

# SCANNING LASER

The 8330 Scanning Laser Vibrometers are a family of highly accurate, compact and versatile, non-contact vibration transducers. They are used for applications where it is impossible or undesirable to mount an array of vibration transducers on the vibrating object.

The 8330 Scanning Laser Vibrometers are full-field systems that quickly produce vibration maps depicting the structural response at multiple measurement points. In such applications they can often replace an array of accelerometers or microphones.

The Scanning Laser Vibrometers are turnkey systems that include all the optical/electronic hardware (and accompanying software) necessary to obtain and present most global, field vibration parameters. For users with more demanding requirements, additional optional software packages can provide result presentations related to multi-shaker excitation (MIMO) and/or advanced modal analysis.



<p>SB 2507 VPI+ Sensor</p>	<p>4507B Accelerometer</p>	<p><b>Modal Excitation Systems</b></p>	<p>KE 1004 Case for Sensor Head KE 1005 Case for Desktop PC KE 1007 Case for Laptop PC</p>
<p>UA1577 Tripod with CAM Head</p>	<p>QA 0225 Tape Measure</p>		<p>Modal Shaker</p>
<p>8329 Laser Doppler Vibrometer</p>	<p>Power Amplifier</p>	<p>4294 Calibration Exciter</p>	<p>2311 Force Transducer</p>
			<p>3624 Modal Exciter Stand</p>

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- SW UPGRADING ACCESSORIES**
- BZ 5317** Office Software
  - BZ 5318** Advanced Modal Analysis software option
  - BZ 5319** Multi-shaker Excitation and MIMO Analysis
  - BZ 5452** Advanced Modal Analysis/MIMO Bundle

- CONNECTION CABLES**
- AO 0582** Short Cable Set (5 m)
  - AO 0583** Medium Cable Set (10 m)
  - AO 0584** Long Cable Set (20 m)

- MODAL EXCITER SYSTEMS**
- 4810 + 2718** 10 N Miniature Shaker
  - 3624** 100 N System
  - 3625** 200 N System
  - 3626** 400 N System
  - 3627** 650 N System
  - 3628** 1000 N System

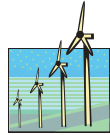
- PORTABLE ODS TESTING SYSTEM**
- 3560 C-S34 8330 D SLDV**
  - 4507 B** Reference Accelerometer
  - KE 1004** Sensor Head Shipping Case
  - KE 1007** Laptop Shipping Case
  - SB 2507** VPI+ Sensor
  - AO 0582** Short Cable Set (5 m)

**TYPE 3560 C-S34**

**Scanning Laser Analyzer (4 In/2 Out)**

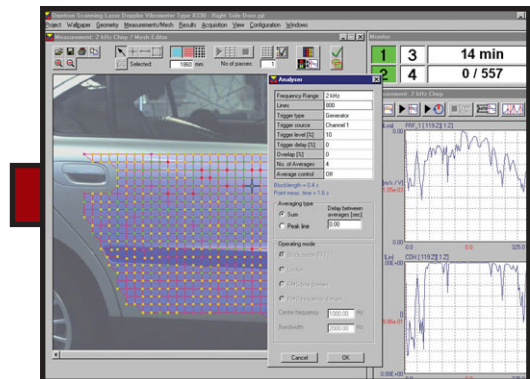
3560 C  
7533  
3109  
7770-N4  
BZ 5310

- Powerful system for general noise and vibration studies. Four input channels measure to 25 kHz and two signal generators
- Laptop-based system is extremely portable for field applications or for measurements in test cells



\* One year SW maintenance

*Seamless integration of sensor control, FFT analyzer, and optional Modal Analysis. Part of the PULSE platform so system capabilities can grow*



