

AC POWER SYSTEMS CATALOG



LOW POWER BENCH AC

*500VA and 1000VA
150V / 300V Ranges
45 - 500Hz*



SINGLE PHASE AC & DC

*600VA to 5000VA
150/300Vac & 212/424Vdc
DC, 15 - 1200Hz*



THREE PHASE AC & DC

*3kVA and 6kVA
150/300Vac & 210/420Vdc
DC, 40 - 1000Hz*



HIGH POWER SYSTEMS

*3kVA to 180kVA
150V / 300V / 600V
45 - 500Hz*



"Your Best Choice in Power"



ADAPTIVE POWER SYSTEMS

www.adaptivepower.com

Company Profile

Adaptive Power Systems (APS) was created in 2003 to manufacture and distribute a complete and extensive line of AC and DC power equipment to meet world-wide applications. Our equipment is sold by independent sales representatives and distributors throughout the world.

Adaptive Power Systems' products are designed to fill the needs of power conversion for either AC or DC applications.

- Our AC to AC converters provide frequencies and voltages found around the world and also for military avionics/shipboard applications. The APS Frequency changer product range is available in power levels from 500 VA to 180 kVA, single- and three-phase output.
- For DC power requirements, we offer a broad range of highly efficient and compact programmable AC/DC power supplies for bench or rack mount use ranging from 3000 Watts to 100's of kilo Watts. A wide selection of power levels and voltage ranges to choose from ensures optimal solutions at very competitive prices.
- In addition to AC and DC power sources, we offer a range of AC and DC programmable electronic loads for a wide range of power test and development applications. You can find these products on the subsequent pages of this Electronic Load Catalog.

Adaptive Power Systems' customer base consists of major U.S. and international corporations. Markets served include production test, household appliance and consumer product manufacturing, defense, commercial aviation, telecommunications, semiconductor manufacturing, industrial manufacturing and compliance test agencies.

With design, manufacturing, sales and service centers around the world, Adaptive Power Systems is a global provider of affordable power test solutions. Put us to the test.



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FC200 SERIES

The series consists of two single phase output instruments in sizes of 500VA and 1kVA. The solid state frequency changers allow the user to duplicate a utility grid of either 50 or 60 Hertz for export product testing or operation of imported equipment.

The frequency can also be adjusted to 400 Hertz for applications such as the testing of military/avionics equipment or for the operation of 400 hertz electronics that are on board an aircraft or a military vessel.

The adjustable frequency band of 45 to 500 Hertz in conjunction with the dual voltage ranges of 0-150 volts or 0-300 volts provides full capabilities for testing and operating electronics worldwide.

Setup and operation of the FC200 Series is exceptionally easy. The simple front panel layout allows users to continuously vary voltage and frequency or to select preset standard frequency settings. Individual meter displays provide digital readouts for frequency, voltage and current while a digital multimeter displays power or power factor.

The FC200 Series converters are a simple and cost effective solution for all of your AC power conversion needs!

Bench Top
Power: 500VA or 1000VA
Voltage: 0-150V / 0-300V
Frequency: 45-500Hz



Model FC210



FC200 SERIES MODELS

MODEL	RATED POWER (VA)	FREQ RANGE (Hz)	VOLTAGE (V _{L-N})	CURRENT (A)	AC INPUT POWER	HEIGHT
FC205	500	45 - 500	0-150 / 0-300	4.2 / 2.1	115V/230V, 47-63 Hz	2U
FC210	1000	45 - 500	0-150 / 0-300	8.4 / 4.2	115V/230V, 47-63 Hz	2U

TECHNICAL SPECIFICATIONS

AC OUTPUT		FC205	FC210
Power		500 VA	1000 VA
Output Phases		1 ϕ , 2 Wire + ground	
Voltage	Ranges	Low: 0-150V _{L-N} , High: 0-300V _{L-N}	
	Resolution	0.1 V	
	Accuracy	\pm (0.5% of setting + 0.2 V)	
Load Regulation		\pm 0.5%	
Harmonic Distortion (V _{thd})		\leq 0.5% (Resistance Load)	
Frequency	Range	45 - 500 Hz	
	Resolution	0.1 Hz at 45 - 99.9 Hz 1 Hz at 100 - 500 Hz	
	Accuracy	\pm 0.2%	
Current	150V range	4.2 A	8.4 A
	300V range	2.1 A	4.2 A
Crest Factor		\geq 4 to 1	
Protection		Over Current, Short, Over Temp.	

AC INPUT		
Input Phases		1 ϕ / 2 Wire + Ground
Voltage		115 / 230V \pm 15%
Frequency		47 - 63Hz

DISPLAYS & CONTROLS	
4 Digit LED Meters	Frequency, Voltage, Current, Power or Power Factor (simultaneously)
Memory (standard)	3 Programmable Memory Locations for Voltage, Frequency and Current
Calibration	Front Panel Calibration
Interface (optional)	PLC Interface. (Adds 4 Setup Memory Locations for total of 7 Locations)
Auto Voltage Adjust	Enables improved voltage regulation within \pm 0.1 V

MECHANICAL	FC205	FC210
Dimensions (HxDxW)	3.5" x 16" x 17"	3.5" x 22" x 17"
	89 x 400 x 430 mm	89 x 560 x 430 mm
Weight (Kg / lbs.)	22 / 48	37 / 81

ENVIRONMENTAL	
Operating Temperature	32° - 104° F / 0° - 40° C
Relative Humidity	80%, non-condensing
Altitude	Below 6500 feet / 2000 m

REGULATORY COMPLIANCE	
Approvals	CE Mark

CFS100 SERIES - SINGLE PHASE AC & DC POWER SOURCES

CFS100 SERIES

The CFS100 series consists of three single phase output instruments in sizes of 800VA, 1600VA and 4kVA. All CFS100 models are fully programmable and capable of both AC and DC output.

