

LW126.151-9

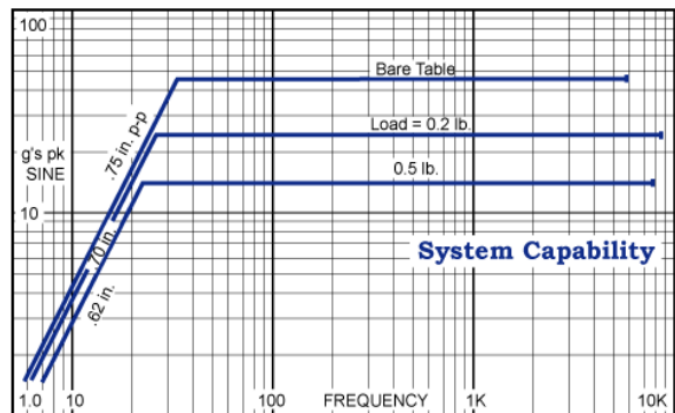
Vibration System



The LW126.151-9 provides an economical test system solution when larger test loads require the large head of the ET-126 shaker operating at reduced acceleration levels. This system has excellent high frequency capabilities and is used for both modal and general purpose testing. Compact size, light weight and convection cooled components make this system a good choice for desktop applications.

General Specifications

Sine force	9.0 lbs force pk
Random force	7.0 lbf rms random
Shock force	21 lbf pk shock
Frequency Range:	DC to 8,500 Hz
Maximum Acceleration:	45 g pk, bare table 23 g pk, 0.2 lb. load 13 g pk, 0.5 lb. load
Maximum Displacement:	0.75 inch pk-pk, bare table
Cooling:	Amplifier: natural convection Shaker: natural convection
Power Requirements:	300 VA @ 100, 115, 220, or 230V, single phase 50/60 Hz



PA-151
Rear Panel

Standard trunnion allows shaker operation in any position from vertical to horizontal. The hook-up requirements on the PA-151 are simple, making the system portable.

System Components*

- ET-126-4 Electrodynamic Shaker
- PA-151 Linear Power Amplifier
- Interconnect Cables and Hoses

System Options*

- VL-145 1 Ch. Digital Controller
- SC-121 Sine Servo Controller
- SG-135 Manual Sine Controller
- Amplifier Rack Mount Brackets
- MS-129 Modal Stinger Kit
- CB-126 Cooling Blower (>13 lbf)

*See individual components for more detailed specifications and options.

ET-126/ET-126HF Electrodynamic Shaker



- 25 pounds pk sine force
- .75 inch stroke
- 2.125 inch diameter table
- Payloads up to 3 lbs.
- Low stray magnetic field
- Frequency range² DC-10 KHz.
DC-14 KHz (HF)
- Trunnion mounting base
- Body and Trunnion Through hole

The Labworks ET-126 Electrodynamic Shaker is a rugged, full featured, small permanent magnet shaker. It is ideally suited for the production screening of small components or for larger transducer calibration systems. The shaker features a 2.125 inch diameter table with multiple attachment points, and an extraordinary 0.75 inch stroke. The ET-126 has a linearly compliant armature suspension that is particularly well suited to modal testing with a current source amplifier. The shaker body and trunnion through-hole allow operation with modal stingers as well as tension wire set ups. The HF version of the ET-126 offer full performance up to 14,000 Hz with operation up to 20,000 Hz at up to 7 lbf.

General Specifications¹

Performance

Sine force	
Natural cooling	13 lbf pk
With blower	25 lbf pk
Random force	
Natural cooling	8 lbf rms
With blower	17.5 lbf rms
Shock force	53 lbf pk
Max displacement	
Continuous pk-pk	0.75 in
Between stops	0.75 in
Maximum velocity	120 ips pk (100 ips pk / -HF)

Physical

Armature weight	0.20 lb (0.35 lb / -HF)
Suspension stiffness	15 lb/in
Dimensions	6.5" H x 4.8" W x 4.25" D
Shaker weight	11 lbs

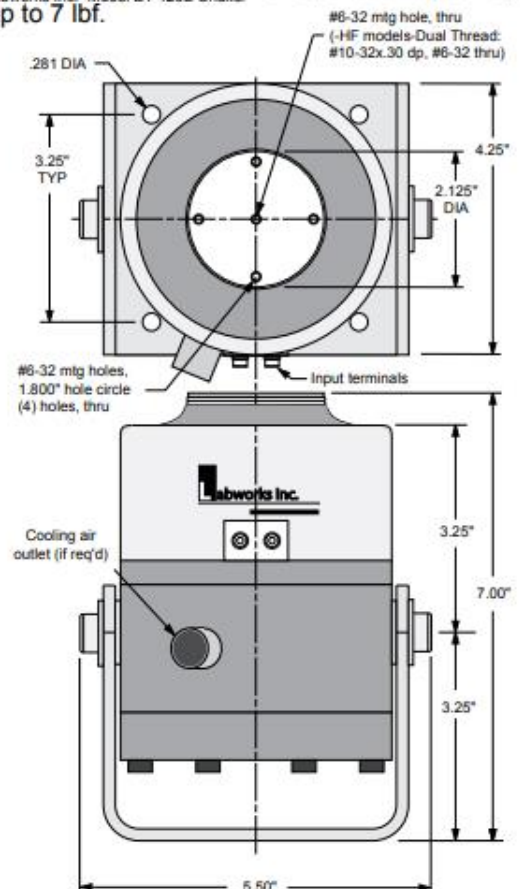
Options

- Vibration isolation mounts.
- Modal stingers and mounts.
- CB-152 Cooling Vacuum (required for operation above 13 lbf).

