## 120LSX

# 1 or 2ø - High Performance AC Power Source

2000 VA 15-1200 Hz 1Ø → 0 - 150 V<sub>L-N</sub> 2Ø → 0 - 300 V<sub>L-N</sub>

## **Standard Features:**

- Single phase output from front panel or bus command.
- 15 to 1200 Hz. Operation 5000 Hz small signal bandwidth.
- Precision Voltage Programming – 0.05% with Continuous Self-Calibration (CSC) engaged.
- True-RMS metering of volts, amps, and power.
- LAN, USB, GPIB & RS232 Interfaces standard
- Waveform Library Arbitrary Waveform Generator.
- 200 stored programs with associated transients for static and dynamic test applications.
- Programmable Output Impedance
- Harmonic Analysis and Waveform
  Synthesis
- Current Inrush Capture and Waveform Analysis

## Available Options:

- T option transformers for higher voltage ranges
- Rack enclosures with caster base



## Model 120LSX

As a member of Pacific's LMX-Series family of high performance AC Power Sources, the 120LSX offers the low acoustic noise, ease of installation, and maximum power density found in all of Pacific's high frequency, pulse width modulated AC Power Sources. Control and operational features provide a high degree of versatility and ease for applications ranging from simple, manually controlled frequency conversion to harmonic testing and sophisticated bus programmable transient simulation.

### ACTEST POWER

The 120LSX is equipped with an advanced controller using three digital signal processors (DSPs) and one command processor with the ability to operate as a fully integrated test system. It supplies a variety of power conditions and transients to the device under test while metering and analyzing all output performance parameters.

#### FREQUENCY/ VOLTAGE CONVERSION

The 120LSX is an excellent source of stable AC Voltage over the frequency range of 15 to 1200 Hz. The output frequency is quartz-crystal stabilized. Output voltages up to 300VLL are available on the 120LSX model.

### LSX SERIES REAL TIME CONTROLLER

The LSX Series uses a powerful real-time controller for generating ACwaveforms, harmonics and inter harmonics and to digitize voltage and current output waveforms and measurements. All controllers provide intuituve front panel using a color touch screen LCD or remote control through standard LAN, USB, GPIB and RS232 interfaces.



## **120LSX Models Output Ratings**

			Output Voltage Max <sup>3</sup> (I-n/I-I)				Output Current⁴ (A <sub>rms</sub> )			
				Transformer				Transformer		
MODEL	Rated Power (VA) <sup>1</sup>	Output Form <sup>2</sup>	Direct	Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1	Direct	Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1
MODEL	POwer (VA)	FOIIII	Direct	1.2.1	2.0.1	2.3.1	Direct	1.2.1	2.0.1	2.3.1
120LSX	2000	1 or 2	150/300	n/a	n/a	n/a	20/14	n/a	n/a	n/a

#### Notes:

1. Rated output power is based on a combination of output voltage, current and load power factor. Values stated represent the rated capabilities of a given model. Consult factory for assistance in determining specific unit capabilities as they might apply to your application.

2. All single phase units except the 115LSX are operable with dual voltage ranges as listed. Output voltage ranges and 10/20 conversions are selected by front panel or bus command.

3. Output voltage ranges listed are for standard units. VMAX is achievable with nominal input voltage at full load.

4. Available current will vary with output voltage and power factor.



FREQUENCY CONVERSION

R&D

MILITARY

CUSTOM



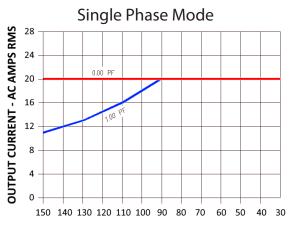
# 120LSX

LSX Power Source S	pecifications	(PF = 1.0, V <sub>out</sub> > 25% F.S.)					
Output Frequency	Line Regulation	Load Regulation <sup>1</sup>	Output Distortion (VTHD)	Ripple & Noise	<b>Response Time</b>		
Full Power 15-1200 Hz Direct Coupled 45-1200 Hz Transformer Coupled	0.1% max for a ±10% line change	Direct Coupled Ranges: 15 to 200 Hz < $\pm$ 0.25% 200 to 1200 Hz < 0.6%	15 to 200 Hz < $\pm$ 0.25% 200 to 1200 Hz < f* 0.7 + 0.11%	< 66 dB	60 msec typ. for a 10-90% load step		

Note 1: Improves to less than 0.05% with external sense and CSC mode enabled. Frequency "f" is in kHz. For transformer coupled voltage ranges, load regulation by step-up ratio is: 1.5:1 - 2%, 2.0:1 - 4%, 2.5:1 - 5%. Improves to < 0.1% with external sense and CSC mode enabled.

## Thermal and Load Power Factor Rating Curves

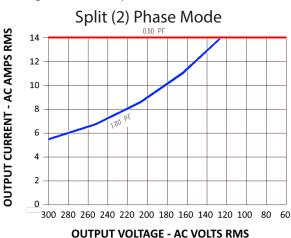
Rated Continuous Load Current as a Function of Power Factor and Output Voltage at Nominal Input Line.



#### **OUTPUT VOLTAGE - AC VOLTS RMS**

Short term overloads to 30A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

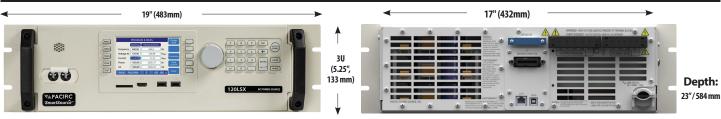
#### AC Input Power Requirements (47-63 Hz)



Short term overloads to 15A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

1	40034 . 400/	44014 . 400/	40014 . 400/	2001/ . 100/	200/2201/ . 400/	220/24034 . 400/
Input Voltage:	100 Vac ± 10%	110 Vac ± 10%	120 Vac ± 10%	200 Vac ± 10%	$208/220$ vac $\pm 10\%$	230 / 240 Vac ± 10%
AC Input Current:	22 Arms	20 Arms	18 Arms	10 Arms	10 Arms	9 Arms
Recommended Input Service:	25 A	25 A	25 A	15 A	15 A	15A

## **Chassis Dimensions and Weights**



## **Ordering Information**

Model	T Option Ratio	AC Input Voltage (1ø)		Options			
120LSX	n la	Specify: 100, 110, 120, 200,	PPSC Test Manager SW License				
TZULSX	n/a	208, 220, 230 or 240	Avionics or IEC Test Sequences				
Order Examp			Model	Lbs / Kg			
120LSX, V <sub>IN</sub> : 12	OVAC		120LSX	70/32			
	-Phase, AC Powe						
120VAC, 1 Phase Input Voltage							



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#### **M Version reduced feature set versions:** A reduced feature set basic LSXM model

version of the LSX is available as well.