

About Pacific Power Source, Inc.

Pacific Power Source has been involved in the design and manufacture of programmable AC power sources since 1971 when the company first opened its doors. Early product development was focused on highly reliable solid state frequency conversion for 400Hz and higher frequency defense applications. Since then, commercial aviation, consumer and industrial products have taken on just as significant a representation in Pacific Power's Customer base.

Headquartered in Irvine, CA with additional facilities in Santa Ana, San Diego, Shanghai, Petersfield UK and Kappelrodeck Germany to ensure local and timely support for its customers.

Throughout its 50+ years existence, the company has remained focused on customer satisfaction and delivery of high quality products that meet or exceed specifications and expectations. Working closely with our customers, we have delivered numerous custom test solutions to meet specific end-user requirements. As a privately owned, agile company, we are able to quickly adapt to changing market needs and remain in close contact with our customers through a large network of sales representatives and distributors throughout the world.



Pacific Power Source Corporate Headquarters in Irvine, California

Find the Series that best fits your needs

PRODUCT APPLICATION	LSX	LMX	AFX	ADF	AZX
Automated Test Power (ATE)	✓	✓	✓	✓	✓
AC Output	✓	✓		✓	✓
AC, DC & AC+DC Output			✓		
Front Panel Controls	✓	✓	✓	✓	✓
Power Line Disturbance/Transient Test	✓	✓	✓		✓
Lab Frequency Converter	✓	✓	✓	✓	
Facilities Frequency Converter			✓	✓	✓
High AC Output Frequency to 5 kHz		✓			
High Current Crest Factor Support		✓	✓	✓	
Linear Technology - Low Output Noise & Distortion		✓			
Switch Mode Technology - Compact	✓		✓	✓	✓
Single, Split and Three Phase Output Modes	✓	✓	✓	1 or 2 & 3	✓
Regenerative, Bidirectional Energy Flow to/from AC Grid					✓
LAN and LXI Interface, USB		✓	✓	✓	

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LSX Series: Single- and Three-Phase Output Switch Mode AC Power Sources

Standard Features:

- Single and Three Phase Models
- 15 to 1200 Hz. Full Power Operation – 5000 Hz small signal bandwidth
- Power Levels from 1500VA to 6000VA
- High Current Crest Factor Support
- Compact Size and Power Efficient Operation
- Variable Speed Fan Control for Quiet Operation
- Advanced Precision Controller with Color Touch User Interface
- Precision RMS metering of volts, amps and power
- PPS Studio Windows Software Suite and built-in Web Server
- LAN (LXI), USB, GPIB (IEEE-488.2) & RS232 Interface standard
- Harmonic Analysis and Waveform Synthesis
- Programmable Output Impedance (Prog-Z)
- Time Domain Waveform Capture and Peak Inrush Capture



315LSX - 1500VA



360LSX - 6000VA

LSX Models - Single Phase Output

	Rated Power ¹	Voltage Max ² (Vrms)				Current ³ (Arms)				Output Frequency	AC Input	Rack Height
MODEL	(VA)	Direct	T 1.5:1	T 2.0:1	T 2.5:1	Direct	T 1.5:1	T 2.0:1	T 2.5:1	(Hz)		
115LSX	1500	132	-	-	-	16.0	-	-	-	15.00-1200	1 ϕ	3U
115LSXT			0-198	0-264	0-330		10.7	8.0	6.4			
120LSX	2000	150/300	-	-	-	20/14	-	-	-		3 ϕ	5U
140LSX	4000	135/270	-	-	-	32/16	-	-	-			8U
140LSXT			202/404	270/540	338/600		21.3/10.7	16.0/8.0	12.8/6.4			5U
160LSX	6000	132/264	-	-	-	48/16	-	-	-			8U
160LSXT			198/396	264/528	330/600		32/10.6	24/8	19.2/6.4			

