LW126.138-13 Vibration System



The LW126HF.141-25 is a high performance system which makes full use of the compact ET-126HF high frequency shaker performance. This system offers full performance up to 14,000 Hz with operation at up to 7 lbf to 20,000 Hz. This system is used for both general purpose testing and transducer calibration requirements. The larger mounting surface of the ET-126HF easily supports the calibration of larger vibration transducers and smaller high frequency assemblies and components for general purpose testing. The shaker can support relatively heavy loads and is perfectly matched to the amplifier, which makes this the most versatile system of its size..

General Specifications

Sine Force:
Random Force:
Shock Force:
Frequency Range:
Max. Acceleration:

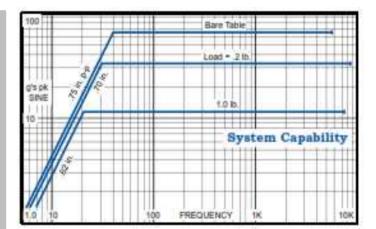
13 lbs force pk (17 w/blower) 8.0 lbf rms random 21 lbf pk shock DC to 8,500 Hz 65 g pk, bare table 32 g pk, 0.2 lb. load 11 g pk 1 lb. load

Max. Displacement: Cooling:

3.

Power Requirements:

11 g pk, 1 lb. load 0.75 inch pk-pk, bare table Amplifier: forced air Shaker: natural convection 1000 VA @100, 120, 220, or 240V, 1Ø, 50/60 Hz.







Standard trunnion allows shaker operation in any position from vertical to horizontal. The hook-up requirements on the PA-138 are simple, making the system portable.

System Components*

- ET-126-1 Electrodynamic Shaker
- PA-138 Linear Power Amplifier
- 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
- SG-135 Manual Sine Controller
- Rack Cabinet
- Accelerometer Package
- 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 performane 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 coolling
With blower
Shock force

8 lbf rms
17.5 lbf rms
53 lbf pk

Max displacement
Continuous pk-pk
Detween stops
0.75 in
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

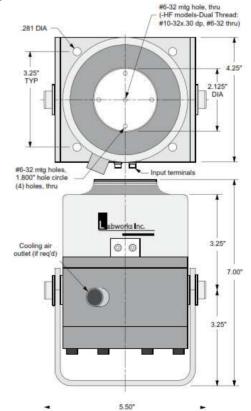
Shaker weight 11 lbs

Options

- Vibration isolation mounts.
- Modal stingers and mounts.
- CB-152 Cooling Vacuum (required for operation above 13 lbf).
- Please see systems ratings for additional specifications

2 Load dependent

Specifications subject to change.



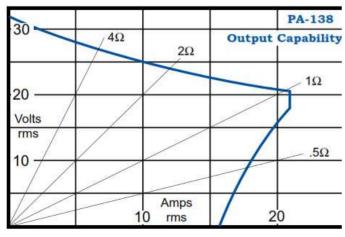
PA-138 Linear Power Amplifier



- Output: 25V, 500 VA
- Direct coupled linear output
- Output voltage and current meters
- Voltage and current source modes
- Small size, high power

The Labworks PA-138 Linear Power Amplifier is a high quality, air-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-138 Amplifiers feature protection from both over current and over temperature insuring long term reliability. The amplifier has full interlock capabilities as well as peak voltage and RMS current bar graphs to monitor output.





General Specifications*

Output voltage 25 V rms
Output current 20 A rms
Max. cont. dissipation
Frequency response

Voltage source: DC to 10 KHz $\,$ -0.6 dB $\,$ Current source: DC to 2 KHz $\,$ -2 dB $\,$ $\,$ 4 Ω $\,$ Max. voltage gain $\,$ 30 dB

Cooling 2-speed fan, automatic

Input impedance $10 \text{ k}\Omega$

Meters

Volts, pk 19 segment \pm 5 % Amps, rms 19 segment \pm 5 %

Interlock circuit

External, user F.O. switch or TTL Input power 1000 VA max

Voltage 100,120, 220, 240 V,1Ø

Frequency 48 to 62 Hz

Dimensions 3.5" H x 19" W x 13" D

Weight 24 lbs

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

Amplifier Options

- Rack panel cabinet
- BNC signal cables