In AC mode, the frequency can be adjusted from 40Hz to 500Hz for a broad range of applications, such as: industrial/commercial applications, testing of military/avionics equipment, or the operation of 400Hz electronics for on-board aircraft or military vessels.

The adjustable frequency band of 40 to 500 Hertz in conjunction with the ability to switch between AC and DC modes provides comprehensive capabilities for testing and operating of both AC and DC powered equipment.

Setup and operation of the CFS100 Series is easy. The simple front panel layout with direct entry keypad and shuttle knob allows users to easily set or vary voltage and frequency. For product testing, 50 memories with 9 test steps each are available for output sequencing and measurement pass/fail checking.

The CFS100 Series power sources are a simple and cost effective solution for all of your AC and DC power test needs!



**Bench or Rack-mount
Power: 800VA to 4000VA
Voltage: AC: 5-150V / 5-300V
DC: 5-200V / 0-400V
Frequency: 40-500Hz**



CFS100 Series Models



CFS100 SERIES MODELS

MODEL	RATED POWER	FREQ RANGE	VOLTAGE	CURRENT (A)	AC INPUT POWER	HEIGHT		
CFS108	AC: 800VA DC: 400W	40 - 500 Hz	AC: 5-150 / 5-300 DC: 5-200 / 5-400	AC: 9.2 / 4.6 DC: 4.6 / 2.3	120V/230V, 47-63 Hz	2U		
CFS108-LAN					208V, 1 ϕ , 47-63 Hz			
CFS116-208	AC: 1600VA DC: 800W			AC: 18.4 / 9.2 DC: 9.2 / 4.6	208V, 1 ϕ , 47-63 Hz			
CFS116-208-LAN					230V, 1 ϕ , 47-63 Hz			
CFS116-230				AC: 4000VA DC: 2000W	AC: 36.8 / 18.4 DC: 18.4 / 9.2		208V, 1 ϕ , 47-63 Hz	
CFS116-230-LAN	230V, 1 ϕ , 47-63 Hz							
CFS140-208	AC: 4000VA DC: 2000W			AC: 36.8 / 18.4 DC: 18.4 / 9.2	AC: 36.8 / 18.4 DC: 18.4 / 9.2		208V, 1 ϕ , 47-63 Hz	5U
CFS140-208-LAN							230V, 1 ϕ , 47-63 Hz	
CFS140-230		208V, 1 ϕ , 47-63 Hz						
CFS140-230-LAN		230V, 1 ϕ , 47-63 Hz						

TECHNICAL SPECIFICATIONS

AC OUTPUT		CFS108		CFS116		CFS140	
Power		AC: 800VA	DC: 400W	AC: 1600VA	DC: 800W	AC: 4000VA	DC: 2000W
Output Phases		1Ø / 3 Wire (L, N, Gnd)					
Voltage	AC Mode	Low AC Range: 5-150V _{L-N} , High AC Range: 5-300V _{L-N}					
	DC Mode	Low DC Range: 5-200Vdc, High DC Range: 5-400Vdc					
	Resolution	0.1 V					
	Accuracy	± (0.2% setting + 0.3 V)					
Load Regulation		± 1.0% Range + 1V, R Load					
Harmonic Distortion (Vthd)		< 1.0%, 80-140V on Low Range, < 1.0%, 160-280V on High Range (Resistance Load)					
Frequency	Range	40 - 500 Hz					
	Resolution	0.1 Hz					
	Accuracy	±1.0 Hz					
Current	AC: 150V/300V	9.2 Aac / 4.6 Aac		18.4 Aac / 9.2 Aac		36.8 Aac / / 18.4 Aac	
	DC: 200V/400V	4.6 Adc / 2.3 Adc		9.2 Adc / 4.6 Adc		18.4 Adc / 9.2 Adc	
Crest Factor		≥ 3 to 1					
Protection		Over Current, Over Power, Short Circuit, Over Temp.					
Efficiency		> 80% (at full load)					

AC INPUT		CFS108		CFS116		CFS140	
Input Phases		1Ø / 2 Wire + Ground		1Ø / 2 Wire + Ground		1Ø / 2 Wire + Ground	
Voltage		115V or 230V ± 10%		208V or 230V (2W+G) ±10%			
Frequency		47 - 63Hz					

MECHANICAL		CFS108		CFS116		CFS140	
Dimensions	inches	3.5" x 16" x 17"		3.5" x 20" x 17"		8.75" x 20" x 17"	
	(HxDxW) mm	89 x 406 x 432 mm		89 x 508 x 432 mm		222 x 508 x 432 mm	
Weight (Kg / lbs.)		19 Kg / 42 lbs.		30.8 Kg / 68 lbs.		64.8 Kg / 143 lbs.	

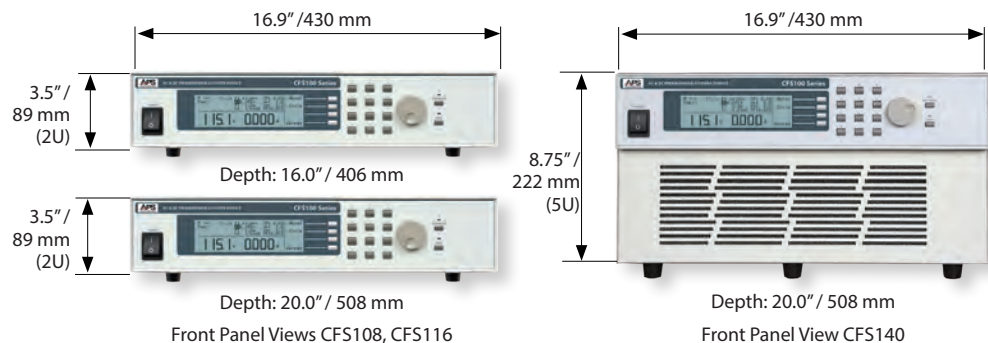
DISPLAYS & CONTROLS

LCD Display	Menus, Settings, Measurements
Keys	Decimal Keypad, Test/Reset, Lock
Shuttle	Digital Rotary Shuttle to slew voltage and Current
Digital Outputs	Pass, Fail, Test in Progress, DB9, rear panel, Relay contact closures
Memory (standard)	50 Programmable Memory Locations with 9 test steps each (AC mode)
Calibration	Front Panel Calibration
Interfaces	USB, RS232 std. LAN Option

