

**500 VA**  
**15-5,000 Hz**

**1Ø → 0-338 V<sub>L-N</sub>**

**2Ø → 0-600 V<sub>L-L</sub>**

**3Ø → 0-338 V<sub>L-N</sub> / 0-585 V<sub>L-L</sub>**

### Standard Features:

- Advanced Linear Amplifiers Provide Very Low Voltage Distortion, no Switching Noise, Fast Voltage and Current Slew Rates, Exceptionally Low Output Impedance and High Peak Current Capability
- Single, split or three phase selectable output from front panel or bus command
- 15 to 5,000 Hz. Full Power Bandwidth Operation – 5Hz to 50KHz small signal bandwidth, 3dB at 10% of full voltage
- Precision Voltage Programming – 0.05% with Continuous Self-Calibration (CSC) engaged
- True-RMS Metering of Volts, Amps, and Power
- Color touch screen front panel operation
- LAN (LXI), USB, GPIB and RS-232 Interfaces
- Arbitrary Waveforms
- Transients for Static and Dynamic Test Applications
- Programmable Output Impedance
- Harmonic Analysis and Waveform Synthesis
- PPSC Manager Windows 10 Software
- Embedded Web server

### Model 305LMX

As the lowest three phase power member of Pacific Power's LMX-Series popular family of high performance Linear AC Power Sources, the 305LMX offers the same low output voltage noise and distortion, ease of installation, and high AC waveform fidelity as found in all of Pacific Power's Linear AC Power Sources. Control and operational features provide a high degree of versatility and ease of use for applications ranging from simple, manually controlled frequency conversion to harmonic testing and sophisticated programmable transient simulation.

### AC TEST POWER

All 305LMX models are equipped with a powerful micro-controller with the ability to operate as a fully integrated test system. This enables a variety of power conditions and transients to be applied to the device under test while metering and analyzing all output performance parameters. For higher power requirements, refer to the complete LMX series catalog.

### FREQUENCY/ VOLTAGE CONVERSION

The 305LMX is an excellent source of stable AC Voltage over the frequency range of 15 to 5,000 Hz. The output frequency is quartz-crystal stabilized. Output voltages up to 135V<sub>L-N</sub> in single phase mode and up to 270V<sub>L-L</sub> in split phase mode are available on the 305LMX model and up to 600V<sub>L-L</sub> in split phase mode or 585V<sub>L-L</sub> in three phase mode on the 305LMXT model.

### PHASE CONVERSION

With the ability to provide two or three phase output, the 305LMX is a good choice to convert one-phase line voltage into precisely controlled split (two-phase) or three phase output power.



**MADE IN USA**

### 305LMX 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	
305LMX	500	1/2 3	0-135/270 0-135/234	n/a	n/a	n/a	4/2 1.3/Ø	n/a	n/a	n/a
305LMXT	500	1/2 3	0-135/270 0-135/234	0-202/404 0-202/350	0-270/540 0-270/468	0-338/600 0-338/585	4/2 1.3/Ø	2.6/1.3 1/Ø	2/1 0.75/Ø	1.6/0.8 0.6/Ø

- Notes:**
- 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.
  - Output Form: Unit is operable as single phase with dual range capability or three phase. Output voltage ranges and 1Ø/2Ø or 3Ø conversions are selected by front panel or bus command.
  - Output voltage ranges listed are for standard units. VMAX is achievable with nominal input voltage at full load.
  - Current ratings at 125 V<sub>RMS</sub> output. Current may vary with power factor.



