MODEL 2521

SIGNAL PROCESSOR

Non-Contact Laser Doppler

CARRYING DOPPLER

Battery-powered, Compact,

and Easy to Carry

High accuracy on length measuring
include ”0” Velocity
Highly-stabilized performance with
Digital technology

Outline

The "CARRYING DOPPLER" MODEL2521 is a compact Laser Doppler Measurement System which is available for portable use by battery. This instruments are much half as smaller and lighter as the conventional Laser Doppler System.
By the internal battery power the measurement is operated for more than 3 hours, and also for more than 15 hours by using the external battery. This feature makes it possible to operate the velocity and length measurement in the powerless area.
And also the features of the high-speed initial velocity and interpolation for lack of signals enable MODEL2521 to operate the high-speed and stable measurement.

Feature

1. Available for portable use of measurement outdoors or in the powerless area by battery.
2. Easier to carry and larger to measure on the range and objects.
3. High measuring features and functions by reasonable price.
4. Non-contact measurement does not have any interference or affection on measured objects such as slip or friction, therefore this is available for various kinds of object.
5. Has the function of the signal interpolation helpful for the stable measurement.
6. Available for the real-time data obtaining through a USB interface.

Specifications

Doppler Sensor MODEL 1521		
Method	Laser Doppler system: Back-scattering differential type	
MODEL 1521 As standard L=300mm	Focus distance	Optimal position at 300 ± 20 mm
	Measurement range 0±1400m/min OR -40～+3200m/min	
Accuracy	Within ±0.2% OR ±0.1m/min	
Power supply	Supplied from MODEL 2521	
Laser power	Class 3B : 20mWMAX, CW, Laser Diode 690nm	
Beam spot	Approx.0.5mmX4mm(oval), Collimated	
Dimensions, Weight	60(W)x30(H)x120(D), excluding projections Approx, 0.3kg	

Other Functions	
interpolation: When Doppler signal is missed, the velocity and length are interpolated by the value before missed timing.	
USB I/F: Parameter settings、real time output of velocity and length	
Memory function: Panel preset function allows 4 different settings to be recalled and stored in the panel. :100data of velocity and length can be stored.	
Power	Lithium polymer battery(60Wh) built-in continuous use time: Over 3 hours(at full charged) Charging time: about 3 hours, trickle charge is supported. By using provided AC adaptor, available for AC100-240V operation and battery-charging.
Dimensions, Weight	250(W)x99(H)x300(D), excluding projections Approx, 3.2kg

Signal Processor MODEL 2521		
Input frequency range	LOW : 0±1400m/min HIGH : -40～+3200m/min	
	Display	1Digital indication in 8decimal digits
	Min. resolution	0.001(m/min) or 0.00001m/s
	Unit	m/min or m/s
	Cycle	0.1sec or 1sec
	Averaging	SMA,WMA,EMA, 2 to 4096times moving average
Initial velocity catch time		Within 5ms
Velocity D/A output	Output Voltage	0±4V, 16bit D/A output Full scale adjustable
	Refresh rate	2ms to 1000ms
	Accuracy	With in ±0.5% at full scale.
	Averaging	SMA,WMA,EMA, 2～4096times moving average
Length Measurement	Measurement range	±0.0001m to 9999.9999m 0.1mm resolution
	Display	1Digital indication in 8decimal digits Indication rate0.1sec OR 1sec
	Pitch pulse Output	0.10 to 100.0mm, 0.01mmresolution A, B 90° phase difference output. ・Open collector output ・RS-422complianced difference output.
	Gate for Length measuring.	Material signal or external gate input signal. Signal slope: selectable.

Options

Carrying case
Solid and light aluminum case.
Very convenient to carry and operate the portable CARRYING DOPPLER on the measuring site.

Sensor plate
Plate to set a sensor on a tripod.