

LW127.141-225 Vibration System

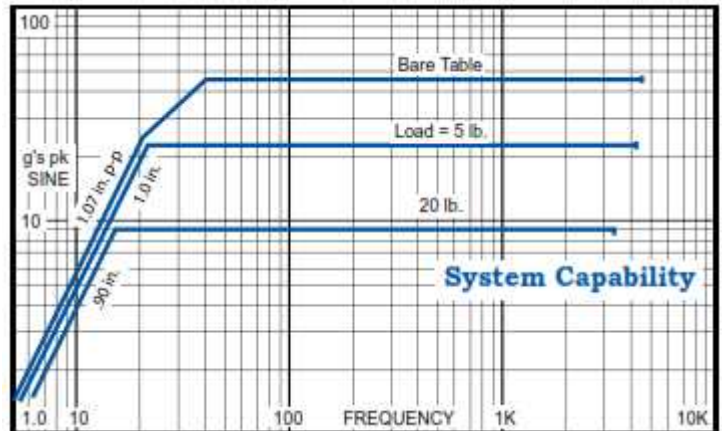


The LW-127-225 system is used when the test article size makes the ET-127 shaker the correct choice but test requirements do not demand the full rated shaker performance available from the LW-127-500 system.

General Specifications

Sine Force:	225 lbs force pk
Random Force:	110 lbf rms random
Shock Force:	240 lbf pk shock
Frequency Range:	DC to 4,500 Hz
Max. Acceleration:	45 g pk, bare table 32 g pk, 2 lb. load 15 g pk, 10 lb. load
Max. Displacement:	1.0 inch pk-pk, bare table
Cooling:	Amplifier: forced air Shaker: cooling blower
Power Requirements:	3500 VA @100-125*, 200-240V, 1Ø, 50/60 Hz.

*Consult factory for low line voltage operation.



Standard trunnion allows shaker operation in any position. from vertical to horizontal. The PA-141 amplifier features switched 115 Vac power.

System Components*

- ET-127 Electrodynamic Shaker
- PA-141 Linear Power Amplifier
- FS-127 Integrated Field Supply
- CB-127 Cooling Blower
- Interconnect Cables and Hoses

System Options*

- VL-144 2 Ch. Sine, Random and Shock Controller
- VL-145 1 Ch. Digital Controller
- SC-121 Sine Servo Controller
- HE-127 Head Expander
- AI-127 Pneumatic Base Isolation Kit
- Rack Cabinet
- Accelerometer Package

*See individual components for more detailed specifications and options.

ET-127 Electrodynamic Shaker



- 500 pounds pk sine force
- 1.0 inch stroke
- 6.0 inch diameter table
- Unsupported Payloads up to 50 lbs
- Low stray magnetic field
- Frequency range DC-4,500 Hz
- Trunnion mounting base

The ET-127 Electrodynamic Transducer is well suited for testing mechanical assemblies, packaging and printed circuit boards, as well as modal applications. The shaker incorporates the latest high-tech composite materials and features a revolutionary "side load" restraint design in the armature suspension and guidance system. A host of "big shaker" options allow the ET-127 to be easily adapted to specific testing applications.

General Specifications¹

Performance

Sine force	500 lbf pk
Random force	350 lbf rms
Shock force	1000 lbf pk
Max displacement	
Continuous pk-pk	1.0 in
Between stops	1.2 in