ENVIRONMENTAL

Operating Temperature	41° - 104° F / 5° - 40° C
Relative Humidity	80%, non-condensing
Altitude	Below 6562 feet / 2000 m

Dimensions



CFS300 SERIES - THREE PHASE AC & DC POWER SOURCES

CFS300 SERIES

The CFS300 series consists of two three phase output capable instruments in sizes of 3kVA and 6kVA. All CFS300 models are fully programmable and capable of both AC and DC output.

In AC mode, the frequency can also be adjusted from 40 Hz to 1000Hz to cover both industrial/commercial and applications such as the testing of military/avionics equipment at either 400Hz fixed frequency or 360Hz to 800Hz variable frequency.

The adjustable frequency band of 40 to 1000 Hertz in conjunction with selectable single, split or three phase output modes and the ability to switch between AC and DC modes provides comprehensive capabilities for testing and operating of both AC and DC powered equipment.

Setup and operation of the CFS300 Series is easy. The simple front panel layout with direct entry keypad and shuttle knob allows users to easily set or vary voltage and frequency. For product testing, 50 memories with 9 test steps each are available for output sequencing and measurement pass/fail checking.

The CFS300 Series three phase power sources are a simple and cost effective solution for all of your AC and DC power test needs!



**Bench or Rack-mount
Power: 3kVA & 6kVA
Voltage: AC: 5-150V / 5-300V
8.7-260V / 8.7-520V
DC: 5-210V / 0-420V
Frequency: 40-1000Hz**



CFS300 Series Models



CFS300 SERIES MODELS

MODEL	RATED POWER	FREQ RANGE	VOLTAGE	CURRENT (A)	AC INPUT POWER	HEIGHT
CFS330	AC: 3000VA DC: 1500W	40 - 1000 Hz	AC: 5-150 / 5-300 V _{LN} 8.7-260 / 8.7-520V _{LL} DC: 5-210 / 5-420	AC: 27.6 / 13.8 1 ϕ 9.2 / 4.6 3 ϕ DC: 14.4 / 7.2	200V-240V, 1 ϕ 47-63 Hz	9U
CFS330-LAN						
CFS360	AC: 6000VA DC: 3000W			AC: 55.2 / 27.6 1 ϕ 18.4 / 9.2 3 ϕ DC: 28.8 / 14.4	200V-240V, 1 ϕ (2W) 200V-240V, 3 ϕ (3W) 346V-416V, 3 ϕ (4W) 47-63 Hz	
CFS360-LAN						

TECHNICAL SPECIFICATIONS

AC OUTPUT		CFS330		CFS360	
Power		AC: 800VA	DC: 400W	AC: 1600VA	DC: 800W
Output Phases		1Ø / 3 Wire (L, N, Gnd), 2Ø / 3 Wire (L1, N, L2, Gnd), 3Ø / 4 Wire (L1, L2, L3, N, Gnd)			
Voltage	AC Mode	Low AC Range: 5-150V _{L-N} , 8.7-260V _{L-L} / High AC Range: 5-300V _{L-N} , 8.7-520V _{L-L}			
	DC Mode	Low DC Range: 5-200Vdc, High DC Range: 5-400Vdc			
	Resolution	0.1 V			
	Accuracy	± (0.2% setting + 0.3 V)			
	Load Regulation	± 1.0% Range + 1V, R Load			
	Harmonic Distortion (Vthd)	< 0.5% < 70Hz, 80-140V on Low Range, < 1.0% > 70Hz, 160-280V on High Range (Resistance Load)			
Frequency	Range	40 - 1000 Hz			
	Resolution	0.1 Hz from 40.0-99.9 Hz / 1 Hz from 100 - 1000 Hz			
	Accuracy	± 0.03% Setting			
Current	AC: 150V/300V	27.6 Aac / 13.8 Adc (1Ø), 9.2 Aac / 4.6 Aac (2Ø&3Ø)		55.2 Aac / 27.6 Aac (1Ø), 18.4 Aac / 9.2 Aac (2Ø&3Ø)	
	DC: 200V/400V	14.4 Adc / 7.2 Adc		28.8 Adc / 14.4 Adc	
	Crest Factor	≥ 3 to 1			
	Protection	Over Current, Over Power, Short Circuit, Over Temp.			
	Efficiency	> 78% (at full load)			

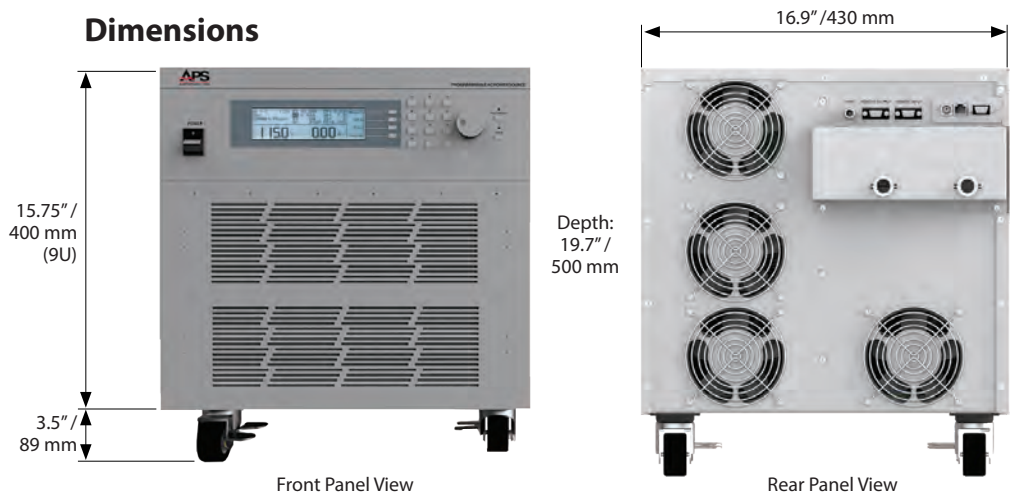
AC INPUT		CFS330		CFS360	
Input Phases		1Ø / 2 Wire + Ground		1Ø or 3Ø	
Voltage		200Vac-240Vac		200V-240V, 1Ø (2W) or 200V-240V, 3Ø (3W) 346V-416V, 3Ø (4W)	
Frequency		47 - 63Hz			

