













SmartVibro(VM-4424S/H, VM-3024H, VM-7024H)

Specifications

Model	SmartVibro VM-4424S	SmartVibro VM-4424H	SmartVibro VM-3024H	SmartVibro VM-7024H
Pickup type	Piezoelectric Type		Electro-dynamic Type	Piezo-resistive Type
Type	Standard	High-end	High-end	High-end
Frequency range	5Hz ~ 10kHz (Acceleration) 10Hz ~ 1kHz (Velocity) * 10Hz ~ 150Hz (Displacement) * 1kHz ~ 10kHz (Bearing) 3Hz ~ 1kHz (H-function) * Maximum frequency of velocity and displacement is restricted by acceleration limit 450m/s ² .		10Hz ~ 1kHz (Acceleration, velocity and displacement)	0.3Hz ~ 100Hz (Acceleration) * 3Hz ~ 100Hz (Velocity and displacement) * Maximum frequency of velocity and displacement is restricted by acceleration limit 20m/s ² .
Full scale	acceleration, velocity, displacement : 6 range, automatic switching bearing : 6 range, automatic switching H function : 6 range, automatic switching		Acceleration : 6 Range, Automatic Switching Velocity : 6 Range, Automatic Switching Displacement : 6 Range, Automatic Switching	Acceleration : 6 Range, Automatic Switching Velocity : 6 Range, Automatic Switching Displacement : 6 Range, Automatic Switching
Maximum measurable range	acceleration, H function : 300m/s ² (RMS,EQP,PEAK) velocity : 1000mm/s(RMS, EQP, PEAK) displacement : 10mmp-p(EQP, PEAK)		acceleration : 100m/s ² (RMS,EQP,PEAK) velocity : 200mm/s(RMS, EQP, PEAK) displacement : 1000μmp-p(EQP,PEAK)	acceleration : 20m/s ² (RMS, EQP, PEAK) velocity : 100mm/s(RMS, EQP, PEAK) displacement : 10mmp-p(EQP, PEAK)
Sampling frequency	51.2kHz		20.48kHz	4.096kHz
Indication	PEAK : acceleration, velocity, displacement EQP : acceleration, velocity, displacement RMS : acceleration, velocity		PEAK : acceleration, velocity, displacement EQP : acceleration, velocity, displacement RMS : acceleration, velocity	PEAK : acceleration, velocity, displacement EQP : acceleration, velocity, displacement RMS : acceleration, velocity
Frequency response	±5%(10Hz ~ 5kHz) +30% / -50%(5Hz ~ 10Hz, 5kHz ~ 10kHz)		±5%(20Hz ~ 500Hz) +5% / -15%(10Hz ~ 20Hz, 500Hz~1kHz)	±5%(0.3Hz ~ 100Hz)
Accuracy	Sensitivity error	±5% (for full scale value at 1kHz)	±5% (for full scale value at 80Hz)	±5% (for full scale value at 16Hz)
	Range changeover error	±2%(1kHz standard)	±2%(80Hz standard)	±2%(16Hz standard)
	Linearity	±1% (for full scale value at 1kHz)	±0.5% (for full scale value at 80Hz)	±1.5% (for full scale value at 16Hz)



Output	AC OUT : 0 ~ ±1V(Load 10kΩ or higher) DC OUT : 0 ~ +1V(Load 10kΩ or higher)		AC OUT : 0 ~ ±1V(Load 10kΩ or higher) DC OUT : 0 ~ +1V(Load 10kΩ or higher)		AC OUT : 0 ~ ±1V(Load 10kΩ or higher) DC OUT : 0 ~ +1V(Load 10kΩ or higher)					
Language	Japanese, English, Chinese (Switching)		Japanese, English, Chinese (Switching)		Japanese, English, Chinese (Switching)					
Power supply	battery : AA×2pcs. (continuous approx. 20hours)		battery : AA×2pcs. (continuous approx. 20hours)		battery : AA×2pcs. (continuous approx. 20hours)					
Size / Mass of body unit	74(W)×32.5(D)×148(H)mm approx.230g(including battery)		74(W)×32.5(D)×148(H)mm approx.230g (including battery)		74(W)×32.5(D)×148(H)mm approx.230g(including battery)					
Size/Mass of pickup	Piezoelectric accelerometer φ19×42(L)mm 40g(pickup) φ6×185(L)mm 70g(probe) *including screw part		Electrodynamic velocity pickup φ25.8×50(L)mm 140g(pickup) φ8×50(L)mm 20g(probe)		Piezo-resistive accelerometer 45(W)×45(D)×45(H)mm 200g (pickup)					
FFT analysis	— f:25Hz、12.5Hz、6.25Hz		- f:10Hz、5Hz、2.5Hz		f:1Hz、0.5Hz、0.25Hz					
Memory	— MMC or compatible card waveform data acquisition saving time : 0.1Sec./0.2 Sec./0.5 Sec./1 Sec. sampling		- MMC or compatible card waveform data acquisition saving time : 1Sec./2 Sec./5 Sec./10 Sec. sampling frequency : 10.24kHz		MMC or compatible card waveform data acquisition Saving time : 5Sec./10Sec./25 Sec./50 Sec. sampling frequency : 2.048kHz					
Option	<ul style="list-style-type: none"> ●Small size strong magnet (for flat surface) MH-201R (φ20x11mm) 		<ul style="list-style-type: none"> ●Small size strong magnet (for spherical surface) MH-203R (φ24x20mm) 		<ul style="list-style-type: none"> ●Small size strong magnet (for flat surface) MH-202R (φ24x10.5mm) 		<ul style="list-style-type: none"> ●Small size strong magnet (for spherical surface) MH-203R (φ24x20mm) 		<ul style="list-style-type: none"> ●magnet MB-PB 	
	<ul style="list-style-type: none"> ●Long cable LC4 (4m) 		<ul style="list-style-type: none"> ●Extention cable CE-3024-3 (3m) CE-3024-6 (6m) CE-3024-10 (10m) 		<ul style="list-style-type: none"> ●Long cable CE-7000 (10m) 					
	<ul style="list-style-type: none"> ●Rubber jacket PC-3024 		<ul style="list-style-type: none"> ●AC adapter PS-3024-3 		<ul style="list-style-type: none"> ●Carrying case C-3024 					

* The specifications and design are subject to change without notice

* Vibrometer (Model:VM-3024S) is no longer sold from September 30th, 2014. Alternative product is "VM-3024H".