

## MicroVibe PDA Based Vibration Measurement System

Low-cost, compact and lightweight, the MicroVibe is the first vibration test and measurement instrument made to be used with a PDA. Packed full of advanced features, including user-selectable measurement units (English or metric), the instrument offers Vibration, Time-waveform, and FFT Spectrum Plots. It also provides technicians with judgment criteria based on ISO standards, enabling an immediate assessment of a machine's condition.



### Common Specifications

Item	Specification
Power Supply	AAA Alkaline Battery X 3
Temperature	0° to +45° C
Humidity	30 to 90% Relative, Non-Condensing
Weight	50g approx.
Dimensions	83.24H x 55.43W x 34.64 D (mm)
Shape	Conforms to Springboard Expansion Slot
Raw Waveform Output	2.5Ö mini-jack output terminal, Sensor input signal output
Reproduced Waveform Output	2.5Ö mini-jack output terminal, waveform output
Sensor Input Terminal	8-Pin modular jack

### Specifications with Electro-dynamic Velocity Pickup CMSS 3812

Item	Mode	Specifications
Mode Type Frequency Range (filter)	Vel. V	10 Hz - 1kHz
	Disp. D	10 Hz - 150kHz
Range Fix or Auto Range	Vel. V (mm/s and in./sec)	3-Range, range error: <+/-1%
		0-1 mm/s, 0-.04 ips
		0-10 mm/s, 0-.4 ips
	0-100 mm/s, 0-4 ips	
Disp. D (i m p-p and Mils p-p)	3-Range, range error: <+/-1%	
	0-10 i m p-p, 0-.4 mils p-p	
	0-100 i m p-p, 0-4 mils p-p	
	0-1,000 i m p-p, 0-40 mils p-p	

### Specifications with Accelerometer CMSS 3811

Item	Mode	Specifications
Mode Type Frequency Range (filter)	Acc. A	10 Hz - 10kHz
	Vel. V	10 Hz - 1kHz
	Disp. D	10 Hz - 150kHz
	H-Func. H	DC - 1kHz, Envelope detection 2k-15kHz
	Acc. B	7kHz - 20kHz
Range	Acc. E	Envelope filter settable 100Hz - 20kHz (100Hz steps)
	Acc. A	3-Range, range error: <+/-1%
Range	H-Func. H	0-.5 G
	Acc. B	0-5 G
	Acc. E	0-50 G
	(G)	Fix or Auto Range
	Vel. V (mm/s and in./sec)	3-Range, range error: <+/-1%
		0-5 mm/s, 0-.2 ips
		0-50 mm/s, 0-2 ips
		0-500 mm/s, 0-20 ips
	Disp. D (i m p-p and Mils p-p)	Fix or Auto Range
		3-Range, range error: <+/-1%
0-100 i m p-p, 0-4 mils p-p		
0-1,000 i m p-p, 0-40 mils p-p		
0-10,000 i m p-p, 0-400 mils p-p		
Range	Fix or Auto Range	
	Fix or Auto Range	

### Measuring Unit Specifications

Sampling	Acc. (with H-func., B E) 76.8kHz, Vel. & Disp.: 19.2kHz
Vibration Level (OA Value) Measurement	Select individual or simultaneous measurement
Judgment	- Abnormal judgment by vibration Severity Standard (ISO-10816 [JIS-B-0906] standard) - Abnormal judgment by IMD standard
Waveform Measurement	Measurement Time = 0.1, 0.2, 0.5, 1, 2, 5s Trigger Function (Specify Range [% to FS].) Waveform Reproduction Function (measurement condition, acceleration only)
FFT Measurement	Analysis Line Number = 400, 800, 1600 Trigger Function (Specify Range [% to FS].) Dominant Frequency component of best 5 display function
Data Save	Saves measured value with information such as machine name, machine number, measuring point name, measuring point, detection direction, remark, measuring data, measuring condition, etc. - Vibration level: 1,000 points, Waveform: 2,000kB, FFT: 200 points.

### Optional Accessories

Accelerometer Pickup	CMSS 3811	Direct Cable 1.5m
Velocity Pickup	CMSS 3812	Direct Cable 1.5m
Magnetic Base	CMAC 3825	40lb pull
Earphones	CMZC 3830	Listen to Machine
Data Extract Software	CMAC 3820	Upload to PC
Calibration Data Sheet & Calibration Certificate		