MECHANICAL		CFS330		CFS360	
Dimensions	inches	15.75" x 19.7" x 16.7		15.75" x 19.7" x 16.7	
	(HxDxW) mm	400 x 500 x 400 mm		400 x 500 x 400 mm	
Weight (Kg / lbs.)		48 Kg / 108.5 lbs.		57 Kg / 125.6 lbs.	

DISPLAYS & CONTROLS	
LCD Display	Menus, Settings, Measurements
Keys	Decimal Keypad, Test/Reset, Lock
Shuttle	Digital Rotary Shuttle to slew voltage and Current
Digital Outputs	Pass, Fail, Test in Progress, rear panel, Relay contact closures
Memory (standard)	50 Programmable Memory Locations with 9 test steps each (AC mode)
Calibration	Front Panel Calibration
Interfaces	USB, RS232 std. LAN Option

ENVIRONMENTAL	
Operating Temperature	41° - 104° F / 5° - 40° C
Relative Humidity	80%, non-condensing
Altitude	Below 6562 feet / 2000 m

Dimensions



CPS100 SERIES - ADVANCED SINGLE PHASE AC & DC POWER SOURCES

CPS100 SERIES

The CPS100 series consists of fourteen single phase power sources with power output ratings ranging from 600VA/W to 5000VA /W. All CPS100 models are fully programmable and capable of AC, DC and AC+DC output.

In AC mode, the frequency can be adjusted from 15Hz to 1000Hz on Standard (S) models or from 15Hz to 1200Hz on Enhanced (E) models. This covers a broad range of applications, such as: industrial/commercial applications, testing of military/ avionics equipment, or the operation of 400Hz or 360Hz~800Hz equipment for on-board aircraft or military vessels.

Setup and operation of the CPS100 Series is very intuitive. The simple front panel layout combined with a large color touch sensitive LCD display allows easy entry of settings. A direct entry keypad and shuttle knob complements the touch interface. Standard models offer the vast majority of features requested by engineers and technicians.

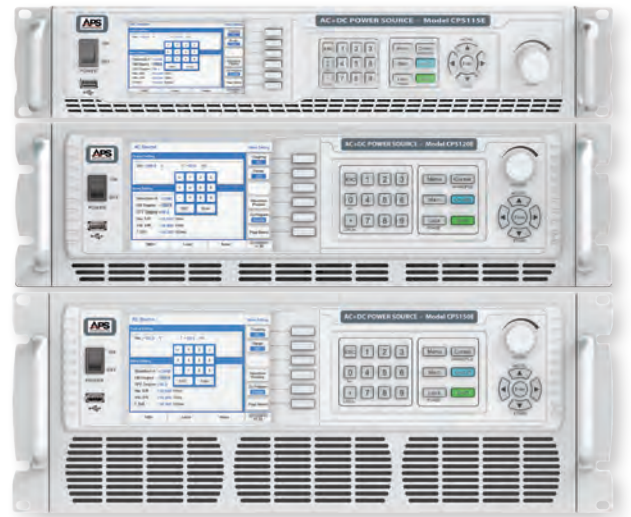
The Enhanced version E models add advanced functions like programmable output impedance, IEC 61000-4 immunity test modes and special functions like pass/fail limit testing and Triac dimmer simulation mode.

All CPS100 models offer a library of 50 THD harmonics waveforms or USER defined waveforms in addition to sinewave output.

The CPS100 Series power sources are sophisticated yet cost effective solution for all of your AC and DC power test needs!



Bench or Rack-mount
Power: 600VA to 5000VA
Voltage: AC: 0-150V / 0-300V
DC: 0-212V / 0-424V
Frequency: DC, 15-1000Hz
DC, 15-1200Hz

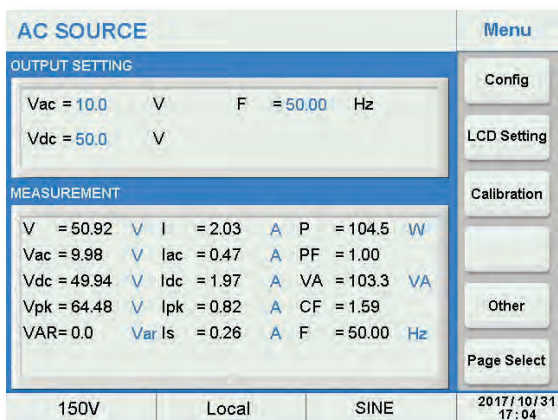


CPS100 Series Models



CPS100 SERIES MODELS

MODEL	RATED POWER	FREQ RANGE	VOLTAGE	CURRENT (Aac Adc)	AC INPUT POWER	HEIGHT
CPS106S / CPS106E	600 VA/W	S version: DC, 15 - 1000 Hz	AC: 0-150 / 0-300 DC: 0-212 / 0-424	5.6/2.8 3.96/1.89	90V~265V, 1 ϕ 47-63 Hz	2U
CPS110S / CPS110E	1000 VA/W			9.2/4.6 6.5/3.3		2U
CPS115S / CPS115E	1500 VA/W			13.8/6.9 9.76/4.88	100V~265V, 1 ϕ , 47-63 Hz	2U
CPS120S / CPS120E	2000 VA/W	E version: DC, 15 - 1200 Hz	AC: 0-150 / 0-300 DC: 0-212 / 0-424	16.0/8.0 11.3/5.65	190V~265V, 1 ϕ 47-63 Hz	3U
CPS130S / CPS130E	3000 VA/W			27.6/13.8 19.6/9.8		4U
CPS140S / CPS140E	4000 VA/W			32.0/16.0 22.6/11.3		4U
CPS150S / CPS150E	5000 VA/W			46.0/23.0 32.6/16.3		4U



