

VibroMet™ Long Range Laser Doppler Vibrometer Features

The VibroMet™ Long Range Laser Doppler Vibrometer (LR-LDV) is an easy-to-use, non-contact instrument that is capable of measuring the vibration of a target with extremely high sensitivity, at distances up to 50 meters. The LR-LDV has applications in a wide variety of fields, including the aerospace, automotive, defense, and civil engineering industries.

- Long Range Measurements up to 50 Meters
- Point and Measure Operation
- High Measurement Sensitivity
- Rugged Field Tested Design
- 12-Month Warranty



VibroMet™ Long Range Laser Doppler Vibrometer Specifications

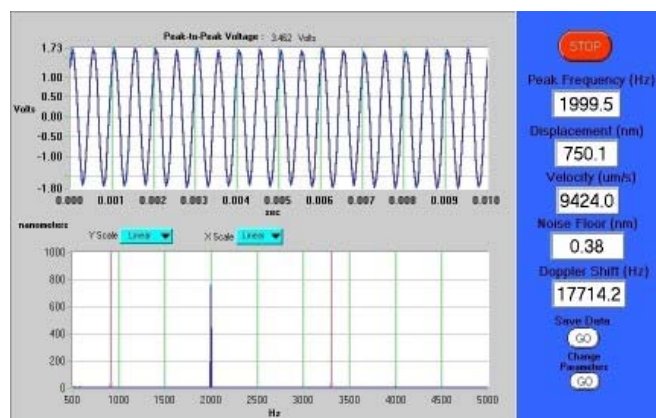
The VibroMet™ LR-LDV, based on an innovative electro-optic configuration developed by MetroLaser, has two components:

Laser Head:

The laser head contains a solid-state laser, transmitting and receiving optics, photo-detector, and demodulation electronics.

Control Box:

The control box contains power supplies and drivers for the system.



VELOCITY RANGE	1 μ m/s to 5 mm/s
VIBRATION FREQUENCY RANGE	DC to 25kHz
WORKING DISTANCE	5m to 50+m
SIGNAL OUTPUT	Analog Velocity and Analog Frequency Modulated (FM)
LASER HEAD DIMENSIONS/WEIGHT	48.2x25.4x21.6 cm/12 kg

The VibroMet™ Long Range Laser Doppler Vibrometer *Applications*

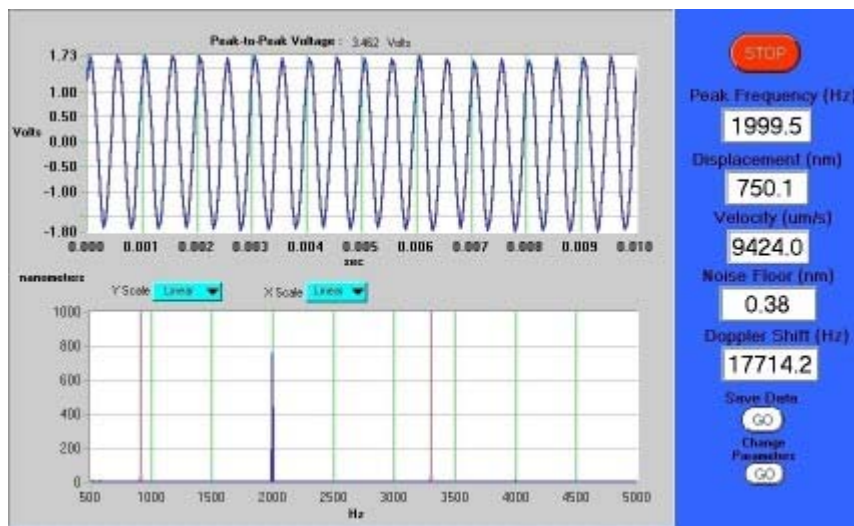
The Long Range Laser Doppler Vibrometer (LR-LDV) has many of the same applications as the VibroMet 500, however it can be used at much farther distances - up to 50+ meters!



The LR-LDV may be used for a variety of applications in the automotive industry including measuring brake pad and tire noise and testing turbo chargers and exhausts.



The LR-LDV can be used for seismic exploration and monitoring. Here the LR-LDV is pointing at a building column while the computer monitor displays the vibration signature of the column.



The picture above shows what you might expect from our software. The top trace is the “vibration velocity vs. time” signal. The bottom trace is a spectrum of the velocity vs. time signal and it shows the frequencies of the signal. In this particular example there is only one frequency (single tone) of about 2 kHz. The panel to the right displays key properties important in characterizing and analyzing vibration.