500 VA 15-5,000 Hz

 $1\phi \rightarrow 0 - 338 \text{ V}_{L-N}$ $2\phi \rightarrow 0 - 600 \text{ V}_{L-L}$

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 or Split 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 105LMX

As the lowest power member of Pacific Power's LMX-Series popular family of high performance Linear AC Power Sources, the 105LMX 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.

ACTEST POWER

All 105LMX 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 105LMX 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 135VL-N in single phase mode and up to 270VL-L in split phase mode are available on the 105LMX model and up to 600VL-L in split phase mode on the 105LMXT model.

PHASE CONVERSION

With the ability to provide two phase output, the 105LMX is a good choice to convert one-phase line voltage into precisely controlled split (two-phase) output power.



105LMX Models Output Ratings

				Output Voltage Max³ (I-n/I-I)				Output Current ⁴ (A _{rms})			
			Transformer			Transformer					
MODEL	Rated Power (VA) ¹	Output Form ²	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	
105LMX	500	1/2	0-135/270	n/a	n/a	n/a	4/2	n/a	n/a	n/a	
105LMXT	500	1/2	0-135/270	0-202/404	0-270/540	0-338/600	4/2	2.6/1.3	2/1	1.6/0.8	

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 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. Current ratings at 125 $\rm V_{\rm RMS}$ output. Current may vary with power factor.





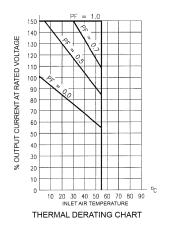
LMX Power Source Specifications $(PF = 1.0, V_{...} > 25\% F.S.)$

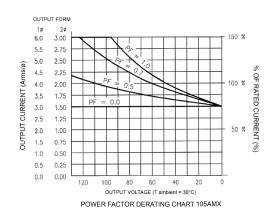
Output Frequency	Line Regulation	Load Regulation ¹	Output Distortion	Ripple & Noise	Response Time
Full Power 15-5,000 Hz Direct Coupled 45-5,000 Hz Transformer Coupled	0.1% max for a ±10% line change	Direct Coupled Ranges: 0.25% 15 to 2,000 Hz. 0.50% 2,000 to 5,000 Hz.	0.1% THD _{AVG} 45 to 1,000 Hz 0.25% THD _{AVG} 15 to 5,000 Hz	- 72 dB	5 μsec 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.





THERMAL RATING -AC CURRENT RMS

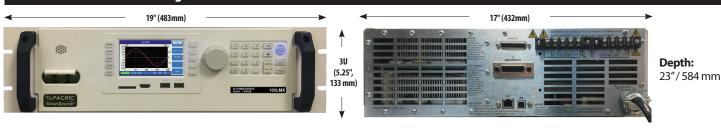
OUTPUT VOLTAGE-AC VOLTS RMS

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 ± 10%	120 Vac ± 10%	220 Vac ± 10%	230 Vac ± 10%	240 Vac ± 10%
AC Input Current:	9 Arms	8 Arms	5 Arms	4 Arms	4 Arms
Recommended Input Service:	25 A	25 A	15 A	15 A	15 A

Chassis Dimensions and Weights



Ordering Information

Model	T Option Ratio	AC Input Voltage (1ø)	Options
105LMX	n/a	Specify: 110, 120, 220,	PPSC Test Manager SW License
105LMXT	1.5:1 or 2.0:1 or 2.5:1	230 or 240	Avionics or IEC Test Sequences

Model	Lbs / Kg		
105LMX	70/31.8		
105LMXT	97 / 44		

Order Example:

- 105LMXT, T= 2.0:1, V_{IN}: 120VAC 500VA, 1-Phase, AC Power Source with optional transformer
- 2.0:1 Transformer Ratio
- 120VAC, 1 Phase Input Voltage



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