

Compact Vibration Generator System 510 Series

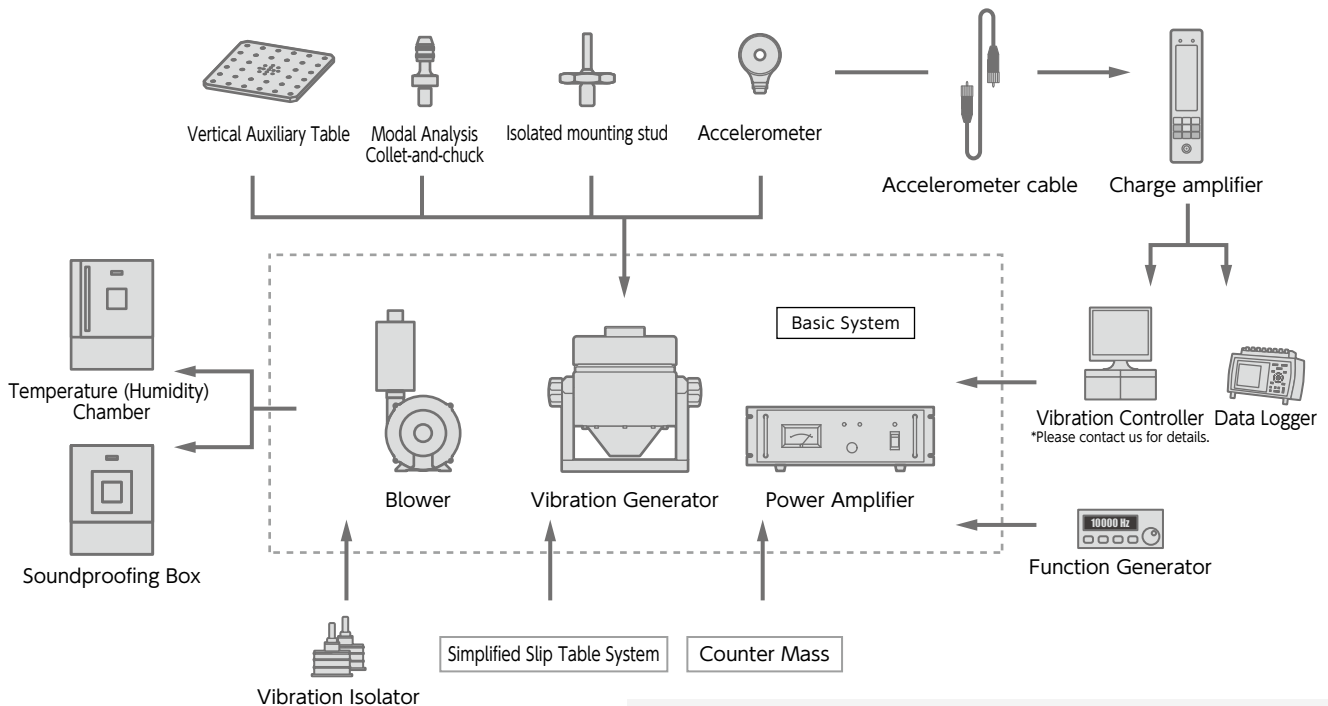


The compact vibration generator is used for vibration meter calibration, mechanical impedance measurement, modal analysis excitation source and small light weight component vibration-proof test. Particularly, concerning the Model:512-D and 513-D vibration generator, ceramic materials are used for their armatures becoming the first in the world, making excitation up to 30 kHz possible (up to 24 kHz for Model:513-D).

- Highly accurate vibration meter calibration, mechanical impedance measurement and modal analysis excitation source
- Vibration-proof test of various sensors and small light weight specimens such as electronic and electric components
- Educational material for fundamental experiment in vibration engineering

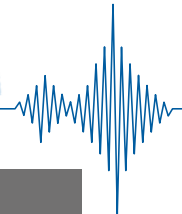


System Configuration



Control System or Oscillator Required:

In addition to the compact vibration generator and power amplifier unit, a vibration control system or function generator, accelerometer and charge amplifier may be required for your application. An optional oscillator is available for the power amplifier unit. As for details, please contact our sales department.