FREQUENCY CONVERSION



AEROSPACE



R & D



MILITARY



MANUFACTURING



CUSTOM

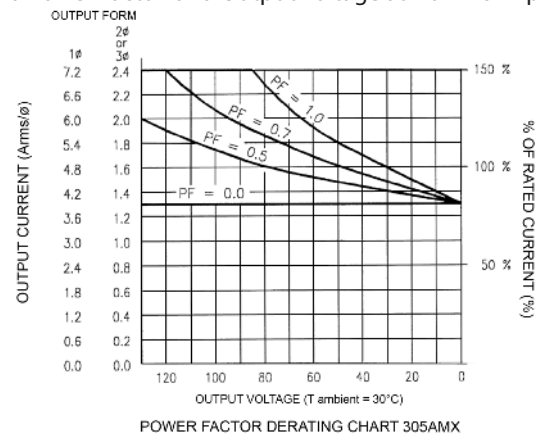
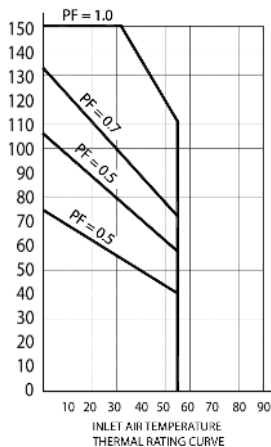
## LMX Power Source Specifications (PF = 1.0, $V_{out} > 25\%$ F.S.)

Output Frequency	Line Regulation	Load Regulation <sup>1</sup>	Output Distortion	Ripple & Noise	Response Time
Full Power 15-5,000 Hz Direct Coupled 45-5,000 Hz Transformer Coupled	0.1% max for a $\pm 10\%$ line change	Direct Coupled Ranges: 0.25% 15 to 2,000 Hz. 0.50% 2,000 to 5,000 Hz.	0.1% THD <sub>AVG</sub> 45 to 1,000 Hz 0.25% THD <sub>AVG</sub> 15 to 5,000 Hz	- 72 dB	5 $\mu$ sec typ. For step load change. Small signal bandwidth = 5 Hz to 50 KHz

**Note 1:** Improves to less than 0.05% with external sense and CSC mode enabled. 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 Ambient Temperature and Power Factor and Output Voltage at Nominal Input Line.

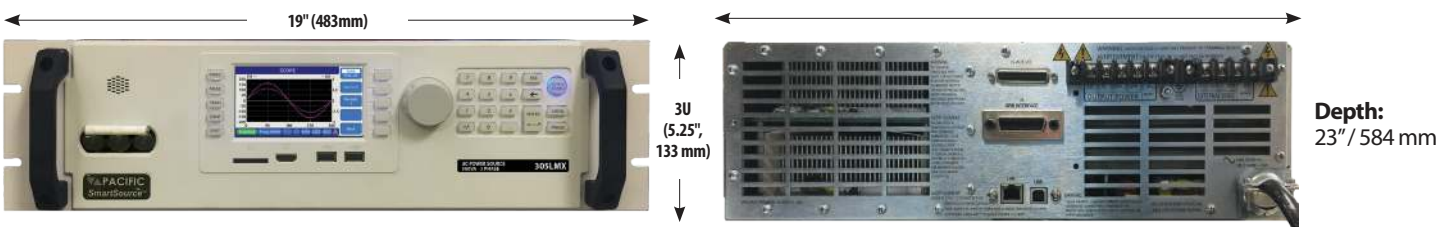


Short term overloads to 150% of rated current are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

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

Input Voltage:	110 Vac $\pm 10\%$	120 Vac $\pm 10\%$	220 Vac $\pm 10\%$	230 Vac $\pm 10\%$	240 Vac $\pm 10\%$
AC Input Current:	14 Arms	13 Arms	7 Arms	7 Arms	6 Arms
Recommended Input Service:	20 A	20 A	15 A	15 A	15 A

## Chassis Dimensions and Weights



## Ordering Information

Model	T Option Ratio	AC Input Voltage (1 $\phi$ )	Options
305LMX	n/a	Specify: 110, 120, 220,	PPSC Test Manager SW License
305LMXT	1.5:1 or 2.0:1 or 2.5:1	230 or 240	Avionics or IEC Test Sequences

Model	Lbs / Kg
305LMX	70 / 31.8
305LMXT	97 / 44

### Order Example:

- 305LMXT, T= 2.0:1,  $V_{in}$ : 120VAC
- 500VA, 3-Phase, AC Power Source with optional transformer
  - 2.0:1 Transformer Ratio
  - 120VAC, 1 Phase Input Voltage

### Export Version:

Three phase LMX Models intended for export outside of the USA must be ordered with the letter "E" (Export) post-fix.  
305LMXTE



17692 Fitch, Irvine, CA 92614 USA  
Phone: +1 949.251.1800  
Fax: +1 949.756.0756  
Toll Free: 800.854.2433  
E-mail: sales@pacificpower.com  
www.pacificpower.com