LSX Models - Single and Three Phase Output

	Rated Power ¹	Voltage Max ² (Vrms)				Current ³ (Arms)				Output Frequency	AC Input	Rack Height
MODEL	(VA)	Direct	T 1.5:1	T 2.0:1	T 2.5:1	Direct	T 1.5:1	T 2.0:1	T 2.5:1	(Hz)		
315LSX	1500	132/264 132/228 (3 ϕ)	198 ⁴ (3 ϕ only)	264 ⁴ (3 ϕ only)	338 ⁴ (3 ϕ only)	12/8 4/ ϕ	2.6/ ϕ ⁴ (3 ϕ only)	2.0/ ϕ ⁴ (3 ϕ only)	1.6/ ϕ ⁴ (3 ϕ only)	15.00-1200	1 ϕ	3U
320LSX	2000	150/300 150/260 (3 ϕ)	225 ⁴ (3 ϕ only)	300 ⁴ (3 ϕ only)	375 ⁴ (3 ϕ only)	20/12 7/ ϕ	4.66/ ϕ ⁴ (3 ϕ only)	3.5/ ϕ ⁴ (3 ϕ only)	2.8/ ϕ ⁴ (3 ϕ only)			
345LSX	4500	135/270 135/234 (3 ϕ)	-	-	-	36/12 12/ ϕ	-	-	-		3 ϕ	5U
345LSXT			202/404 202/350	270/540 270/468	338/600 338/585		24/8 8/ ϕ	18/6 6/ ϕ	14.4/4.8 4.8/ ϕ			8U
360LSX	6000	135/270 135/234 (3 ϕ)	-	-	-	48/16 16/ ϕ	-	-	-			5U
360LSXT			198/396 198/343	264/528 264/457	330/600 330/572		32/10.7 10.7/ ϕ	24/8 8/ ϕ	19.2/6.4 6.4/ ϕ			8U

NOTES: 1. Rated output power is based on a combination of nominal output voltage, rated current and load power factor. 2. Vmax is maximum RMS output voltage with full rated load applied.

3. Available current will vary with output voltage and power factor. See product datasheets. Values shown in table are Rated RMS Current. 4. Requires Mod M99211. See page 8.

LMX Series: Single- and Three-Phase Output Linear AC Power Sources

Standard Features:

- Single and Three Phase Models
- 15 to 5000 Hz. Full Power Operation – 40 kHz small signal bandwidth
- Power Levels from 500VA to 30kVA
- Extreme Low Noise and Distortion Output
- Variable Speed Fan Control for Quiet Operation
- Advanced Precision Controller with Color Touch User Interface
- Precision RMS metering of volts, amps and power
- PPS Studio Windows Software Suite and built-in Web Server
- LAN (LXI), USB, GPIB (IEEE-488.2) & RS232 Interface standard
- Harmonic Analysis and Waveform Synthesis
- Programmable Output Impedance (Prog-Z)
- Time Domain Waveform Capture and Peak Inrush Capture

Available options:

- Master/Slave Parallel Mode for 345LMX & 360LMX models



312LMX - 1200VA



320LMX - 2KVA



LMX Models - Single Phase Output

	Rated Power ¹	Voltage Max ² (Vrms)				Current ³ (Arms)				Output Frequency	AC Input	Rack Height
MODEL	(VA)	Direct	T 1.5:1	T 2.0:1	T 2.5:1	Direct	T 1.5:1	T 2.0:1	T 2.5:1	(Hz)		
105LMX	500	135/270	-	-	-	4.0/2.0	-	-	-	20.00-5000	1 ø	3U
105LMXT			202/404	270/540	338/600		2.6/1.3	2.0/1.0	1.6/0.8			
108LMX	750	135/270	-	-	-	6.0/3.0	-	-	-			
108LMXT			202/404	270/540	338/600		4.0/2.0	3.0/1.5	2.4/1.2			
112LMX	1200	150/300	-	-	-	10.0/5.0	-	-	-		3 ø	8U
140LMX	4000	135/270	-	-	-	32/16	-	-	-			11U
140LMXT			202/404	270/540	338/600		21.3/10.7	16.0/8.0	12.8/6.4			8U
160LMX	6000	135/270	-	-	-	48/16	-	-	-			11U
160LMXT			202/404	270/540	338/600		32.0/10.7	24.0/8.0	19.2/6.4			