Physical

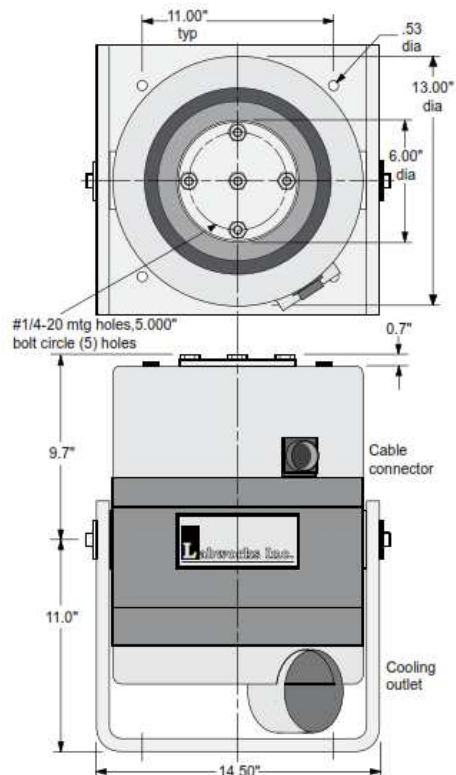
Armature weight	5.0 lb
Suspension stiffness	250 lb/in
Dimensions	21" H x 14.5" W x 14" D
Shaker weight	475 lbs

Options

- AI-127 (5 Hz) & SI-127 (10 Hz) Vibration Isolation Mounts.
- LS-127 Pneumatic Payload Support.
- DB-127 DuoBase Horizontal/Vertical Table.
- TA-127 Thermal Chamber Interface.
- M6 x 1 Metric Inserts.
- Head Plates and Fixtures

¹ Please see systems ratings for additional specifications.
Load dependent.
Specifications subject to change.

²



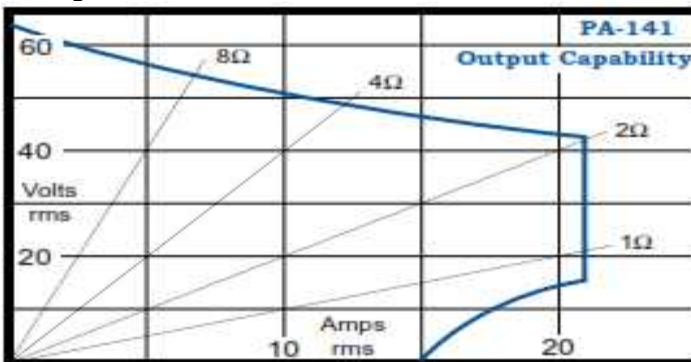
PA-141 Linear Power Amplifier



- Output: 50V, 1000 VA
- Direct coupled linear output
- Voltage and current source mode
- External interlock circuitry
- Optional shaker field supplies



The Labworks PA-141 Linear Power Amplifier has two operational modes. The amplifier can be used as either a wide-band, highly damped voltage source, or as a high impedance current source. Optional, internal DC field power supplies can be supplied for use with Labworks ET-140 and ET-127 Shakers. These options provide the convenience of a single chassis, as well as fully integrated power-up and cooling interlocks.

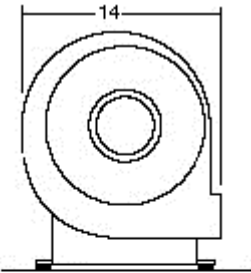


General Specifications*

Output voltage	50 V rms
Output current	20 A rms
Max. cont. dissipation	900 W
Frequency response	
DC input: DC to 10 KHz	-6 dB
AC input: 1.0 to 10 KHz	-6 dB
Max. voltage gain	36 dB
Cooling	2-speed fan, automatic
Input impedance	10 kΩ
Volts, pk	19 segment ± 5 %
Amps, rms	19 segment ± 5 %
Interlock circuit	
External, user	F.O. switch or TTL
Shaker, internal, optional	cooling
Optional field power	1000 W max
Input power	2000 VA (3000 w/field)
Voltage	208 or 230 Vac, 1∅
Frequency	48 to 62 Hz
Dimensions	7" H x 19" W x 17" D
Weight	48 lbs

*Specifications subject to change. Call factory for latest specifications.

CB-127 Cooling Vacuum



General Specifications

Blower Type:	Suction
Flow @ Pressure:	200 cfm @ 4" H
Motor:	1/3 Hp
Power:	115 Vac, 60 Hz
Intake:	4" dia. (5" dia. w/o adapter)
Hose Length:	12.5', flexible vacuum, std
Pressure Drop:	1" H ₂ O@200 cfm
Maximum allowable combined ducting pressure drop with ET-127	

