	Resolution	0.01W 0.1W 1W	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	± (0.6% of reading + 5counts) , 0.2 ~ 999.9W ± (0.6% of reading + 2counts) , 1000 ~ 9999W
Apparent Power (VA)	Resolution	0.01VA 0.1VA 1VA	0.1VA 1VA
	Accuracy	± (1% of reading + 7 counts) , 0.20 ~ 99.99VA ± (1% of reading + 7 counts) , 100.0 ~ 999.9VA ± (1% of reading + 5 counts) , 1000 ~ 9999VA	± (1% of reading + 7 counts) , 0.2 ~ 999.9VA ± (1% of reading + 5 counts) , 1000 ~ 9999VA

Power Factor	Range	0.000~ 1.000		
	Resolution	0.001		
	Accuracy	±2% reading + 2 counts		
<b>General</b>				
Remote output signal		Pass, Fail, Test-in Process, Trigger in, Trigger out, OUT ON/OFF		
Sync output signal		Output Signal 10 V, BNC Type		
Number of Preset		10 (0~9 numeric keys)		
Protection		OCP, OPP, OTP and Alarm		
Trigger Out		Maximum low level output = 0.8V Minimum high level output = 2V Maximum source current = 8mA.		
Trigger In		Maximum low level input voltage = 0.8V Minimum high level input voltage = 2.0V Maximum sink current = 8mA.		
<b>SEQUENCE / SIMULATION FUNCTION</b>				
Number of Memories		10 (0~9 numeric keys)		
Number of Steps		255 max. (for 1 sequence)		
Step Time Setting Range		0.01 ~ 999.99 S		
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		
<b>AC Input</b>				
Phase		Single Phase		
Input Voltage		115/230Vac ± 15%	230Vac ± 15%	
Input Frequency		50/60Hz		
Max. Current		16A/8A	32A/16A	32A 50A
Power Factor		0.7 Typ.		
<b>Environmental Conditions</b>				
	Operating temperature range	0 ~ +40 °C		
	Storage temperature range	-10 ~ +70 °C		
	Operating humidity range	20 ~ 80% RH (no condensation)		
	Storage humidity range	80% RH or less (no condensation)		
<b>Interface</b>				

Standard		USB Host, LAN	USB Host, USB CDC, LAN		
Optional		GPIB (APS-001) RS232 / USB CDC (APS-002)	GPIB (APS-001) RS232 (APS-007)		
<b>Dimensions &amp; Weight</b>					
Dimensions(mm)	W	430	430	430	430
	H	89	89	312	400
	D	400	560	650	650
Weight		24Kg	38Kg	90Kg	128Kg

Product specifications are subject to change without notice.

The Specifications are not suit for ARB mode.

\*1 Maximun output current at working voltage 120Vrms, 240Vrms

\*2 45 to 500Hz, 10% or higher of the rated output voltage, the maximum current or lower

\*3 All of measurement accuracy is at  $23 \pm 5^{\circ}\text{C}$

\*4 In the case of 15 to 155V, 30 to 310V, sine wave, no load

\*5 Maximun output current at working voltage 480Vrms

\*6 In the case of 60 to 600V, sine wave, no load

\*7 45 to 999.9Hz, 10% or higher of the rated output voltage, the maximum current or lower



Cosinus Messtechnik GmbH  
 Rotwandweg 4  
 D-82024 Taufkirchen  
 Tel 089-665594-0  
 Fax 089-665594-30  
 e-Mail: [office@cosinus.de](mailto:office@cosinus.de)  
 Internet: [www.cosinus.de](http://www.cosinus.de)