LMX Models - Single and Three Phase Output

	Rated Power ¹	Voltage Max ² (Vrms)				Current ³ (Arms)				Output Frequency	AC Input	Rack Height
MODEL	(VA)	Direct	T 1.5:1	T 2.0:1	T 2.5:1	Direct	T 1.5:1	T 2.0:1	T 2.5:1	(Hz)		
305LMX	500	135/270 135/234 (3ø)	-	-	-	4/2 1.3/ø (3ø)	-	-	-	20.00-5000	1 ø	3U
305LMXT			202/404 202/350 (3ø)	270/540 270/468 (3ø)	338/600 338/585 (3ø)		2.6/1.3 1.0/ø (3ø)	2/1 0.75/ø (3ø)	1.6/0.8 0.6/ø (3ø)			
308LMX	750	135/270 135/234 (3ø)	-	-	-	6/2 2/ø (3ø)	-	-	-			
308LMXT			202/404 202/350 (3ø)	270/540 270/468 (3ø)	338/600 338/585 (3ø)		4/1.3 1.3/ø (3ø)	3/1 1/ø (3ø)	2.4/0.8 0.8/ø (3ø)			
312LMX	1200	150/300 150/260 (3ø)	225 ⁴ (3ø only)	300 ⁴ (3ø only)	375 ⁴ (3ø only)	10/3.3 3.3/ø (3ø)	2.2/ø ⁴ (3ø only)	1.66/ø ⁴ (3ø only)	1.33/ø ⁴ (3ø only)		3 ø	5U
320LMX	2000	135/270 135/234 (3ø)	-	-	-	18/6 6/ø (3ø)	-	-	-			8U
320LMXT			202/404 202/350 (3ø)	270/540 270/468 (3ø)	338/600 338/585 (3ø)		12/4 4/ø (3ø)	9/3 3/ø (3ø)	7.2/2.4 2.4/ø (3ø)			8U
345LMX	4500	135/270 135/234 (3ø)	-	-	-	36/12 12/ø (3ø)	-	-	-			11U
345LMXT			202/404 202/350 (3ø)	270/540 270/468 (3ø)	338/600 338/585 (3ø)		24/8 8/ø (3ø)	18/6 6/ø (3ø)	14.4/4.8 4.8/ø (3ø)			8U
360LMX	6000	135/270 135/234 (3ø)	-	-	-	48/16 16/ø (3ø)	-	-	-			11U
360LMXT			202/404 202/350 (3ø)	270/540 270/468 (3ø)	338/600 338/585 (3ø)		32/10.7 10.7/ø (3ø)	24/8 8/ø (3ø)	19.2/6.4 6.4/ø (3ø)			

NOTES: 1. Rated output power is based on a combination of nominal output voltage, rated current and load power factor. 2. Vmax is maximum RMS output voltage with full rated load applied.

3. Available current will vary with output voltage and power factor. See product datasheets. Values shown in table are Rated RMS Current. 4. Requires Mod M99211. See page 8.

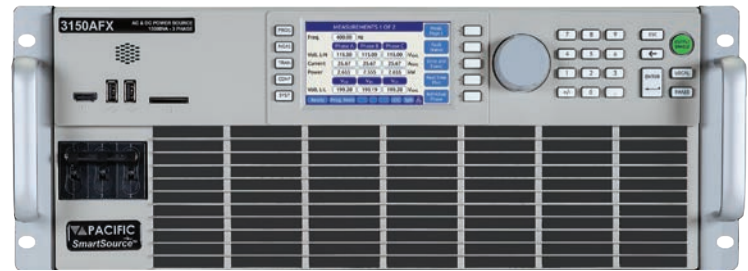
AFX Series - High Power AC, DC and AC+DC Power Sources and Cabinets

Standard Features:

- Three, Split and Single Phase Output Modes
- AC, DC and AC+DC Output
- Constant Power Voltage Range Provides Higher Current at Lower Voltage Settings
- DC, 1Hz to 3000 Hz Frequency Range
- Power Levels from 6kVA to 150kVA
- High Current Crest Factor Support
- Compact Size and Power Efficient Operation
- Variable Speed Fan Control and sleep mode for Quiet Operation
- True-RMS metering of volts, amps, and power
- USB, LAN (LXI), GPIB and RS232 Interfaces standard
- PPSC Studio Software Suite & Built-in Web Server Control

