

**4000 VA**  
**15-1200 Hz**

**1 $\phi$  → 0 - 135 V<sub>L-N</sub>**  
**2 $\phi$  → 0 - 270 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.

**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 140LSX**

As a member of Pacific's LMX-Series family of high performance AC Power Sources, the 140LSX 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.

**AC TEST POWER**

The 140LSX 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 140LSX 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 270V<sub>LL</sub> are available on the 140LSX model and up to 600V<sub>LL</sub> on the 140LSXT model.

**LSX SERIES REAL TIME CONTROLLER**

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

**140LSX Models Output Ratings**

MODEL	Rated Power (VA) <sup>1</sup>	Output Form <sup>2</sup>	Output Voltage Max <sup>3</sup> (I-n/I-l)				Output Current <sup>4</sup> (A <sub>rms</sub> )			
			Transformer			Direct	Transformer			
			Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1		Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1	
140LSX	4000	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

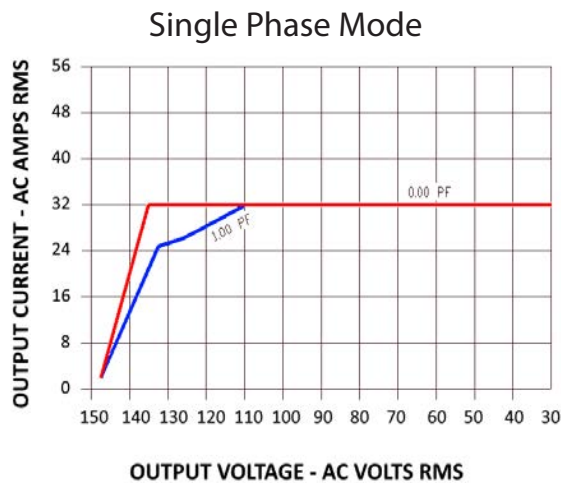
## LSX Power Source Specifications (PF = 1.0, $V_{out} > 25\%$ F.S.)

Output Frequency	Line Regulation	Load Regulation <sup>1</sup>	Output Distortion ( $V_{THD}$ )	Ripple & Noise	Response Time
Full Power 15-1200 Hz Direct Coupled 45-1200 Hz Transformer Coupled	0.1% max for a $\pm 10\%$ 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 $< \pm 0.25\%$ 200 to 1200 Hz $< f * 1.4 + 0.22\%$	$< 66$ dB	60 msec typ. for a 10-90% load step

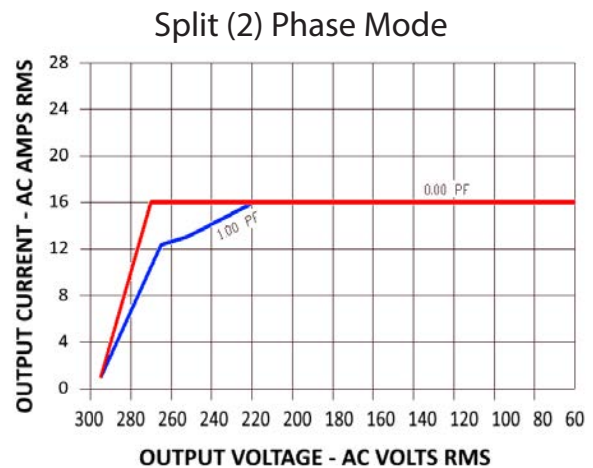
**Note 1:** Improves to less than 0.05% with external sense and CSC mode enabled. Frequency "f" is in kHz. For transformer coupled voltage ranges, load regulation by step-up ratio is: 1.5:1 - 2%, 2.0:1 - 4%, 2.5:1 - 5%. Improves to  $< 0.1\%$  with external sense and CSC mode enabled.

## Thermal and Load Power Factor Rating Curves

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



Short term overloads to 40A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

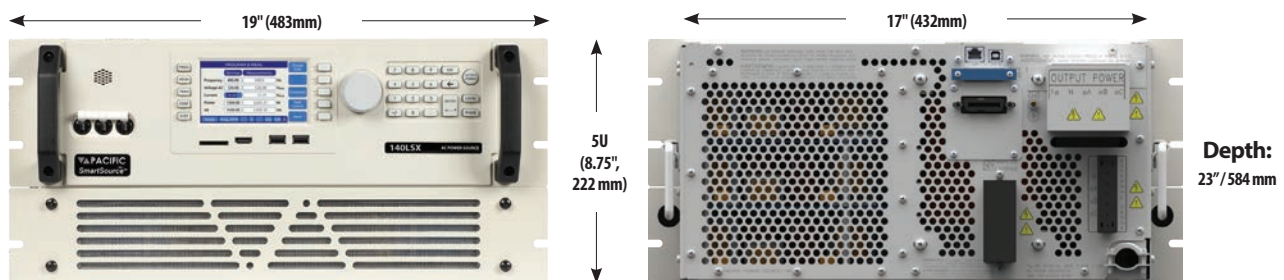


Short term overloads to 20A are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

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

Input Voltage:	208Vac $3\phi \Delta \pm 10\%$	220Vac $3\phi \Delta \pm 10\%$	240Vac $3\phi \Delta \pm 10\%$	220/380Vac $3\phi \pm 10\%$	230/400Vac $3\phi \pm 10\%$	240/416Vac $3\phi \pm 10\%$	277/480Vac $3\phi \pm 10\%$
AC Input Current:	13 Arms	12 Arms	11 Arms	7 Arms	7 Arms	6.5 Arms	Cost Option
Recommended Input Service:	20 A	20 A	15 A	10 A	10 A	10 A	Consult Factory

## Chassis Dimensions and Weights



## Ordering Information

Model	T Option Ratio	AC Input Voltage ( $1\phi$ )	Options
140LSX(T)	1.5:1, 2.0:1, 2.5:1	Specify: 208, 220, 240, 380, 400, 416 or 480	PPSC Test Manager SW License Avionics or IEC Test Sequences

### Order Example:

- 140LSXT, T = 2.0:1,  $V_{IN}$ : 220/380VAC
- 4000VA, 1-Phase, AC Power Source
  - 220/380VAC, 3 Phase Input Voltage

### M Version reduced feature set versions:

A reduced feature set basic LSXM model version of the LSX is available as well.

Model	Lbs / Kg
140LSX	120 / 54.5
140LSXT	245 / 111.3