

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

IVS-300 *Industrial Vibration Sensor*



IVS SERIES INDUSTRIAL SENSORS

- IVS-200 Industrial Vibration Sensor
- **IVS-300 Digital Industrial Vibration Sensor**
- Accessories for IVS Series
  - Beam Deflector
  - Programming Kit
  - Additional Parts

DIGITAL ON-LINE VIBRATION SENSING

The Polytec Industrial Vibration Sensor IVS-300 is an integrated single-box digital vibrometer, specifically developed for non-contact vibration measurement in production test environments. It enables fast, accurate product quality monitoring and accelerates time-to-market. The IVS-300 features a robust and compact design, sealed according to IP-64 standards to cope with the challenges of harsh industrial areas.

Designed for Measurements on Difficult Surfaces

The IVS-300 exploits the latest digital signal processing techniques to ensure accurate and repeatable measurements from uncooperative surfaces. It is the first choice for non-contact measurements on "difficult" surfaces with poor light scattering characteristics and for the analysis of low vibration amplitudes requiring high resolution.

The IVS-300 is easily retrofitted into existing production lines because the laser interferometer optics and electronics are all contained within a single, compact and robust industrial housing.

All range and filter settings are software configured via a serial interface, leaving no risk of accidental changes in key settings on the production line. Vibration signal output is via an analog (±4 V), or digital audio interface (S/P-DIF).

Key Features of the IVS-300 Industrial Vibration Sensor

- Robust and compact single-box design, eye-safe visible low power laser (Class II)
- Simple to install and operate
- Easy to integrate into test rig applications and existing control systems
- Advanced digital signal electronics for lowest noise combined with highest sensitivity
- 0 to 22 kHz frequency response
- Velocity up to ± 500 mm/s (3 ranges)
- Analog velocity output and digital S/P-DIF audio interface compatible with VIBSOFT-SP and other acquisition systems supporting the S/P-DIF standard

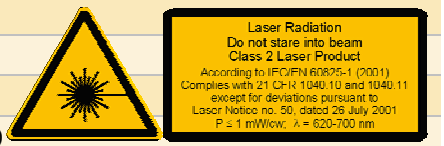
IVS-300 Technical Data

General Specifications			
Operating temperature	+5 °C … +40 °C (41 °F … 104 °F)		
Storage temperature	-10 °C … +65 °C (14 °F … 149 °F)		
Relative humidity	max. 80 %, non-condensing		
Protection rating	IP 64		
Dimensions [L x W x H]	302 mm x 114 mm x 55 mm (11.9 in x 4.5 in x 2.2 in)		
Weight	ca. 2.6 kg		
Power	11 V … 14.5 V DC, max. 15 W		
Decoder type	DSP velocity decoder, 3 measurement ranges		
Velocity ranges	± 20 mm s^{-1}	± 100 mm s^{-1}	± 500 mm s^{-1}
Scaling factor	5 mm s^{-1}/V	25 mm s^{-1}/V	125 mm s^{-1}/V
Velocity resolution*	< 0.02 µm s^{-1} /√ Hz	< 0.02 µm s^{-1} /√ Hz	< 0.1 µm s^{-1} /√ Hz
Frequency range	0 … 22 kHz (digital output); 0.5 Hz … 22 kHz (analog output)		
Filters	1. Digital low pass filter 1kHz / 5 kHz / 22 kHz (-1 dB), roll-off >120 dB/dec (analog and digital output) 2. Analog high pass filter 100 Hz (-3 dB) /off, roll-off about 60 dB/dec (analog output only)		
Outputs analog	± 4 V, 24-bit DAC, ranges: 5 / 25 / 125 (in mm s^{-1}/V)		
Outputs digital	S/P-DIF (Sony/Philips Digital Audio Interface) 24 bit, 48 kSa/s		
Connectors	1. Industrial connector for voltage supply, optical signal level and velocity output 2. Connector for IVS-310 signal level indicator and RS-232 cable 3. Triax connector for S/P-DIF digital output		
Optical system	Fixed focus lens (ff): 240 mm stand-off distance Variable focus lens (vf): 90 mm to 3 m stand-off distance		
Laser safety	< 1 mW output power, laser safety class II, visible 632.8 nm laser		

* The resolution is defined as the signal amplitude (rms) at which the signal-to-noise ratio is 0 dB, measured from 3M Scotchlite® tape.

Accessories	
IVS-310	Signal level display, cable length 2 m
IVS-320	Connection box with power supply (100 V … 240 V AC), BNC output connectors for velocity signal/signal level and remote control input for laser on/off
IVS-Prog	Programming kit for adjusting the velocity range and filter settings
OFV-P7	Adjustable mounting plate recommended for fitting IVS-300 in industrial production/QC lines
IVS-320-C	Cable for connection of IVS-300 to IVS-320 connection box
IVS-200-C	Cable for external connection of IVS-300 to process control systems
VIB-A-100	Beam deflector and component parts, see separate data sheet

Compliance with Standards	
Electrical safety	IEC/EN61010
EMC	IEC/EN61326
Laser safety	IEC /EN60825-1
CE	Mark (EMC, laser safety, LVD)



Polytec GmbH
Polytec-Platz 1-7
76337 Waldbronn
Germany
Tel. + 49 (0) 7243 604-0
Fax + 49 (0) 7243 69944
info@polytec.de

Polytec-PI, S.A. (France)
32 rue Délizy
93694 Pantin
Tel. + 33 (0) 1 48 10 39 34
Fax + 33 (0) 1 48 10 09 66
info@polytec-pi.fr

Lambda Photometrics Ltd. (Great Britain)
Lambda House, Batford Mill
Harpenden, Herts AL5 5BZ
Tel. + 44 (0) 1582 764334
Fax + 44 (0) 1582 712084
info@lambdaphoto.co.uk

Polytec KK (Japan)
Hakusan High Tech Park
1-18-2 Hakusan, Midori-ku
Yokohama-shi, 226-0006
Kanagawa-ken
Tel. +81 (0) 45 938-4960
Fax +81 (0) 45 938-4961
info@polytec.co.jp

Polytec, Inc. (USA)
North American Headquarters
1342 Bell Avenue, Suite 3-A
Tustin, CA 92780
Tel. +1 714 850 1835
Fax +1 714 850 1831
info@polytec.com

Midwest Office
3915 Research Park Dr.,
#A12
Ann Arbor, MI 48108
Tel. +1 734 662 4900
Fax +1 734 662 4451

East Coast Office
25 South Street, Suite A
Hopkinton, MA 01748
Tel. +1 508 544 1224
Fax +1 508 544 1225

Technical specifications are subject to change without notice. LM_DS_IVS-300_2005_04_2000_E

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP