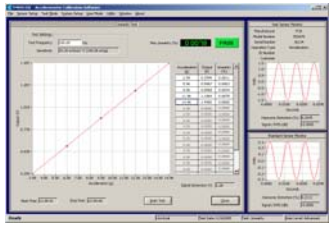
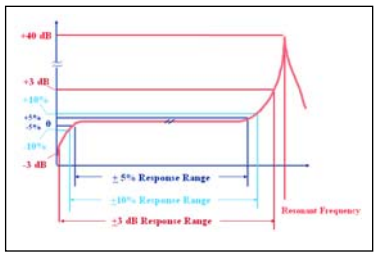
CALIBRATION

Basic Linearity
Model 9155D-501



- Perform multipoint sensor linearity check using the model 394A30 or 394A31 air bearing shaker
- Easy-to-use software interface automates data acquisition across specified amplitude range and provides seamless interface with the 9155 calibration software and database
- Allows for measurement at user-defined test frequencies
- Provides additional assurance of sensor health and performance, increasing confidence in measurement accuracy

Resonance Test
Model 9155D-550



- Resonance search testing up to 50 kHz runs directly on the model 394A30 or 394A31 air bearing shaker, eliminating the need to remount the sensor under test, streamlining sensor calibration throughput
- Provides simple screening technique for damaged sensors
- Easy-to-use software interface automates sweep measurement and interface with 9155 calibration software and database

Shock Calibration
Model 9155D-525

- Provides calibration and linearity check from 20 g to 10,000 g
- Uses state-of-the-art pneumatically actuated exciter providing controlled and consistent impacts
- Includes variety of impact anvils and projectiles to tailor the impulse shape for frequency content and shock level
- Compatible with standard back-to-back shock reference accelerometer
- Supports a variety of sensor mounting configurations
- Easy-to-use software interface automates sensitivity / linearity calculation and provides a seamless interface with the 9155 calibration software and database
- Provides graphical indication of sensor zero shift
- Electronic control unit provides user control of projectile drive pressure and pulse width

Laser Primary
Model 9155D-575

- Provides primary calibration capability meeting the performance requirements specified in ISO 16063-11
- Direct demodulation of doppler laser signal assures low measurement uncertainty
- Seamlessly integrates with 9155 Accelerometer Calibration Workstation for automated, primary calibrations

Ultra-Low Frequency
Model 9155D-771/-779

- Calibrates high sensitivity sensors to lower frequencies with industry leading usable stroke of 25 cm
- Offers better accuracy at lower frequencies due to displacement based optical reference
- Calibrates sensors with lower sensitivities, compared to traditional 15 cm calibration shakers
- Increases throughput with use of real-time amplitude control
- Reduces transverse motion with graphite air bearings
- Durable and reliable technology adapted from the manufacturing market is ideal for high daily throughput

WHAT'S NEW

Accelerometer Calibration Solutions

TEDS Sensor Support
Model 9155D-400

- Provides seamless, automatic update to TEDS sensors upon completion of calibration, supporting both P1451.4 and 1451.4 formats

Basic ICP Signal Conditioning
Model 9155D-442

- Integrates PCB model 442A102 ICP sensor signal conditioner and 422 series in-line charge amplifier

Dual Mode Charge Amplifier
Model 9155D-443

- Integrates PCB model 443B101, laboratory-style precision charge amplifier for automated computer controlled gain

Capacitive Sensor Signal Conditioning
Model 9155D-445

- Integrates PCB model 445A101 capacitive sensor signal conditioner with selectable gain of x1, x10 and x100

Piezoresistive Signal Conditioning
Model 9155D-478

- Integrates PCB model 478A30 piezo-resistive sensor signal conditioner has simple push button controls and supports ¼, ½ and full bridge accelerometers

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Air Bearing Exciter
Model K394A30 & K394A31

- Porous ceramic air bearing effectively eliminates transverse motion over entire useable frequency range
- Lorentz force coil lifting mechanism greatly improves calibration throughput by eliminating troublesome rubber band suspension
- State-of-the-art hybrid design of the K394A30 incorporates the superior mass-stiffness properties of a beryllium core with a lightweight aluminum armature, allowing accurate frequency response calibration measurements up to 15 kHz
- All-beryllium armature design of the K394A31 allows accurate frequency response calibration measurements up to 20 kHz
- Internal precision reference accelerometer's high mounted resonant frequency (in excess of 70 kHz) ensures accurate resonance search through 50 kHz
- Innovative, two-part armature design provides electrical isolation, improving accuracy by eliminating electrical noise in the calibration measurement
- Beryllium core can be easily removed, allowing quick changes for annual recertification or use of multiple reference cores supporting optimal mounting configurations for a variety of sensors under test
- Self-centering, locking armature with anti-rotation design
- Compact design weighs just 10kg (22 lbs) yet delivers high acceleration levels, up to 40g_{pk}, while still meeting ISO 16063 distortion levels
- 10 mm stroke and low distortion characteristics allow accurate calibration as low as 1 Hz

Accelerometer Calibration Workstation
Model 9155

- Assures accurate NIST and/or PTB traceable calibration from 0.5 Hz to 20 kHz
- Calibration typically performed in under a minute per axis
- Automates TEDS sensor onboard information updating

9155 shown with Rack Integration option (9155D-100), Dual-mode Charge Amplifier option (9155D-443) and Air-bearing Shaker System Upgrade (9155D-830)

- As low as 0.75% uncertainty with primary laser calibration of the embedded reference accelerometer
- Supports ICP®, Charge, Piezo-resistive, Capacitive and Velocity output accelerometers
- Creates a system for any budget with customizeable hardware and software options
- Prints customizable calibration certificates compliant with ISO 17025

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