



## OMS LaserPoint LP01-HF Laser Doppler Vibrometer



### OMS LaserPoint LP01-HF Laser Vibrometer Specifications

The OMS LaserPoint LP01-HF Vibrometer is based on a patented electro-optical configuration. The system consists of two components, an optical head and an electronic controller, which are connected by a cable.

The optical head contains a near-infrared laser diode with a built-in high speed photo-detector, an acousto-optic modulator, and a red laser diode to aid in aiming the beam. The controller contains a demodulator, a signal strength indicator, two selectable velocity ranges, and an array of low pass filter options.

#### Velocity Range

→ 5  $\mu\text{m/s}$  to 800 mm/s

#### Vibration Frequency Range

→ 0.01 Hz to 100 kHz

#### Working Distance

→ 1 cm to 5 m

#### Displacement Range

→ 0.04 nm (at 20 kHz) to 12 mm (at 10 Hz)

#### Optics

→ Collimated (No Focusing Needed)

#### Surface Reflectivity

→ Realistic Surfaces

#### Signal Output

→ Analog Velocity and 10.7 MHz FM Outputs

#### Dimensions

→ Laser Head: 24 x 11.4 x 7.6 cm

→ Electronic Controller: 30 x 22 x 6 cm

#### Weight

→ Laser Head: 1.4 kg

→ Electronic Controller: 3.9 kg

#### Low Pass Filters

→ 1, 5, 20, 40, 60 kHz

#### Output Voltage (max)

→  $\pm 10$  Volts

#### Laser

→ 780 nm, < 20 mW, Class 3B

→ 650 nm, < 1 mW, Class 2

#### Power Requirement

→ 100 to 230 VAC at 50/60 Hz

**Temperature Range**

→ 3 - 45°C

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