Color Touch Screen User Interface displays output setting + 15 measurements

S vs E MODEL FEATURES COMPARISON

FEATURES	STANDARD (S)	ENHANCED (E)
AC, DC, AC+DC Modes	●	●
Frequency Range	15-1000Hz	15-1200Hz
Arbitrary Waveforms	●	●
Waveform Synthesis	●	●
Transient List Mode	●	●
Measurements	●	●
Harmonic Analysis & THD		●
Programmable Impedance		●
IEC411	●	●
IEC413, IEC414, IEC428		●
Triac Function		●

TECHNICAL SPECIFICATIONS

AC OUTPUT		CFS106	CPS110	CPS115	CPS120	CPS130	CPS140	CPS150
Power		600 VA/W	1000 VA/W	1500 VA/W	2000 VA/W	3000 VA/W	4000 VA/W	5000 VA/W
Output Phases		1Ø / 3 Wire (L, N, Gnd)						
Voltage	AC Mode	Low AC Range: 0 - 150 V _{L-N} , High AC Range: 0 - 300 V _{L-N}						
	DC Mode	Low DC Range: 0 - 212 Vdc, High DC Range: 0 - 424 Vdc						
	Resolution	0.1 V						
	Accuracy	± (0.2% setting + 0.2% FS)						
Load Regulation		15Hz - 100Hz: ± 0.1% Range / 100.1Hz - 1200Hz: ± 0.5% Range						
Harmonic Distortion (Vthd)		15Hz - 70Hz: < 0.3% / 70.1Hz-1000Hz: < 1.0% / >1000Hz: < 2.0%						
Frequency	Range	S models: DC, 15 - 1000 Hz / E models: DC, 15 - 1200 Hz						
	Resolution	0.1 Hz						
	Accuracy	±1.0 Hz						
Current	AC: 150V/300V	5.6 / 2.8	9.2 / 6.4	13.8 / 6.9	16.0 / 8.0	27.6 / 13.8	32.0 / 16.0	46.0 / 23.0
	DC: 200V/400V	3.96 / 1.89	6.5 / 3.3	9.76 / 4.88	11.3 / 5.65	19.6 / 9.8	22.6 / 11.3	32.6 / 16.3
Crest Factor AC Current		5.8 to 1	6 to 1	6 to 1	6 to 1	6 to 1	5 to 1	4 to 1
Protection		Over Current, Over Power, Short Circuit, Over Temp.						
Efficiency		> 80%	> 84%	> 86%	> 86%	> 85%	> 86%	> 86%

AC INPUT	CPS106, CPS110	CPS115	CPS120, CPS130, CPS140, CPS150
Input Phases	1Ø / 2 Wire + Ground	1Ø / 2 Wire + Ground	1Ø / 2 Wire + Gnd or 2Ø / 2 Wire L-L + Gnd
Voltage	90V ~ 265V ± 10%	100V ~ 265V ± 10%	190V ~ 265V ± 10%
Frequency	47 - 63Hz		

MECHANICAL		CPS106, CPS110, CPS115	CPS120	CPS130, CPS140, CPS150
Dimensions	inches	3.5" x 20.5" x 17"	5.25" x 20.5" x 17"	7.0" x 20.5" x 17"
	(HxDxW) mm	89 x 520 x 432 mm	89 x 520 x 432 mm	222 x 520 x 432 mm
Weight (Kg / lbs.)		15.5 Kg / 35 lbs.	21 Kg / 47.2 lbs.	29 Kg / 63.9 lbs.

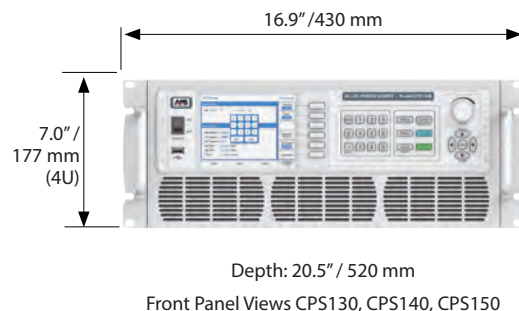
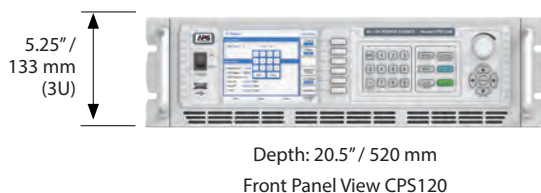
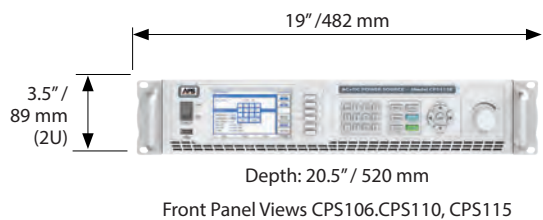
DISPLAYS & CONTROLS

LCD Display	Color Touch Sensitive LCD
Keys	Menus, Soft Keys, Decimal Keypad
Shuttle	Digital Rotary Shuttle to set or slew settings
Digital Outputs	Option EXT or AUX
Memory (standard)	Settings, Transients
Calibration	Front Panel Calibration
Interfaces	USB, RS232, RS485 LAN std on CPS120~CPS150, Option on CPS106~CPS115. GPIB option on all models

ENVIRONMENTAL

Operating Temperature	32° - 104° F / 0° - 40° C
Relative Humidity	95%, non-condensing
Altitude	Below 6550 feet / 2000 m

Dimensions



APS 1000 SERIES - SINGLE PHASE VOLTAGE & FREQUENCY CHANGERS

APS 1000 SERIES

The APS1000 series consists of six 1 phase output instruments ranging in size from 3 kVA to 60 kVA. The converters allow the user to duplicate a utility grid of either 50 or 60 hertz for export product testing or operation of imported equipment.

