

# LW126HF.138-13

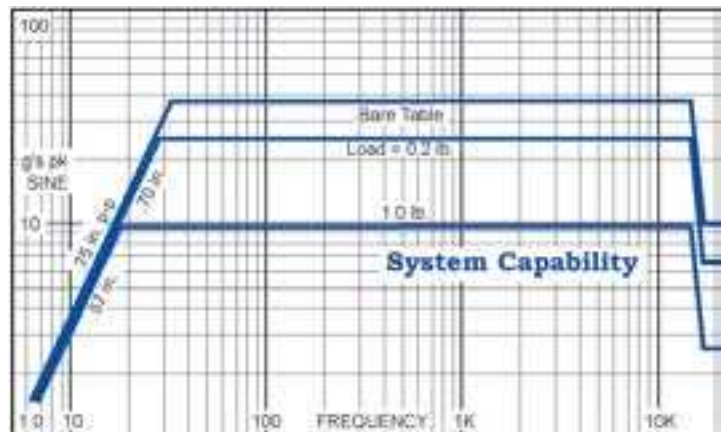
## High Frequency Vibration System



The LW126HF.138-13 is a high performance system which incorporates the compact ET-126HF high frequency shaker. This system offers the maximum performance from the ET-126HF shaker without a cooling blower. Full system ratings are provided up to 14,000 Hz with reduced operation up to 20,000 Hz. This system is used for both general purpose high frequency testing and transducer calibration requirements. The larger mounting surface of the ET-126HF easily supports the calibration of most vibration transducers and smaller assemblies and components for general purpose testing not requiring high acceleration. 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

<b>Sine Force:</b>	13 lbf pk (17 w/ opt. blower)
<b>Random Force:</b>	8.0 lbf rms random
<b>Shock Force:</b>	21 lbf pk shock
<b>Frequency Range:</b>	DC to 14,000 Hz (usable to 20,000 Hz)
<b>Max. Acceleration:</b>	37 g pk, bare table 24 g pk, 0.2 lb. load 9.6 g pk, 1 lb. load
<b>Max. Displacement:</b>	0.75 inch pk-pk, bare table
<b>Cooling:</b>	Amplifier: forced air Shaker: natural convection
<b>Power Requirements:</b>	1000 VA @100, 120, 220,, Or 240V. 1Ø. 50/60 Hz.



### System Components\*

- ET-126-1 Electrodynamic Shaker
- PA-138 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
- Rack Cabinet
- CB-152 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 range<sup>2</sup> 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 Specifications<sup>1</sup>

### 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

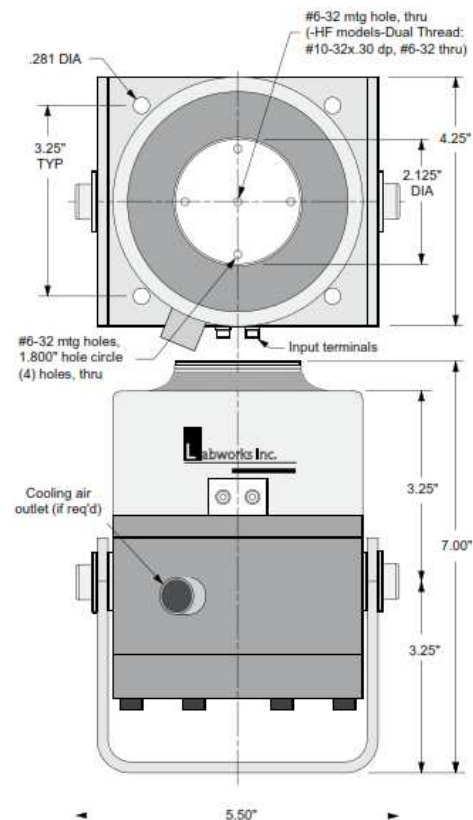
### Options

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

<sup>1</sup> Please see systems ratings for additional specifications

<sup>2</sup> Load dependent.

Specifications subject to change.



# PA-138 Linear Power Amplifier

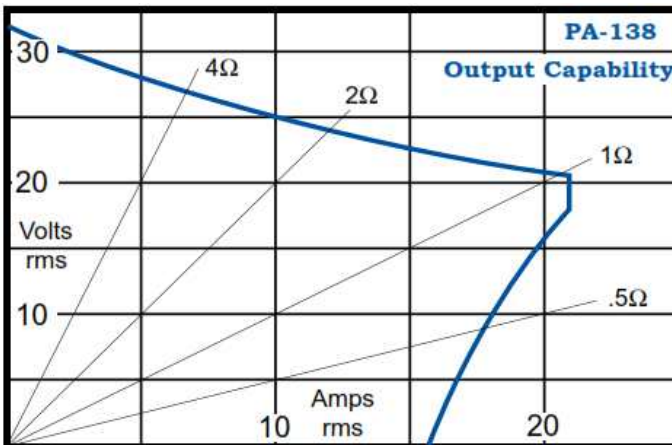


- Output: 25V, 500 VA
- Direct coupled linear output
- Output voltage and current meters
- Voltage and current source modes
- Small size, high power



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\*

<b>Output voltage</b>	25 V rms
<b>Output current</b>	20 A rms
<b>Max. cont. dissipation</b>	450 W
<b>Frequency response</b>	
Voltage source: DC to 10 KHz	-0.6 dB
Current source: DC to 2 KHz	-2 dB @ 4Ω
<b>Max. voltage gain</b>	30 dB
<b>Cooling</b>	2-speed fan, automatic
<b>Input impedance</b>	10 kΩ
<b>Meters</b>	
Volts, pk	19 segment ± 5 %
Amps, rms	19 segment ± 5 %
<b>Interlock circuit</b>	
External, user	F.O. switch or TTL
<b>Input power</b>	1000 VA max
Voltage	100, 120, 220, 240 V, 1∅
Frequency	48 to 62 Hz
<b>Dimensions</b>	3.5" H x 19" W x 13" D
<b>Weight</b>	24 lbs

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

## Amplifier Options

- Rack panel cabinet
- BNC signal cables