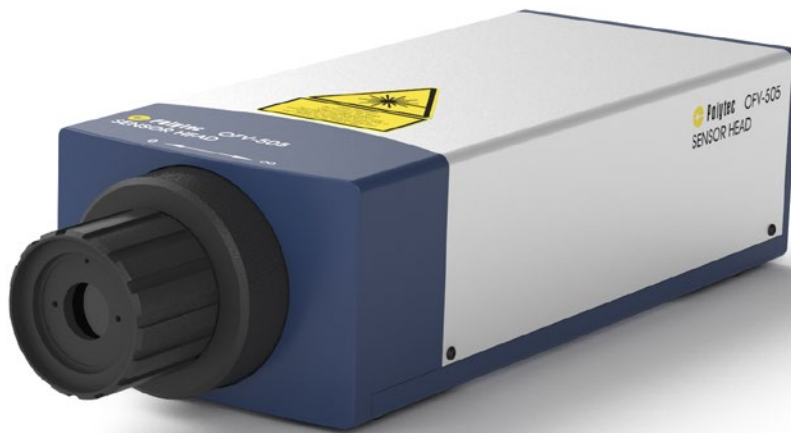


OFV-505 Sensor Head

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 all 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

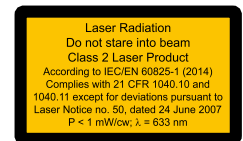
Operating temperature	+5 °C ... +40 °C (41 °F ... 104 °F)
Relative humidity	Max. 80%, non-condensing
Weight	3.4 kg
Dimensions [W x H x L]	120 x 80 x 345 mm (4.7 x 3.2 x 13.6 in)
Controller compatibility	OFV-5000, OFV-2520, OFV-2570 Vibrometer Controller, VDD-E-600 Digital Front-End

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
Min. stand-off distance ³ [mm]	60	185	490	1,800
Aperture diameter (1/e ²) [mm]	3.4	6.8	11.3	22.6
Typical spot size in µm at				
100 mm	24	-	-	-
200 mm	49	99	-	-
500 mm	118	52	57	-
1,000 mm	236	112	62	-
2,000 mm	476	230	132	60
3,000 mm	724	350	204	96
5,000 mm distance	1,272	590	346	166
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/ofv5000 for more detailed information.

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

² Default configuration

³ Measured from the front of the focusing ring.

 **Polytec GmbH (Germany)**
Polytec-Platz 1-7
76337 Waldbronn
Tel. +49 7243 604-0
info@polytec.de

Polytec GmbH (Germany)
Vertriebs- und Beratungsbüro
Schwarzschildstraße 1
12489 Berlin
Tel. +49 30 6392-5140

 **Polytec, Inc. (USA)**
North American Headquarters
16400 Bake Parkway
Suites 150 & 200
Irvine, CA 92618
Tel. +1 949 943-3033
info@polytec.com

Central Office
1046 Baker Road
Dexter, MI 48130
Tel. +1 734 253-9428

East Coast Office
1 Cabot Road
Suites 101 & 102
Hudson, MA 01749
Tel. +1 508 417-1040

 **Polytec Ltd. (Great Britain)**
Lambda House
Batford Mill
Harpندن, Herts AL5 5BZ
Tel. +44 1582 711670
info@polytec-ltd.co.uk

 **Polytec France S.A.S.**
Technosud II
Bâtiment A
99, Rue Pierre Semard
92320 Châtillon
Tel. +33 1 496569-00
info@polytec.fr

 **Polytec Japan**
Arena Tower, 13th floor
3-1-9, Shinyokohama
Kohoku-ku, Yokohama-shi
Kanagawa 222-0033
Tel. +81 45 478-6980
info@polytec.co.jp

 **Polytec South-East Asia Pte. Ltd.**
Blk 4010 Ang Mo Kio Ave 10
#06-06 TechPlace I
Singapore 569626
Tel. +65 64510886
info@polytec-sea.com

 **Polytec China Ltd.**
Room 402, Tower B
Minmetals Plaza
No. 5 Chaoyang North Ave
Dongcheng District
100010 Beijing
Tel. +86 10 65682591
info-cn@polytec.com