The frequency can be adjusted to 400 hertz for applications such as the testing of military/avionics equipment or for the operation of 400 hertz electronics that are on board an aircraft or a military vessel. The adjustable frequency band of 45 to 500 Hertz in conjunction with the dual voltage ranges of 0-150 volts or 0-300 volts provides full capabilities for testing and operating electronics worldwide. Setup and operation of the APS 1000 Series is exceptionally easy. The simple front panel layout allows users to continuously vary voltage and frequency or to select preset standard frequency settings. Individual meter displays provide digital readouts for frequency, voltage and current while a digital multimeter displays power or power factor. The APS 1000 Series converters are a simple and cost effective solution for all of your AC power conversion needs!

Key Features & Specifications for the APS 1000 Series

- Dual Output Voltage Ranges
- Input to Output Isolation
- Output Voltage Distortion (Vthd) less than 1%
- Input Requirements: 208, 220, 240, 380, 415, 480 VAC \pm 10%, 3 phase, 47-63 Hz (3kVA and 5kVA, 230VAC \pm 15%, 1 phase)
- Intuitive Front Panel Controls
- Easy to Read LED Displays: Frequency, Voltage, Current, Power and Power Factor
- Memory Locations: Can save three desired settings of any voltage, frequency and current limit output parameters



Single Phase Power
Power: 3kVA to 60kVA
Voltage: 150V/300V/600V
Frequency: 45-500Hz



Model APS 1040

AVAILABLE 1000 SERIES MODELS

MODEL	RATED POWER (VA)	No. PHASES	FREQ RANGE (Hz)	VOLTAGE (V _{L-N})	CURRENT (A)	AC INPUT POWER	DIMENSION
APS 1003	3,000	1	45 - 500	0-150 / 0-300	25.2 / 12.6	230V, 1 ϕ , 47-63 Hz	12 x 26 x 17"
APS 1005	5,000	1	45 - 500	0-150 / 0-300	42 / 21	230V, 1 ϕ , 47-63 Hz	12 x 26 x 17"
APS 1010	10,000	1	45 - 500	0-150 / 0-300	84 / 42	208-480, 3 ϕ , 47-63 Hz	28 x 29 x 17"
APS 1020	20,000	1	45 - 500	0-150 / 0-300	168 / 84	208-480, 3 ϕ , 47-63 Hz	33 x 29 x 17"
APS 1030	30,000	1	45 - 500	0-150 / 0-300	252 / 126	208-480, 3 ϕ , 47-63 Hz	43 x 39 x 24"
APS 1040	40,000	1	45 - 500	0-150 / 0-300	336 / 168	208-480, 3 ϕ , 47-63 Hz	43 x 39 x 24"
APS 1060	60,000	1	45 - 500	0-150 / 0-300	504 / 252	208-480, 3 ϕ , 47-63 Hz	66 x 39 x 32"

APS 1000 SERIES - SINGLE PHASE VOLTAGE & FREQUENCY CHANGERS

TECHNICAL SPECIFICATIONS

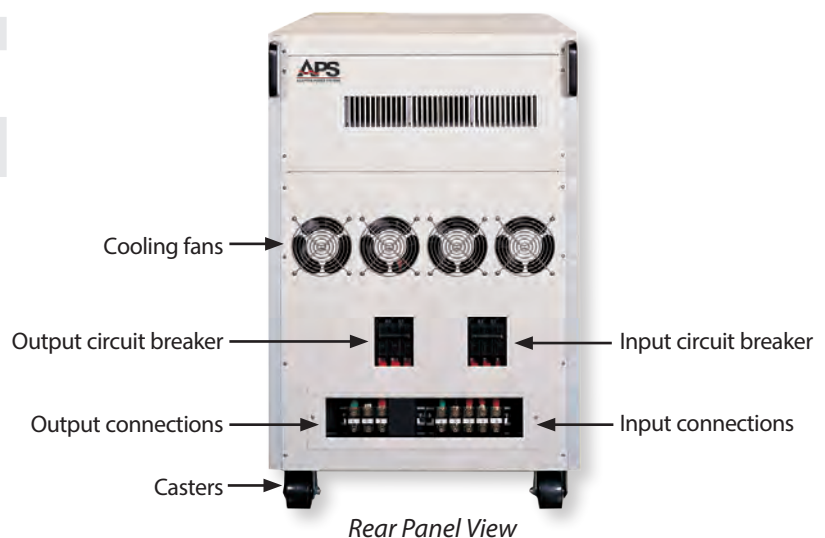
AC OUTPUT		APS 1003	APS 1005	APS 1010	APS 1020	APS 1030	APS 1040	APS 1060
Power		3 kVA	5 kVA	10 kVA	20 kVA	30 kVA	40 kVA	60 kVA
Output Phases		1Ø / 3 Wire (L, N, Gnd)						
Voltage	Ranges	Low Range: 0-150V _{L-N} , High Range: 0-300V _{L-N} 300V _{L-N} /600V _{L-N} Ranges available on 10KVA to 60KVA models - Option 600						
	Resolution	0.1 V						
	Accuracy	± (1.0% + 0.2 V)						
	Load Regulation	± 0.5%						
	Harmonic Distortion (Vthd)	≤ 1% (Resistance Load)						
Frequency	Range	45 - 500 Hz						
	Resolution	0.1 Hz at 45 - 99.9 Hz 1 Hz at 100 - 500 Hz						
	Accuracy	± 0.2%						
Current	150V range	25.2 A	42.0 A	84.0 A	168.0 A	252.0 A	336.0 A	500.0 A
	300V range	12.6 A	21.0 A	42.0 A	84.0 A	126.0 A	168.0 A	250.0 A
	Crest Factor	≥ 3 to 1						
	Protection	Over Current, Short Circuit, Over Temp.						
	Efficiency	> 85% (at full load)						

