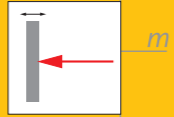
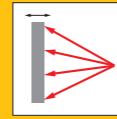


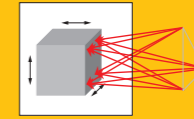
FROM SINGLE POINT MEASUREMENT...



... SCANNING OF SURFACES...



... TO COMPLETE 3-D VIBRATION CHARACTERIZATION



OFV Modular Laser Vibrometer

Universal system, designed as a flexible, upgradeable solution for research, development and general vibration measurements



- This modular system makes non-contact vibration analysis very simple, flexible and precise, regardless of whether the sample is large or small, delicate or difficult to access
- The system comprises
 - an OFV-5000 Controller
 - decoder modules
 - a choice of sensor heads (OFV-505/503 standard single point, OFV-551/552 fiber single point or differential, compact OFV-534)
- Various analog and/or digital decoder options seamlessly cover:
 - the entire velocity range up to ± 20 m/s
 - displacements from the picometer to the meter range
 - frequencies from DC to 24 MHz
- Designed-in flexibility – the system can be extended to a full field scanning vibrometer, a microscope-based scanning vibrometer or a Micro System Analyzer

PSV-400 Scanning Vibrometer

A full-field vibration measurement and visualization system that is fast and easy to use

- Complete PSV Software Package provides detailed vibration data analysis including graphing, animation of 2-D and 3-D color maps, FRFs, and data export to Modal Analysis and FEA packages
- Powerful accessories and options. For example, geometry data can be determined directly from the test piece via the optional Geometry Scan Unit
- Simplifies and enhances complex noise and vibration characterization for R&D, commercial and industrial applications



mm

μ m



PSV-400-3D Scanning Vibrometer

The ideal measurement system for gathering non-contact 3-dimensional vibration data from both simple and complex geometries

- High spatial resolution measurement using three independent PSV-400 scan heads
- Data interface to Modal Analysis and FEA Software
- High frequency version available (1 MHz) for ultrasonic transducer and device development
- Allows dynamic stress and strain evaluation with optional StrainProcessor
- Fully automated modal testing with the RoboVib Structural Test Station

UHF-120 Ultra High Frequency Vibrometer

A compact and non-contact sensor for ultra high frequency vibration measurements up to 1.2 GHz

- Single point and full-field measurements
- Precise dynamic characterization of Out-of-Plane motion
- Small spot size for measurements of short acoustical wavelengths



nm

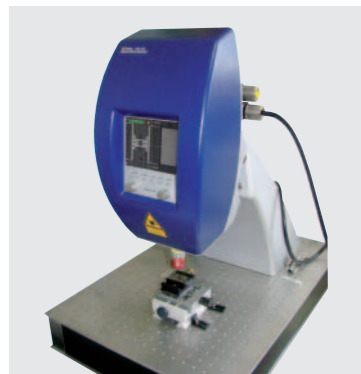
MSA-500 Micro System Analyzer

Unified technology simplifies precise measurements and quick analysis of 3-D dynamics and topography of MEMS, MOEMS and other microstructures

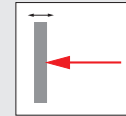
- Three powerful technologies integrated in one instrument:
 - Laser-Doppler vibrometry for Out-of-Plane motion analysis
 - Stroboscopic video microscopy for measurement of In-Plane vibration
 - White light interferometry for topography imaging
- Rapid identification and visualization of Out-of-Plane and In-Plane resonances
- Integrated microscope optics are optimized to guarantee highest lateral resolution and image quality
- Simple and intuitive operation, ready to make measurements in a matter of minutes



- Easily mounts to MEMS probe stations
- Dual beam option for differential measurements



Portable and Industrial Vibrometers and Velocimeters



IVS Industrial Vibration Sensors

- Proven performance for production line quality control
- Robust single-box design with tamperproof operation
- Available with integral digital signal processing for accurate measurements from arbitrary surfaces

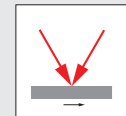


PDV Portable Digital Vibrometers

- The first truly portable digital vibrometer for condition monitoring and other mobile measurement tasks

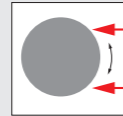
CLV Compact Laser Vibrometers

- Ideal for general production test/R&D work
- Compact lightweight sensor head design with remote controller and near DC up to 3.2 MHz frequency response



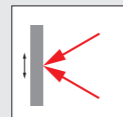
LSV Laser Surface Velocimeters

- Precision, non-contact measurement of speed, direction and length of moving surfaces
- Robust housing designed for accurate work in the harshest industrial environments
- Proven performance on coils, strips, tubes, paper and hot steel



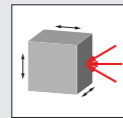
Rotational Vibrometers

- For torsional vibration and rotational speed variation measurement, e.g. automotive engine and drivetrain torque, motors and pumps, etc.
- Provides angular velocity, displacement and rpm outputs



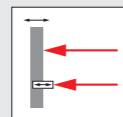
In-Plane Vibrometers

- For transverse (In-Plane) vibration measurement
- Separates DC and AC velocity components



3D-LV Tri-Axial Vibrometers

- Simultaneous non-contact measurement of vibration along 3 axes
- Separate analog velocity outputs: v_x , v_y and v_z



Differential Vibrometers

- Optical Subtraction of ambient vibrations
- Specially suited for microsystems and valve train dynamics

Special Vibrometers

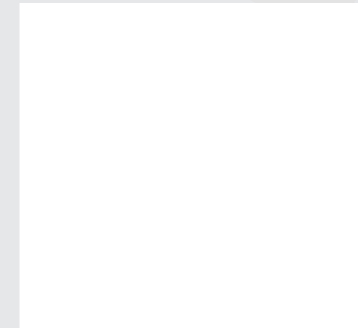
Laser Doppler Vibrometry

Polytec manufactures a range of laser vibrometers that have become the accepted gold standard for non-contact vibration measurement.

Whether the application is for 100 % Q.A. inspection of motors on a production line, optimizing an ultrasonic cutting tool, confirming the characteristics of a MEMS micro-resonator or identifying torsional modes in a vehicle's drivetrain, there is a Polytec system that can provide the measurement solution.

Technical specifications are subject to change without notice. OVM_BR_ProductFlyer_2010_11_5000_E

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Laser Vibrometers and Velocimeters

Optical Measurement Solutions for Vibration, Length and Speed

