

### ES-50W-445

System Performance	Metric	American
Rated Sine Force	50 kN	11000 lbf
Rated Random Force	50 kN	11000 lbf
Rated Shock Force	100/150* kN	22000/33000* lbf
Usable Frequency	DC-2700 Hz	DC-2700 Hz
Maximum Velocity	2/2.5* m/s	78.7/98.4* in/s
Maximum Acceleration	1000 m/s <sup>2</sup>	100 g
Maximum Static Payload	800 kg	1760 lbs
Resonance Frequency	2400±5% Hz	2400±5% Hz
Maximum Displacement p-p	51 mm	2 in

### Shaker: ET-50W-450

Mass of Moving Elements	50 kg	110 lbs
Armature Diameter	445 mm	17.5 in
Weight	About 4500 kg	About 9921 lbs
Body Suspension Natural Frequency	2.5 Hz	2.5 Hz
Stray Flux Density	<10 Gauss	<10 Gauss
Dimension L×W×H	1730×1104×1296 mm	68.1×43.5×51 in

### Power Amplifier: SDA-50

Power	50 kVA	50 kVA
Power Supply Requirement	90 kVA	90 kVA
Dimension L×W×H	1200×1010×2070 mm	47.2×39.8×81.5 in
Weight Uncrated	About 1000 kg	About 2205 lbs

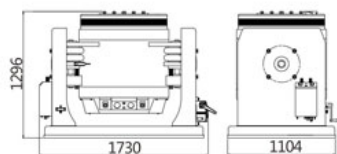
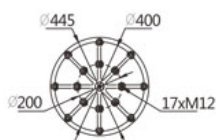
### Water Cooling: CU-1

Internal Circle Water Flow (Distilled Water)	40 L/min	8.8 gal/min
Internal Circle Water Pressure (Distilled Water)	1 Mpa	145 psi
External Circle Water Flow (City Water)	100 L/min	22 gal/min
External Circle Water Pressure (City Water)	0.25-0.4 Mpa	36-58 psi
Water Pump Power (Internal/External)kW	4/2.5 kW	4/2.5 kW
Distilled Water Requirement	Hardness 30ppm, PH7~8, Conductivity 1Us/cm	
Unit Weight ( kg )	About 250 kg	About 551 lbs
Dimension L×W×H	607×1010×2070 mm	23.9×39.8×81.5in

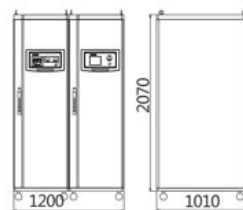
### Options

- Magnesium or Aluminum Armature
- Customized Fixtures (T, L, Cube)
- Combo or Standalone Slip Table
- Pneumatic Isolators or Free Foundation Isolation Base
- Motorized Shaker Body Rotation System
- Air Caster or Glide Rail
- Head Expanders and Vertical Support Platforms
- Cooling tower
- Thermal barrier
- Remote control

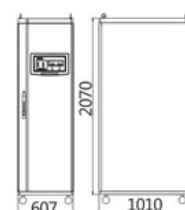
### Outline Drawing



ET-50W-450



Power Amplifier SDA-50



Water Cooling CU-1

### Water-cooled Series

Water-cooled Vibration test system features with the large force, large bearing capacity and high cooling efficiency, to complete the tri-axial sinusoidal vibration test, broadband random vibration test and classical (semi-sinusoidal, trapezoidal, and postpeak sawtooth) pulse and shock response spectrum test. The multi-environment combined test can be completed with the equipped climate chamber. At present, this series has a variety of models to choose. The exciting force range is from 50 kN to 500 kN and maximum load is from 800 kg to 10000 kg.

### Performance characteristics

- Random to sinusoidal excitation force ratio: 1:1
- Two-times-of-sine shock force (Three times optional)
- Displacement peak-to-peak: 51mm, 76mm or 100mm
- Lightweight armature and large working table
- Better vibration isolation effect of air spring at trunnion position
- Large bearing capacity of air spring in central room, and good low-frequency performance
- Equipped with an automatic centering system, to control the armature is always in the balance position during movement
- Double magnetic circuit design, with low flux leakage and uniform magnetic field

NOTE: In keeping with our commitment to continuous product improvement, the information herein is subject to change.