AC INPUT		APS 1003	APS 1005	APS 1010	APS 1020	APS 1030	APS 1040	APS 1060
Input Phases		1Ø / 2 Wire + Ground			3Ø / 3W + ground			
Voltage		230V ± 15%			208V, 220V, 240V (3W+G), 380V, 415V, 480V (4W+G) ±10%			
Frequency		47 - 63Hz						

MECHANICAL		APS 1003	APS 1005	APS 1010	APS 1020	APS 1030	APS 1040	APS 1060
Dimensions	inches	12 x 26 x 17		28 x 29 x 17	33 x 29 x 17	43 x 39 x 24		66 x 39 x 32
	(HxDxW) mm	305 x 660 x 432		709 x 730 x 430	839 x 730 x 430	1079 x 980 x 600		1662x980x800
Weight (Kg / lbs.)		95/210	125/275	228/503	350/772	592/1305	663/1462	885/1951

DISPLAYS & CONTROLS	
4 Digit LED Meters	Frequency, Voltage, Current, Power or Power Factor (simultaneously)
PLC Remote Interface	Run Programs P1, P2, P3, and Output On/Off
Memory (standard)	3 Programmable Memories with 5 steps each for Voltage, Frequency, Test Time, Delay Time, Current, Power and PF Limits
Calibration	Front Panel Calibration
Interface (optional)	GPIB or RS232
	Expands Memories from 3 to 8
Auto Voltage Adjust	Enables improved voltage regulation within ± 0.1 V

ENVIRONMENTAL	
Operating Temperature	32° - 104° F / 0° - 40° C
Relative Humidity	80%, non-condensing
Altitude	Below 6500 feet / 2000 m



APS 3000 SERIES - THREE PHASE VOLTAGE & FREQUENCY CHANGERS

APS 3000 SERIES

The APS 3000 series consists of eight 3 phase output instruments ranging in size from 3 kVA to 120 kVA. The converters allow the user to duplicate a utility grid of either 50 or 60 hertz for export product testing or operation of imported equipment.

The frequency can be adjusted to 400 hertz for applications such as the testing of military/avionics equipment or for the operation of 400 hertz electronics that are on-board an aircraft or a military vessel. The adjustable frequency band of 45 to 500 Hertz in conjunction with the dual voltage ranges of 0-150 volts or 0-300 volts provides full capabilities for testing and operating electronics worldwide. Setup and operation of the APS 3000 Series is exceptionally easy. The simple front panel layout allows users to continuously vary voltage and frequency or to select preset standard frequency settings. Individual meter displays provide digital readouts for frequency, voltage and current while a digital multimeter displays power or power factor. The APS 3000 Series converters are a simple and cost effective solution for all of your AC power conversion needs!

Key Features & Specifications for the APS 3000 Series

- Dual Output Voltage Ranges
- Input to Output Isolation
- Output Voltage Distortion (Vthd) less than 1%
- Input Requirements: 208, 220, 240, 380, 415, 480 VAC \pm 10%, 3 phase, 47-63 Hz. (3kVA and 6kVA, 220, 230, 240VAC 1 phase, APS 3090 and larger require 380V or higher)
- Intuitive Front Panel Controls
- Easy to Read LED Displays: Frequency, Voltage, Current, Power and Power Factor
- Memory Locations: Can save three desired settings of any voltage, frequency and current limit output parameters



Three Phase Power: 3kVA to 180kVA
Voltage: 150V/300V/600V
Frequency: 45-500Hz



Model APS 3060

AVAILABLE 3000 SERIES MODELS

MODEL	RATED POWER (VA)	No. PHASES	FREQ RANGE (Hz)	VOLTAGE	CURRENT (A) per Phase	AC INPUT POWER	DIMENSION
APS 3003	3,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	8.4 / 2.1	230V, 1 ϕ , 47-63 Hz	34 x 26 x 17"
APS 3006	6,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	16.8 / 8.4	230V, 1 ϕ , 47-63 Hz	34 x 26 x 17"
APS 3009	9,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	25.5 / 12.6	208-480, 3 ϕ , 47-63 Hz	33 x 39 x 24"
APS 3015	15,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	42 / 21	208-480, 3 ϕ , 47-63 Hz	33 x 39 x 24"
APS 3030	30,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	84 / 42	208-480, 3 ϕ , 47-63 Hz	38 x 39 x 24"
APS 3060	60,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	168 / 84	208-480, 3 ϕ , 47-63 Hz	65 x 39 x 32"
APS 3090	90,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	252 / 126	380-480, 3 ϕ , 47-63 Hz	71 x 39 x 48"
APS 3120	120,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	336 / 168	380-480, 3 ϕ , 47-63 Hz	71 x 47 x 48"
APS 3150	150,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	420 / 210	380-480, 3 ϕ , 47-63 Hz	71 x 47 x 63"
APS 3180	180,000	3	45 - 500	0-150 / 0-300V _{L-N} 0-260 / 0-520V _{L-L}	504 / 252	380-480, 3 ϕ , 47-63 Hz	71 x 47 x 63"

