

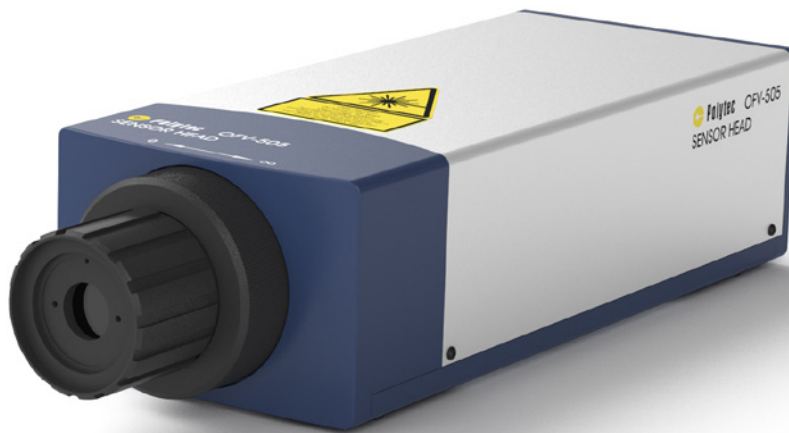


OFV-505 Sensor Head

Polytec's OFV-series single point laser vibrometers determine vibrational velocity and displacement of structures quickly and very precisely.

The sensor head OFV-505 integrates interferometer, laser and imaging optics in a stable housing.

The sensor head achieves its highest signal quality when combined with the digital OFV-5000 Vibrometer Controller.



Highlights

- Fast and low-noise results thanks to auto and remote focus
- Well-suited for dark surfaces and long measurement distances
- Flexibility thanks to variable working distance and interchangeable lenses
- Visible laser spot ensures easy alignment and focusing
- Eye-safe laser

OFV-505 Sensor Head

Ultimate Performance Vibrometer
Datasheet



Technical Data



Optical Specifications

Laser type	Helium Neon (HeNe)
Laser class	Class 2, < 1 mW, eye-safe
Laser wavelength	633 nm, visible red laser beam
Focus	Auto focus, remote focus, manual focus ¹
Maximum stand-off distance	Up to 300 m (with OFV-SLR, surface dependent)
Visibility maxima	234 mm + n · 204 mm; n = 0, 1, 2, 3, ... measured from the focusing ring

General Specifications

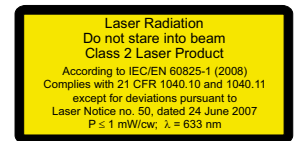
Operating temperature	+5 °C ... +40 °C (41 °F ... 104 °F)
Relative humidity	Max. 80%, non-condensing
Weight	3.4 kg
Dimensions [W x H x L]	120 x 80 x 345 mm (4.7 x 3.2 x 13.6 in)
Controller compatibility	OFV-5000, OFV-2520, OFV-2570 Vibrometer Controller, VDD-E-600 Digital Front-End

Compliance with Standards

Laser safety	IEC/EN 60825-1; CFR 1040.10 and 1040.11
Electrical safety	IEC/EN 61010-1
EMC	IEC/EN 61326-1

Options and Accessories

Front lens	OFV-SR short range	OFV-MR mid range	OFV-LR ² long range	OFV-SLR super long range
Focal length [mm]	30	60	100	200
Min. stand-off distance [mm]	100	200	530	1,800
Aperture diameter (1/e ²) [mm]	3.4	6.8	11.3	22.6
Typical spot size in µm at				
100 mm	25	-	-	-
200 mm	49	25	-	-
500 mm	121	54	18	-
1,000 mm	245	112	62	-
2,000 mm	500	235	135	60
3,000 mm	750	356	210	96
5,000 mm distance	1,260	604	356	168
Each additional meter add [µm]	240	126	74	36



Polytec offers a wide range of accessories including tripods, tilt and traverse stages for mounting and positioning fiber heads.

Please contact your local vibrometer sales engineer or visit our website www.polytec.com/vibrometers for more detailed information.

¹ OFV-503 model available without auto focus and remote focus.

² Default configuration

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