Available options:

- Output Transformer (T-Option) for 400V-L-N output voltage. Requires AFX-T version power source



3150AFX - 15kVA



Patented Technology

- UPC Studio Test Manager test sequences for Avionics, Shipboard and IEC 61000-4 Compliance Test

AFX Models - One, Split & Three Phase Output

MODEL	Rated Power ¹ (VA/W)	Voltage Max ² (Vrms/Vdc)	Current ³ (Max)				Output Frequency ⁴ (Hz)	AC Input	Height
			AC 1 Phase	AC 2 & 3 Phase	DC 1 Output	DC 3 Outputs			
360AFX	6000	AC: 0 - 300 ² (0 - 333) DC: 0 - ±425	50 A	16.7A/phs	50.0 A	16.7 A	DC, 15.00-1200 (1.0 - 3000) ⁴	208-240Vac, 3ø or 380-480Vac, 3ø	4U Chassis 7" / 178 mm
390AFX	9000		75 A	25.0 A/phs	62.5 A	21.0 A			
3120AFX	12000		100 A	33.3 A/phs	62.5 A	21.0 A			
3150AFX	15000		125 A	41.7 A/phs	62.5 A	21.0 A			
3180AFX	18000		150 A	50.0 A/phs	125.0 A	41.7 A			
3240AFX	24000		200 A	66.7 A/phs	125.0 A	41.7 A			
3300AFX	30000		250 A	83.4 A/phs	125.0 A	41.7 A			15U Cabinet
3450AFX	45000		375 A	125 A/phs	187.5 A	62.5 A			
3600AFX	60000		500 A	166.7 A/phs	250 A	83.3 A		380-480Vac, 3ø	28U Cabinet
3750AFX	75000		625 A	208.3 A/phs	312.5 A	104 A			
3900AFX	90000		750 A	250 A/phs	375 A	125 A			

NOTES: 1. Rated output power is in 3 or 1 phase mode, nominal output voltage, rated current. Contact Pacific for higher power models.

2. Vmax is maximum AC RMS or DC output voltage with full rated load applied. Extended voltage range to 333Vac L-N/576V-L-L.

3. Values shown in table are Rated RMS or DC Current. Shown for 1 phase AC mode or single output DC mode and per phase for 3 & 2 phase AC mode or per output for DC mode.

4. Full rated Frequency range is 15Hz to 1200Hz. Extended Frequency range is 1Hz to 3000Hz with some voltage and or power derating.



360AFX - 6kVA/6kW



390AFX - 9kVA/9kW



3120AFX - 12kVA/12kW



3150AFX - 15kVA/15kW



3180AFX - 18kVA/18kW



3240AFX - 24kVA/24kW



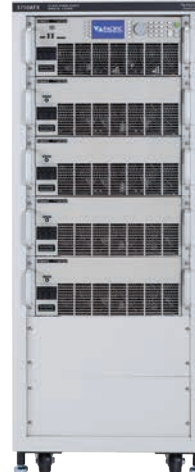
3300AFX - 33kVA/33kW



3450AFX - 45kVA/45kW



3600AFX - 60kVA/60kW



3750AFX - 75kVA/75kW



3900AFX - 90kVA/90kW

ADF Series - Modular High Power Frequency Converters

Standard Features:

- Available Single phase or Three/ Split phase Output models
- AC Sine wave Output
- Constant Power Voltage Range Provides Higher Current at Lower Voltage Settings
- 45 Hz to 500 Hz Frequency Range
- Power Levels from 15kVA (4U unit) to 90kVA (19" Cabinets)
- High Current Crest Factor Support
- Compact Size and Power Efficient Operation
- Variable Speed Fan Control and sleep mode for Quiet Operation
- True-RMS metering of volts, amps, and power
- USB, LAN (LXI), GPIB and RS232 Interfaces standard



3150ADF - 15KVA



Available options:

Patented Technology

- Option F: Extends frequency range to 45 Hz ~ 1200 Hz
- Option V: Extends Voltage range to 333Vac LN/ 576Vac LL

