# 1 or 2ø - High Performance AC Power Source

6000 VA 15-1200 Hz

 $1\phi \rightarrow 0 - 135 V_{L-N}$  $2\phi \rightarrow 0 - 270 V_{L-N}$ 

### **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.

# **Available Options:**

- Rack enclosures with caster base
- Programmable Output Impedance
- Harmonic Analysis and Waveform Synthesis
- Peak Inrush Capture and Waveform Analysis
- PPSC Manager Software



# Model 160LSX

As a member of Pacific's LMX-Series family of high performance AC Power Sources, the 160LSX 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 160LSX 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 160LSX 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 270VLL are available on the 160LSX model and up to 600VLL on the 160LSXT 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.

# **160LSX Models Output Ratings**

			C	Output Voltage Max³ (I-n/I-I)			Output Current <sup>4</sup> (A <sub>ms</sub> )			
			Transformer				Transformer			
	Rated	Output		Ratio	Ratio	Ratio		Ratio	Ratio	Ratio
MODEL	Power (VA) <sup>1</sup>	Form <sup>2</sup>	Direct	1.5:1	2.0:1	2.5:1	Direct	1.5:1	2.0:1	2.5:1
160LSX	6000	1 or 2	0-135 / 270	202 / 404	270 / 540	338/600	32/16	21.3 / 10.7	16/8	12.8 / 6.4

#### 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 AEROSPACE R & D MILITARY MANUFACTURING CUSTOM



### LSX Power Source Specifications (PF = 1.0, $V_{\text{cm}} > 25\%$ F.S.)

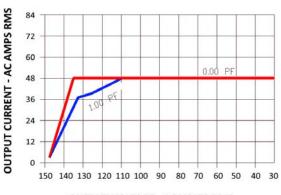
Output Frequency	Line Regulation	Load Regulation <sup>1</sup>	Output Distortion (Vтно)	Ripple & Noise	Response Time
Full Power 15-1200 Hz Direct Coupled 45-1200 Hz Transformer Coupled	0.1% max for a ±10% line change	Direct Coupled Ranges: 15 to 200 Hz $< \pm 0.25\%$ 200 to 1200 Hz $< f* 2.5 + 0.25\%$	15 to 200 Hz < ± 0.25% 200 to 1200 Hz < f* 1.4 + 0.22%	< 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.

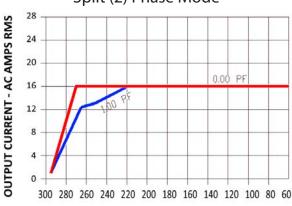
# Single Phase Mode



**OUTPUT VOLTAGE - AC VOLTS RMS** 

Short term overloads to 60A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

# Split (2) Phase Mode



**OUTPUT VOLTAGE - AC VOLTS RMS** 

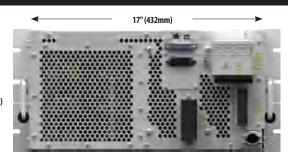
Short term overloads to 20A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

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

Input Voltage:	208Vac3ø∆±10%	220Vac3ø∆±10%	240Vac3ø∆±10%	220/380Vac3ø±10%	230/400Vac3ø±10%	240/416Vac3ø±10%	277/480Vac3ø±10%
AC Input Current:	20 Arms	18 Arms	16 Arms	11 Arms	10 Arms	10 Arms	Cost Option
Recommended Input Service:	30 A	30 A	25 A	15 A	15 A	15 A	Consult Factory

#### **Chassis Dimensions and Weights**





**Depth:** 23"/584 mm

#### **Ordering Information**

Model	T Option Ratio	AC Input Voltage (1ø)	Options	
160LSX(T)	1.5:1, 2.0:1, 2.5:1	Specify: 208, 220, 240, 380,	PPSC Test Manager SW License	
		400, 416 or 480	Avionics or IEC Test Sequences	

#### **Order Example:**

 $160LSXT, T = 2.0:1, V_{IN}: 220/380VAC$ 

- 6000VA, 1-Phase, AC Power Source
- 220/380VAC, 3 Phase Input Voltage

Model	Lbs / Kg
160LSX	145 / 66
160LSXT	270 / 122.8



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