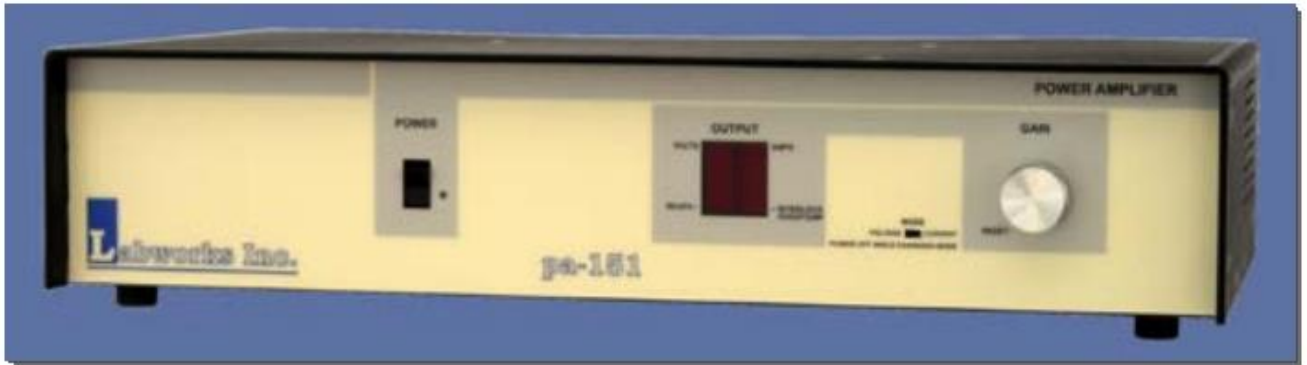
¹ Please see systems ratings for additional specifications.

² Load dependent.

Specifications subject to change.



PA-151 Linear Power Amplifier

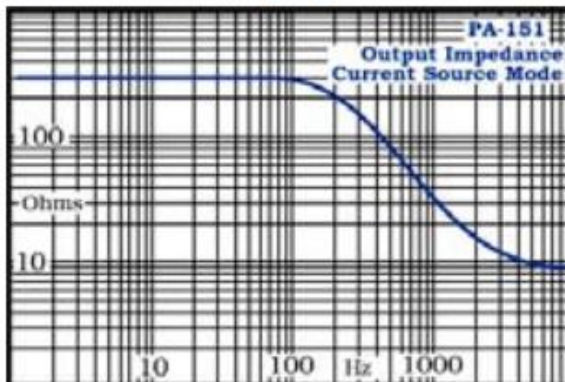
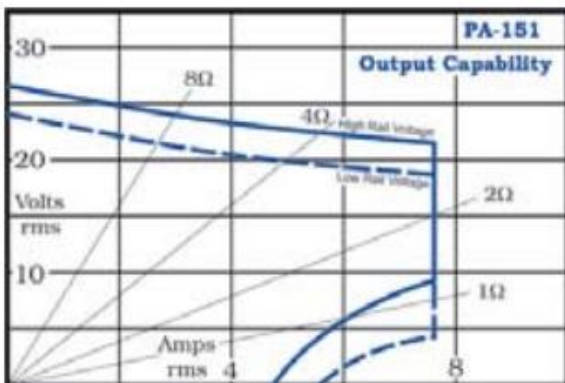


- Output: 25V or 20V, 180 VA¹
- Direct coupled linear output
- Output voltage and current meters
- Voltage and Current source modes
- Convection cooling, no fans
- Light weight, desktop amplifier



The Labworks PA-151 Linear Power Amplifier is a high quality, convection-cooled, direct-coupled audio amplifier primarily intended for use with small vibration systems. Although this amplifier has been designed to directly drive low impedance loads, it can be used in any application requiring continuous duty, high quality, audio power.

PA-151 Amplifiers feature protection from both over current and over temperature insuring long term reliability. The amplifier circuitry uses soft start technology for load protection and has external interlock capabilities as well as output voltage and current bar graphs. A voltage-proportional-to-output-current signal output is provided for modal test and other applications requiring force monitoring. A unique dynamic output drive circuit provides high random peak output current for increased random and shock vibration system performance.



General Specifications²

Output voltage	25 or 20 V rms
Output current	7.5 A rms
Max. cont. dissipation	180 W
Frequency response	
Voltage Source: DC to 10 KHz	-1 dB
Current Source: DC to 2 KHz	-2 dB @ 4Ω
Max. voltage gain	28 dB
Max. current gain	22 A/V
Cooling	Natural convection
Input impedance	10 kΩ
Meters	
Volts	9 segment bar graph
Amps	9 segment bar graph
Interlock circuit	
External, user	F.C. switch or TTL, F.C.
Input power	
Voltage	300 VA max
Frequency	100-120, 200-240 V, 1ø
Dimensions	3.5" H x 17" W x 13" D
Weight	19 lbs

¹ Switch selectable internal rail voltage allows impedance matching to load requirements
² Specifications subject to change. Call factory for latest specifications.

Amplifier options

- Rack mount brackets
- Rack panel cabinet