

Technical Data

The PSV Xtra upgrade option is fully compatible with the PSV-500 Scanning Vibrometer series with the specifications given below.



PSV-I-550 Scanning Head

Dimensions [W x L x H]	189 x 370 x 177 mm (74.4 x 145.7 x 69.7 in)
Weight	9 kg (19.8 lbs); 9.2 kg with PSV-G-500 Geometry Scan Unit ¹
Laser type	<ul style="list-style-type: none"> ■ Measurement laser: wavelength 1,550 nm, output power <10 mW ■ Targeting laser: wavelength 532 nm (green), effective output power <1 mW ■ PSV-G-500 Geometry Scan Unit ¹: wavelength 660 – 680 nm; effective output power <1 mW
Laser safety class	Class 2
Working distance	Vibrometer: 125 mm ... ~100 m; Geometry Scan Unit ¹ : 250 mm ... 30 m
Scan angle [h x v]	50° x 40°
Scanner properties	Angular resolution <0.002°, Angular stability <0.001°/h, max. 30 scan points/s
Sample size	From a few mm ² up to several m ²
Camera ²	HD format, 20x optical zoom, max. field of view [h x v] 55° x 32°
Interfaces, electrical	Multi-pin bayonet connector, DIN plug for pan/tilt head control or external scanner control
Interfaces, mechanical	Hexagon type tripod adapter for VIB-A-T02, 2x M6 thread



PSV-500 Xtra Metrological Specifications

Model	# of ranges	Full scale m/s (peak) ⁴	Decoder frequency range	Resolution $\mu\text{m s}^{-1}/\sqrt{\text{Hz}}$	# of reference channels	# of signal generator channels ³
PSV-500-B High Resolution	13	0.0025 ... 30	0 Hz ... 50 (100) kHz	0.01 ... 0.5	1 (4)	1 (4)
PSV-500-B Enhanced	10	0.025 ... 25	0 Hz ... 50 kHz	0.02 ... 0.5	1 (4)	1 (4)
PSV-500-H, -3D-H	13	0.0025 ... 30	0 Hz ... 100 kHz	0.01 ... 0.5	8	4
PSV-500-M, -3D-M	13	0.0025 ... 30	0 Hz ... 1 (2) MHz	0.01 ... 2.5	3 (1 with -3D-M)	1
PSV-500-HV, -3D-HV in V mode	13	0.0025 ... 30	0 Hz ... 25 MHz	0.02 ... 15	3 (1 with -3D-HV)	1
PSV-500-HV, -3D-HV in H mode	13	0.0025... 30	0 Hz ... 100 kHz	0.01 ... 0.5	8	4

Compliance with Standards

Electrical safety	IEC/EN 61010-1:2011-07
	IEC/EN 61326-1:2006-10; Emission: FCC Class B; IEC/EN 61000-3-2 and 61000-3-3; Immunity: IEC/EN 61000-4-2 to 61000-4-6 and IEC/EN 61000-4-11
Laser safety	IEC/EN 60825-1 (2008) (CFR 1040.10, CFR 1040.11)

¹ Depending on model: optional
² All 3D systems are retrofitted with two additional PSV-I-570 Scanning Heads without camera, weight 9.0 kg.
³ Bandwidth corresponding to acquisition bandwidth.
⁴ Range dependent.


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