ADF Models - Single 19" Rack Mount Units or 19" Cabinets

MODEL	Rated Power ¹ (VA/W)	Voltage Max ² (Vrms)	Current per Phase ³ (Max)		Output Frequency ⁴ (Hz)	AC Input	Height
			1 Phase	2 & 3 Phase			
1150ADF	15000	0 - 300 ²	125.0 A	-	45-500 (15 - 1200) ⁴	208-240Vac, 3ø or 380-480Vac, 3ø	4U Chassis 7" / 178 mm
3150ADF	15000		-	41.7 A			18U Cabinet
1300ADF	30000		250.0 A	-			
3300ADF	30000		-	83.3 A			
1450ADF	45000		375.0 A	-		380-480Vac, 3ø	28U Cabinet
3450ADF	45000		-	125.0 A/phs			
3600ADF	60000		-	166.7 A/phs			
3750ADF	75000		-	208.3 A/phs			
3900ADF	90000		-	250.0 A/phs			

NOTES: 1. Rated output power is in 3 or 1 phase mode, nominal output voltage, rated current. Contact Pacific for higher power models.

2. Vmax is maximum AC RMS or DC output voltage with full rated load applied. Option V: Extended voltage range to 333Vac L-N/576VLL.

3. Values shown in table are Rated RMS. Shown for 1 phase for 1xxxADF models and per phase for 3 & 2 phase AC mode for 3xxxADF models

4. Full rated Frequency range is 45Hz to 500Hz. Option F: Extended Frequency range is 15Hz to 1200Hz

AZX Series - High Power Regenerative AC & DC Power Sources / Grid Simulators

Standard Features:

- Bidirectional, Regenerative 4 Quadrant Operation
- Three, Split and Single Phase Output Modes
- AC, DC and AC+DC Output Modes
- Dual Constant Power Voltage Ranges, 440V_{LN} / 760V_{LL} Vac or ± 650 Vdc Max.
- DC, 15Hz to 1000 Hz Frequency Range
- Power Levels from 30kVA to 200kVA
- High Current Crest Factor Support
- Variable Speed Fan Control for Quiet Operation
- Precision metering of volts, amps, and power
- USB, LAN (LXI), GPIB and RS232 Interfaces standard
- PPSC Studio Software Suite & Built-in Web Server Control

AZX Models	Rated Power ¹ (kVA/kW)	Voltage Max ² (Vrms/Vdc)	Max. Current ³ per Phase				No. Cabinets
			High AC Rng	Low AC Rng	High DC Rng	Low DC Rng	
3300AFX	30	AC: 0 - 440V _{LN} 0-225V _{LN} DC: 0 - ± 650 Vdc 0 - ± 335 Vdc	45 Arms	90 Arms	30 Adc	60 Adc	1
3500AFX	50		75 Arms	130 Arms	50 Adc	100 Adc	1
31000AFX	100		150 Arms	260 Arms	100 Adc	200 Adc	2
31500AFX	150		225 Arms	390 Arms	150 Adc	300 Adc	3
32000AFX	200		300 Arms	520 Arms	200 Adc	400 Adc	4



3500AFX - 50KVA

MS Series - High Power Frequency Converters

Standard Features:

- Solid State Frequency Converter
- 62.5 KVA/50 KW AC Power Output per Cabinet
- Output Voltage 0-120VL-N / 0-208VL-L
- Single Phase, Split Phase or Three Phase Configurations
- 50Hz, 60Hz or 400 Hz Frequency Settings
- Adjustable Frequency Range 47Hz to 500Hz
- Easy Paralleling for Higher Power Output to 1750A/phase
- Rugged Industrial Construction and Power Efficient Operation
- True-RMS metering of volts, amps, and power

Available options:

- Output Transformers for Higher Voltage Ranges
- SCU/UPC32 Advanced Controller with 20Hz - 500Hz Capability
- UPC Studio Software Suite



ECTS2 Series - EMC Harmonics & Flicker Test Systems

Support Test Standards:

EMC Emissions Tests:

- IEC 61000-3-2 Harmonics Emissions
- IEC 61000-3-12 Harmonics Emissions
- IEC 61000-3-3 Flicker Emissions
- IEC 61000-3-11 Flicker Emissions

