Scanning-Type Laser Doppler Vibrometer System

AT7500

Enables some points of the small object to measure with high-speed, and surface vibration measurements to display, judge, and to animationize.

AT7500 is a surface vibration system which can measure some points of the small object with high-speed, and which can display, judge, and animationize the measurements by using Laser Doppler Vibrometer. Concerning vibration answering frequency, AT7500 can measure it from DC to 1MHz. Also AT7500 can measure vibration quantity for the optional applied vibration signals (speed signals and displacement signals), and judge GO/NG for the rated value.
By using scanning function of laser beam with two axises galvano mirror, AT7500 can measure +/-20mm XY surface. Moreover, combining scanning function with electric stage (optional) will expand XY surface to +/-45mm.

Features

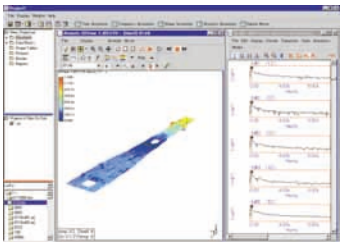
Measurement area
AT7500 can measure XY surface to Max. +/-45mm to use laser beam scan in combination with electric XY stage (optional) by two axis galvano mirror.

Measurement point
Max. 10,000 points can be measured.

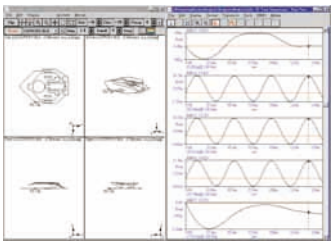
Vibration quantity measurement function
AT7500 can measure vibration quantity of object by set sampling frequency, and judge GO/NO for the rated value.

Data storage
Measurement conditions and measurement data can be saved into CSV file format or M scope file format.

Contents of analysis



Vibration distribution analysis for hard disk slider



Vibration distribution analysis for optical pick up

Animation function

- Animation on the four screens or the single screen.
- Surface color display
- Rotation on the screen
- Interactive animation using line, peak and hand cursor from the area of time/frequency
- Shape animation from the shape table
- Comparison animation of two shape data

Example of use

- Vibration distribution for hard disk
- Vibration distribution for optical pick up
- Vibration distribution for mobile phone

Specifications

Items		AT7500
Scan range		40mm x 40mm
Number of measurement points		10,000 points (Max)
Measurement speed range		20 μm/s ～ 3 m/s
The number of input channels		2ch
Measurement function		Speed measurement, displacement measurement (optional), acceleration measurement (optional)
Measurement frequency range	Speed measurement	AT3600: DC～200kHz AT3700: DC～1MHz
	Displacement measurement	0.5Hz～200kHz (Option)
	Acceleration measurement	2Hz～200kHz (Option)
Measurement data length		25,600 data/point (max)
Minimum beam diameter		Minimum 20 μm
Return position accuracy		Within +/- 5 μm (at the position of minimum beam diameter)
Sampling frequency		500Hz to 10MHz (Enables to set by 1, 2, and 5 steps)
A/D resolution		12 bits
Judge function		Level, frequency level
Measurement speed		Max 30 points/sec. (It varies with depending on measurement conditions.)
Rated power supply		AC100V AC at 50Hz/60Hz*1

*1 Estimation except for AC 100V

Office: Jl. Radin Inten II No. 62 Duren Sawit, Jakarta 13440 - Indonesia
Workshop: Jl. Pahlawan Revolusi No. 22B, Jakarta 13430 - Indonesia
Phone: 021-8690 6777 (Hunting)
Mobile: +62 816 1740 8925
Fax: 021-8690 6771