**TYPE 3560 C-S35**

**Scanning Laser Analyzer (4 In/2 Out)**

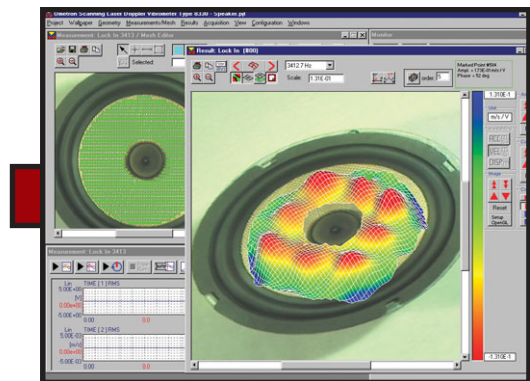
3560 C  
7536  
3110  
7770-N2  
BZ 5310

- Extended frequency range for measurements on hard disk drive components, turbine blades, (tweeters) and scale models
- Two input channels measure to 200 kHz and a signal generators can input signals to 100 kHz
- Easily expandable to four (or more) channels



\* One year SW maintenance

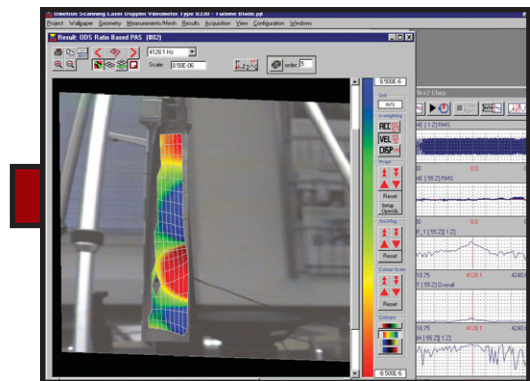
*Animate Operating Deflection Shapes (ODS), save animations as AVI files, and export data and geometry as UFF files.*



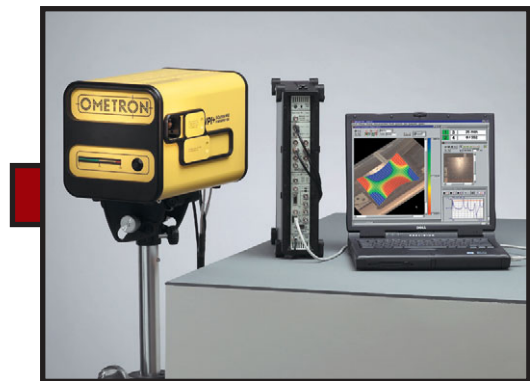
**APPLICATION GUIDELINES**

APPLICATION GUIDELINES	8330 D	8330 E	8330 E 4 ch. opt.
ODS testing of hot components	X	X	X
ODS testing of disk drives		X	X
ODS testing of large speakers	X	X	X
ODS testing of tweeters		X	X
Lock-in Analysis (harmonics)	25 kHz (25 kHz)	100 kHz (200 kHz)	100 kHz (200 kHz)
UFF export of measurement and geometry for external modal analysis	X	X	X
SIMO Modal Analysis	BZ 5318	BZ 5318	BZ 5318
MIMO Modal Analysis	BZ 5452		BZ 5452

*Wide range of analysis techniques to handle real world structures – non-linear, non-steady, and closely coupled modes*



*System is world's most compact Scanning Laser Vibrometer. Small size is ideal for field measurements or space limited laboratories*



**MODAL TESTING SYSTEM**  
3560 C-S34 8330D SLDV  
2311-100 ISOTRON® Force Sensor  
3624 Modal Excitation System  
BZ 5318 Advanced Modal Analysis Software Option  
SB 2507 VPI+ Sensor  
AO 0582 Short Cable Set (5 m)

**ADVANCED MODAL TESTING SYSTEM**  
3560 C-S34 8330D SLDV  
2 x 2311-100 ISOTRON® Force Sensor  
2 x 3624 Modal Excitation System  
BZ 5452 Advanced Modal Analysis/MIMO Bundle

SB 2507 VPI+ Sensor  
AO 0582 Short Cable Set (5 m)

**4 CHANNEL HIGH FREQUENCY SYSTEM**  
3560 C-S35 8330E SLDV  
3560 C-S2 General Sound & Vibration (2 inp., 1 gen., 100 kHz)  
UL 0190 4-Port Ethernet Switch  
SB 2507 VPI+ Sensor  
AO 0582 Short Cable Set (5 m)