THE MODAL SHOP
AN AMPHENOL COMPANY

MODEL **9155D-550**

RESONANCE TEST OPTION

- Integrates industry's best air-bearing shaker (Models K394B30 and K394B31) for accurate, automated resonance search testing up to 50 kHz
- Provides early warning detection technique for damaged sensors
- Allows user to select frequency resolution for optimal sweep measurements
- Easy-to-use software GUI automates sweep measurement and interface with 9155 calibration software and database
- Sweep runs directly on the K394B30 or K394B31 air-bearing shaker systems, eliminating the need to remount the sensor under test, streamlining sensor calibration throughput
- Provides rapid, efficient measurements in just seconds

FOR CALIBRATION SYSTEM MODEL 9155

The Accelerometer Calibration Workstation with Model 9155D-550 Resonance Test option allows the user to measure a sensor's mounted resonant frequency using the Model K394B30/B31 state-of-the-art precision air-bearing shaker. Unlike other air-bearing shakers, the resonance frequency of the internal reference of the K394B30/B31 shaker is > 70 kHz giving it a truly usable range for resonant searches up to 50 kHz. As the search is done with the shaker, no remounting of the sensor is required, making the resonance search take only seconds after the normal back-to-back calibration is performed.

By measuring the mounted resonant frequency of a sensor, tiny cracks and other flaws in the sensor can be detected well before the sensor actually fails.

The Accelerometer Calibration Workstation Model 9155 features back-to-back comparison calibration of piezoelectric (PE), capacitive (VC) and piezoresistive (PR) mode accelerometers for both sensitivity and phase according to ISO 16063-21. Printed certificates fulfill the requirements set forth by ISO 17025 for calibration certificates.

CE

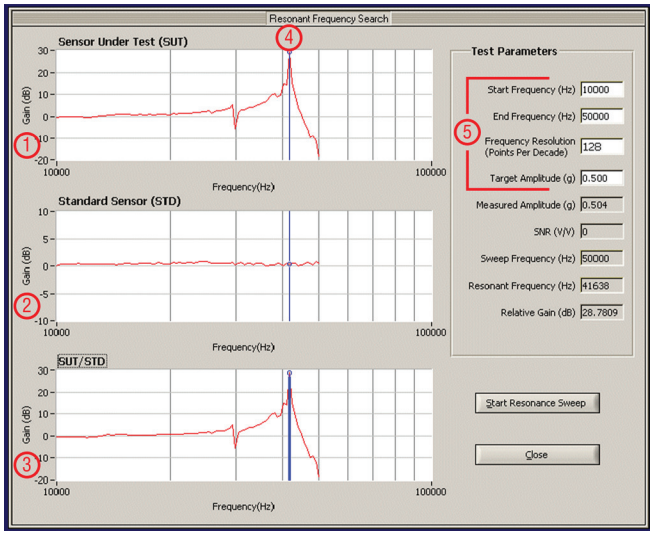
SPECIFICATIONS	
Performance	
Frequency Range	5 kHz to 50 kHz
Frequency Resolution	12.5, 25, or 50 Hz
Test Technique	Back-to-back sweep
Reference	
Mounted Resonance [1]	> 70 kHz
Software Compatibility	9155 v.4.0.0 or later
Hardware Compatibility	NI PCI-4461
Other System Options	
9155D-100	**19 in Rack Integration.** Approx. 36.5 in H x 21.75 in W x 26 in D [93 cm x 55 cm x 66 cm]. Integrates components in 19 in rack.
9155D-120	**Shaker Mount.** Provides wood pedestal to support calibration shaker. Requires user to fill with sand (not included).
9155D-160	**Tool Kit.** Includes torque wrench, screwdrivers, crescent wrenches, toolbox, etc.
9155D-350	**Calibration Label Printing.** Provides automatic calibration label printing using a Zebra thermal transfer label printer.
9155D-400	**TEDS Sensor Support.** Provides for automatic update of TEDS sensors. Requires 9155D-443 option.
9155D-442	**Basic ICP Signal Conditioning.** Adds signal conditioner for ICP and charge mode sensors.
9155D-443	**Dual-mode Charge Amplifier.** Computer control and automated switching between ICP and charge mode sensors.
9155D-445	**Capacitive Sensor Signal Conditioning.** Adds signal conditioner for capacitive sensors.
9155D-478	**Piezoresistive Signal Conditioning.** Adds support for piezoresistive sensors. Includes PCB 478A30 signal conditioner.
9155D-501	**Linearity.** Provides for multipoint sensor linearity checks via sinusoidal vibration up to 40 g.
9155D-525	**Shock Calibration.** Provides for verification of shock accelerometers from 20 g to 10 000 g.
9155D-575	**Laser Primary Calibration.** Adds primary calibration capability as specified in ISO 16063-11.
9155D-600	**Velocity Sensor Calibration.** Allows calibration of velocity sensors. Reports data in velocity units.
9155D-771	**Low Frequency (0.5 Hz – 500 Hz).** Long stroke shaker with SmartStroke™ technology and accelerometer reference sensor.
9155D-779	**Low Frequency (0.1 Hz – 500 Hz).** Long stroke shaker with SmartStroke™ technology, accelerometer and optical reference sensors.
9155D-830	**K394B30 Air-Bearing Shaker.** Adds precision air-bearing shaker 5 Hz – 15 kHz.
9155D-831	**K394B31 Air-Bearing Shaker.** Adds precision high-frequency air-bearing shaker 5 Hz – 20 kHz.
9155D-961	**Hammer Calibration.** Allows calibration of instrumented impact hammers, includes 9961C cal fixture

[1] Mounted resonance of the internal reference sensor in the K394B30/B31

RESONANCE TEST OPTION

The 9155D-550 Resonance Test option seamlessly integrates with the 9155 Accelerometer Calibration Workstation software. With just a few mouse clicks, the calibration technician can go from frequency response calibration to resonance search. The Model 9155D-550 Resonance Test option requires either the Model 9155D-830 K394B30 Air-Bearing Shaker or Model 9155D-831 K394B31 Air-Bearing Shaker.

9155-550 Software



1. Frequency Spectrum Sensor Under Test
2. Frequency Spectrum Standard Sensor
3. Frequency Response Function
4. Automated resonant frequency selection
5. Technician-controlled frequency range, resolution and amplitude

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