# **op Data Physics**

The GW-V617 air-cooled shaker is the perfect fit for intermediate force level testing applications that require a smaller sized shaker system. The GW-V617 shaker has an armature size of 6.9 inches (174.5 mm) and a peak to peak displacement of 2 inches (51 mm). The shaker is available in two force ratings, depending on power amplifier configuration.

#### **Standard Features**

- Peak sine force: up to 1500 lbf (6.67 kN)
- Random force rms: up to 1025 lbf (4.6 kN)
- Velocity peak: 60 in/sec. (1.5 m/sec)
- Peak to peak displacement: 2.0 in (51 mm)



#### Options

- Air or rubber isolated mounts for vertical testing only
- Isolated trunnions for vertical and horizontal testing
- Air glides
- Motorized guidance
- V-groove wheels and guidance rails
- Monobase systems to provide three axis testing with slip tables
- Head expanders and fixtures
- Thermal barriers
- Acoustic enclosures
- Weatherproof enclosures for cooling blowers
- Economy field supply

## **Typical Applications**

- Electronic components
- Avionics
- Automotive



Frequency (Hz)

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	Maximum Sine Force (pk)		Maximum Random Force (rms)		Maximum Shock Force*		Maximum Acceleration (Sine)		Maximum Velocity		Displacement Peak to Peak		Armature Diameter		Armature Mass		Insert Threads		Armature Resonance ±5%	Frequency Range		Static Payload Support		Electrical Power Consumed	Shaker Body Mass		Stray Magnetic Field**	
	lbf	kN	lbf	kN	lbf	kN	g	m/s²	ips	m/s	in	mm	in	mm	lbs	kg	SAE	Metric	Hz	Min.	Max.	lbs	kg	kVA	lbs	kg	mT	Gauss
GW-V617/DSA5-5K	1050	4.67	900	4.0	3480	15.5	70	687	60	1.5	2.0	51	6.9	174.5	15.0	6.8	5/16-24	M8	2200	DC	3000	200	90	8.8	1385	629	<.5	5.0
GW-V617/DSA5-10K	1500	6.67	1025	4.6	4500	19.9	100	980	60	1.5	2.0	51	6.9	174.5	15.0	6.8	5/16-24	M8	2200	DC	3000	200	90	11.4	1385	629	<.5	5.0

\* At 3 mSec \*\* 1 in. (25 mm) above table



Measures are in millimeters [ inches ].

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## **GW-V617** Electrodynamic Shaker

## **Environmental Characteristics**

#### **Ambient Working Temperature Range** (non condensing)

(non-condensing)	
Shaker	50F to 77F (10C to 25C)
Amplifier	50F to 104F (10C to 40C)

Anti-condensation blower option available for the shaker when used in conjunction with a thermal chamber.

#### Acoustic Noise @ 1m

Shaker	Up to100dbA & 1m**
Amplifier	65 dBA @1m with cooling fans at low speed, 78dbA @ 1m with cooling fans at high speed. High speed fan engaged at <60% output current.
Blower	72 dBA @1m <sup>##</sup>
<b>Humidity</b> Shaker Amplifier	<95% non-condensing <95% non-condensing
Facility Requirements Power supply range	380/400/415/440/480 Vac 50/60 Hz 3 phase AC
Total electrical requirements	See table
Weight <sup>#</sup>	1385 lbs (629 Kg)

\*\* Dependent upon operating frequency & payload.

# Typical weight, dependent upon mounting options selected. ## Noise reduction enclosures available for the cooling blower.

Signal to Noise Ratio Weight\*

**Rated Power\*** 

Input Sensitivity Input Impedance

Voltage Output

**Current Output** 

Switching Frequency

\* Multiple listing reflects amplifier models - small to large.

## **Amplifier Characteristics**

5 kVA / 10 kVA
100 kHz nominal
2.3 V rms for full output
10 K ohm input impedance
82 V rms
62 A rms per fitted power module
Each power module = 5KW
Example: 15Kw = 3 power modules
> 75 dB

616 lbs (280 kg) (5K) 638 lbs (290 kg) (10K)

## **Amplifier Dimensions**

Height	50" (	1273 mm)
Width	24″	(600 mm)
Depth	32″	(800 mm)

#### **Shaker Dimensions**

28.1″	(714 mm)
20.4″	(519 mm)
20.4″	(519 mm)
	28.1″ 20.4″ 20.4″

(May vary with mounting options.)

#### **Blower Dimensions**

Height	30.3″	(770 mm)
Width	28.3″	(720 mm)
Depth	36.2″	(920 mm)

#### **Performance Notes**

- 1. Random force based upon a flat spectrum 20Hz-2KHz @3 sigma with a nonresonant payload equal to or greater than twice the moving system mass.
- 2. System utility includes the cooling blower.
- 3. Specifications are subject to change without notice.