511·512 Series Specifications

Model	511-A		512-A		512-A/A		512-D		512-D/A		
Type	Modal Analysis		Standard		High Force:64N		High Frequency:30kHz		High Frequency:30kHz:High Force:64N		
Rated force	N	15	49		64		49		64		
Frequency range	Hz	2 to 5k	2 to 20k		2 to 20k		2 to 30k		2 to 30k		
Max. acceleration	m/s ²	230.7	376.9		492.3		272.2		355.5		
Max. velocity	m/s	1.26	1.14		1.31		1.00		1.14		
Max. displacement	mm _{p-p}	5.0	7.0		7.0		7.0		7.0		
Axial Resonance		More than 3.9kHz		More than 16kHz		More than 16kHz		More than 32kHz		More than 32kHz	
Moving Element	kg	0.065		0.13		0.13		0.18		0.18	
Armature Material		Aluminum		Magnesium		Magnesium		Ceramic		Ceramic	
Stiffness	N/mm	5		12		12		12		12	
Armature Size	mm	M6 L= 20		ø40		ø40		ø40		ø40	
Maximum Payload	kg	—		2.0		2.0		2.0		2.0	
Stray Field		—		—		—		—		—	
Field Power		Permanent Magnet		Permanent Magnet		Permanent Magnet		Permanent Magnet		Permanent Magnet	
Operating Environment	°C	-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop	
Cooling		Natural		Natural		Forced air		Natural		Forced air	
Dimensions	mm	120W × 190H × 100D		ø150 × 178 (★1)		ø150 × 178 (★1)		ø150 × 178 (★1)		ø150 × 178 (★1)	
Mass	kg	4.2		9.5		9.5		9.5		9.5	
Matched Amplifier		371-A		371-A		372-A		371-A		372-A	
Blower		—		—		Yes		—		Yes	
Accessory		Trunnion Stand		—		—		—		—	
Option		—		Trunnion Stand (Mass 2.4kg)		Trunnion Stand (Mass 2.4kg)		Trunnion Stand (Mass 2.4kg)		Trunnion Stand (Mass 2.4kg)	

(★1)Except for grip.

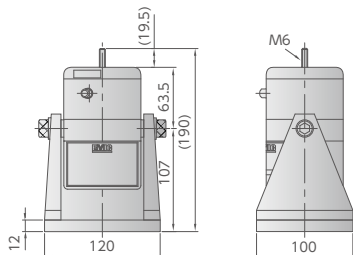
513 Series Specifications

Model	513-B		513-B/A		513-D		513-D/A		
Type	Standard		High Force:147N·196N		High Frequency:24kHz		High Frequency:24kHz:High Force:147N		
Rated force	N	98	147		196		98		
Frequency range	Hz	3 to 13k	3 to 13k		3 to 24k		3 to 24k		
Max. acceleration	m/s ²	264.8	397.2		529.7		175		
Max. velocity	m/s	1.17	1.43		1.67		0.92		
Max. displacement	mm _{p-p}	10	10		10		10		
Axial Resonance		More than 12kHz		More than 12kHz		More than 23kHz		More than 23kHz	
Moving Element	kg	0.37		0.37		0.56		0.56	
Armature Material		Magnesium		Magnesium		Ceramic		Ceramic	
Stiffness	N/mm	14.0		14.0		14.0		14.0	
Armature Size	mm	ø79		ø79		ø79		ø79	
Maximum Payload	kg	3.0		3.0		3.0		3.0	
Stray Field		—		—		—		—	
Field Power		Permanent Magnet		Permanent Magnet		Permanent Magnet		Permanent Magnet	
Operating Environment	°C	-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop		-10 to +40 w/o dewdrop	
Cooling		Natural		Forced air		Natural		Forced air	
Dimensions	mm	ø215W × 230H (★1)		ø215W × 230H (★1)		ø215W × 230H (★1)		ø215W × 230H (★1)	
Mass	kg	26		26		26		26	
Matched Amplifier		371-A		372-A		374-A		372-A	
Blower		—		Yes		—		Yes	
Accessory		Interconnecting Cable×1 Grip× 2		Interconnecting Cable×1 Grip× 2		Interconnecting Cable×1 Grip× 2		Interconnecting Cable×1 Grip× 2	
Option		Trunnion Stand (Mass 4.0kg)		Trunnion Stand (Mass 4.0kg)		Trunnion Stand (Mass 4.0kg)		Trunnion Stand (Mass 4.0kg)	

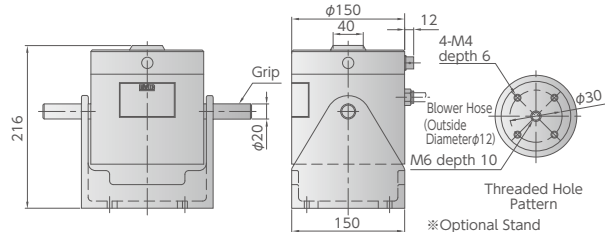
(★1)Except for grip.

Dimensions

● 511 Series



● 512 Series



● 513 Series