EMC Immunity Test Software:

- IEC 61000-4-11 (Option)
- IEC 61000-4-13 (Option)
- IEC 61000-4-14
- IEC 61000-4-17
- IEC 61000-4-27 (Option)
- IEC 61000-4-28
- IEC 61000-4-29 (Option)
- IEC 61000-4-34 (Option)

Avionics Test Software:

- RTCA/DO160, Section 16
- MIL-STD 704
- Airbus ABD0100.1.8 (A380)
- Airbus ABD0100.1.8.1 (A350)
- Airbus AMD24C (A400M)
- Boeing 787B3-0147



ECTS2-3450F 45kVA EMC Test Systems

Options

19" Instrument Cabinets

To protect your valuable equipment and make it easier to deploy in multiple locations in your facility, Pacific Power Source offers custom installation of one or more of its AC Power Sources in a rugged 19" wide rack. Racks are available in different heights to accommodate the power source(s) height and allow for additional instrument space if needed. Highly recommended for multi-chassis parallel AMX or LMX configurations.

Mobile Power Conditioning Unit

The MPCU is a fully integrated AC Power System mounted in a composite case for transportation and storage. The MPCU can be utilized as a power conditioner, frequency converter, voltage converter, current source, or any number of other applications.

IEC 60725 Flicker Impedance (Option M6204)

The M6204 unit provides the requisite lumped impedance between the AC Power Source and the Unit Under Test (UUT) used to test for flicker compliance to IEC 61000-3-3. Meets IEC 60725 impedance standard. Maximum current 16 A per phase. For single and three phase flicker testing. For harmonics and flicker test solutions, refer to the ECTS2 EMC test systems info.

Harmonic Analysis & Waveform Synthesis (HAS Option)

The HAS option adds harmonic measurement of both voltage and load current on all output phases to the UPC controller, allowing for detailed analysis of voltage and/or current distortion.

This option also allows the user to easily define harmonically distorted waveforms by entering a combination of harmonic amplitudes and phase angles directly from the front panel.

Programmable Output Impedance (Prog-Z Option)

The Prog-Z option allows the internal impedance to be adjusted up or downward. To simulate a "softer" AC Source, the output value can be set to a higher positive value. To simulate a much "Stiffer" AC Source, a negative value can be entered for Zo resulting in positive current feedback.

Dream Link (DRM Option)

The DRM option allows multiple AC sources to be frequency synchronized and phase locked together to create polyphase AC power configurations.

PRODUCT MODIFICATIONS & CUSTOM SYSTEMS

We realize our catalog products may not always be a perfect fit for your specific applications. For this reason, we offer special modifications (Mods) on most of our catalog products that allow us to specially meet your unique qualifications. Mods can be hardware, firmware or software in nature.

With our rich history of modifications over the last few decades, many product modification requests can be accommodated using existing mods, saving our customers non-recurring engineering cost (NRE). A sample listing of available Mods is shown below.

M6087: 600Vac output voltage range for 115LSX. Provides 600Vac, single phase output at 2.5Arms.

M99167: Extended output frequency range to 9999Hz for AMX Series with UPC12/32 controller.

M99169: High Current AC Source, 3-phase for contactor testing

M99211: 2.2kVA magnetics module for 3-phase AC Source models 312AMX, 315LSX or 320LSX.

M99219: Fixed output 115VLN/200VLL, 400Hz, 3-phase frequency converter for MIL-STD-704E compliant AC output.

M99360: 400VLN single or three phase magnetics module for use with 345/360LSX or AMX models.

Contact factory for a complete listing of available mods.

In addition to product modifications like the samples listed here, our engineering team can also develop complete custom products and AC power test systems to your specifications.

If you can't find a good fit in this standard product catalog, please contact our sales department to discuss your AC power test requirements with our experienced application engineers.



Custom multi-unit AC Power system

Service and Support

Pacific Power Source's customer support is second to none. Our Customer Support Program provides the training, repair, calibration, and technical support services that our customers value. 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. Complete calibration and repair services are offered at our US, European and Chinese 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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