APS 3000 SERIES - THREE PHASE VOLTAGE & FREQUENCY CHANGERS

TECHNICAL SPECIFICATIONS

AC OUTPUT		APS3003	APS3006	APS3009	APS3015	APS3030	APS3060	APS3090	APS3120	APS3150	APS3180
Power	Total	3 kVA	6 kVA	9 kVA	15 kVA	30 kVA	60 kVA	90 kVA	120 kVA	150 kVA	180 kVA
	Per Phase	1 kVA	2 kVA	3 kVA	5 kVA	10 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA
Output Phases		3Ø / 5 Wire (L1, L2, L3, N, Gnd)									
Voltage	Ranges	Low Range: 0-150V _{L-N} / 260V _{L-L} , High Range: 0-300V _{L-N} / 0-520V _{L-L} 300V _{L-N} /520V _{L-L} and 600V _{L-N} /1040V _{L-L} Range pairs available - Option 600									
	Resolution	0.1 V									
	Accuracy	± (1.0% + 0.2 V)									
Load Regulation		± 0.5%									
Harmonic Distortion (Vthd)		≤ 1% (Resistance Load)									
Frequency	Range	45 - 500 Hz									
	Resolution	0.1 Hz at 45 - 99.9 Hz 1 Hz at 100 - 500 Hz									
	Accuracy	± 0.2%									
Phase Current	150V range	8.4 A	16.8 A	25.2 A	42.0 A	84.0 A	168.0 A	252.0 A	336.0 A	417.0 A	500.0 A
	300V range	4.2 A	8.4 A	12.6 A	21.0 A	42.0 A	84.0 A	126.0 A	168.0 A	208.0 A	250.0 A
Crest Factor		≥ 3 to 1									
Protection		Over Current, Short Circuit, Over Temp.									
Efficiency		> 85% (at full load)									

AC INPUT		APS3003	APS3006	APS3009	APS3015	APS3030	APS3060	APS3090	APS3120	APS3150	APS3180
Input Phases		1Ø / 2 Wire + Ground			3Ø / 3W + ground			3Ø / 4W + ground			
Voltage		230V ± 15%		208V, 220V, 240V (3W+G), 380V, 415V, 480V (4W+G) ±10%				380V, 415V, 480V (4W+G) ±10%			
Frequency		47 - 63Hz									

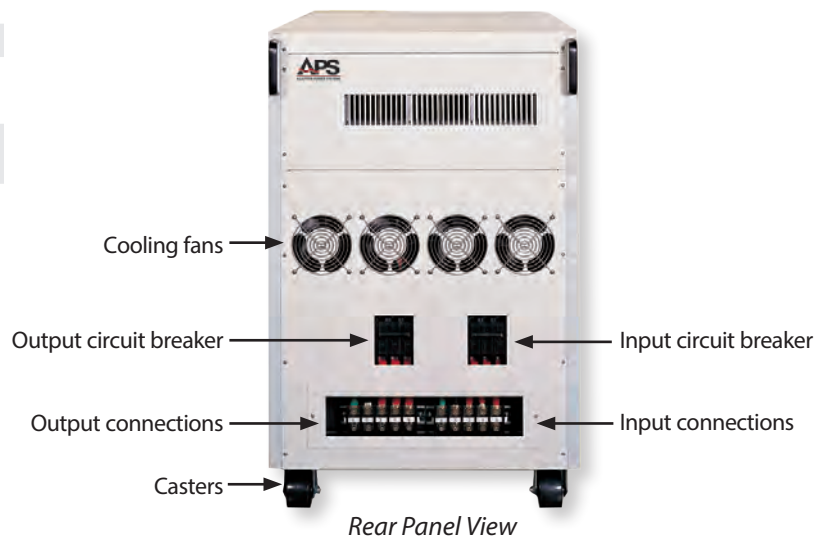
MECHANICAL		APS3003	APS3006	APS3009	APS3015	APS3030	APS3060	APS3090	APS3120	APS3150	APS3180
Dimensions	inches	34 x 26 x 17		33 x 39 x 24		38 x 39 x 24	65 x 38 x 32	71 x 39 x 48	71 x 47 x 48	71 x 47 x 63	71 x 47 x 63
	(HxDxW) mm	864 x 660 x 432		839 x 980 x 600		949x980x600	1662x980x800	1805x980x1200	1805x1180x1200	1805x1180x1200	1805x1180x1200
Weight (Kg / lbs.)		140/308	175/385	299/659	362/798	547/1206	909/2004	1505/3318	2139/4716	1800/3968	1800/3968

DISPLAYS & CONTROLS

4 Digit LED Meters	Frequency, Voltage, Current, Power or Power Factor (simultaneously)
PLC Remote Interface	Run Programs P1, P2, P3, and Output On/Off
Memory (standard)	3 Programmable Memories with 5 steps each for Voltage, Frequency, Test Time, Delay Time, Current, Power and PF Limits
Calibration	Front Panel Calibration
Interface (optional)	GPIB or RS232 Expands Memories from 3 to 8
Auto Voltage Adjust	Enables improved voltage regulation within ± 0.1 V

ENVIRONMENTAL

Operating Temperature	32° - 104° F / 0° - 40° C
Relative Humidity	80%, non-condensing
Altitude	Below 6500 feet / 2000 m



Service and Support

Adaptive Power Systems' customer support is second to none. Our Customer Support Program provides the training, repair, calibration, and technical support services that our customers value. So, in addition to receiving the right test equipment, our customers can also count on excellent support before, during and after the sale. With company owned support and service centers around the world, support is never far away.



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Warranty and Service Centers

New Product Warranty: All AC Power Products carry a one year factory warranty. Complete calibration and repair services are offered at our US, Europe or China manufacturing facilities (see contact info below). Calibrations are to original factory specifications and are traceable to NIST (National Institute of Standards and Technology).

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