THE MODAL SHOP
AN AMPHENOL COMPANY

MODELS **9155D-600 & 9155D-650**

VELOCITY SENSOR OPTIONS

- Perform velocity sensor calibration and verification frequency sweeps
- Easy-to-use software GUI automates data acquisition
- Sweeps performed at user-defined frequencies
- Applies pass/fail criteria for nominal sensitivity and frequency response
- Results reported in English or Metric units
- 9155D-650 adds hardware to measure 4-20 mA current loop velocity sensors

TYPICAL APPLICATIONS

- In-house calibration of vibration instrumentation

FOR CALIBRATION SYSTEM MODEL 9155

The Velocity Option 9155D-600 of the 9155D Calibration System enables the calibration and verification of velocity sensors, such as moving coil type. The 9155D-650 option adds hardware and software to calibrate 4-20 mA current loop sensors. 9155D-600 option is included with 9155D-650.

The reference vibration measurement is measured with a typical quartz ICP® reference accelerometer. The reference accelerometer output is converted to velocity for comparison against the SUT (Sensor Under Test) measurement.

9155 customers who use the software with accelerometers will find that the velocity sensor interface will be identical. It has the same experience starting at sensor setup, through data acquisition, and finally report generation.

The 9155D-600 and 9155D-650 options add velocity and 4-20 mA current loop to the list of supported SUT types for 9155: high frequency vibration acceleration, low frequency (0.1 Hz) vibration acceleration, shock acceleration, dynamic pressure, acoustic microphones, and visual output (vibration meters). These calibrations are all performed according to appropriate international standards defined by ISO, IEC, and ANSI. Also, reports are automatically generated that fulfill the requirements of ISO 17025.

9155 SYSTEM OPTIONS

9155D-100	**19" 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" 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-550	**Resonance Check.** Provides for resonance check of accelerometers up to 50 kHz.
9155D-575	**Laser Primary Calibration.** Adds primary calibration capability as specified in ISO 16063-11.
9155D-961	**Hammer Calibration.** Allows calibration of instrumented impact hammers, includes 9961C cal fixture
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-875	**High Payload Calibration Shaker.** Offers a useable frequency range of 5Hz to 10kHz for heavy payload transducers.
9155D-901	**Environmental Monitoring Option.** Includes calibrated external temperature, humidity and pressure gauge.
9155D-903	**Low Pressure**. Step function pulse calibrator to dynamically calibrate pressure transducers up to 150 psi (1 MPa).
9155D-905	**Ultra High Pressure**. For dynamic pressure measurements up to 80 000 psi (550 MPa).
9155D-907	**Medium Pressure.** Aronson step pressure calibrator for dynamic pressure calibrations up to 1000 psi (6.9 MPa).
9155D-910	**Acoustic Microphones.** Comparison calibration of microphones per 61094-S. Software option.
9155D-913	**High Pressure**. Impulse calibrator for dynamic pressure calibrations up to 15 000 psi (100 MPa).

VELOCITY OPTION

The 9155D-600 Velocity option is a software-only option available with the 9155 Accelerometer Calibration Workstation System. The software option allows for measurement of velocity sensor performance across a specified frequency or amplitude range at user-defined test points, dependent upon allowable test frequencies for the given shaker. The measurements are limited by the actuator hardware (i.e. the shaker, amplifier, etc.) and the specifications listed below are achievable with the indicated hardware only.

9155-600 Software
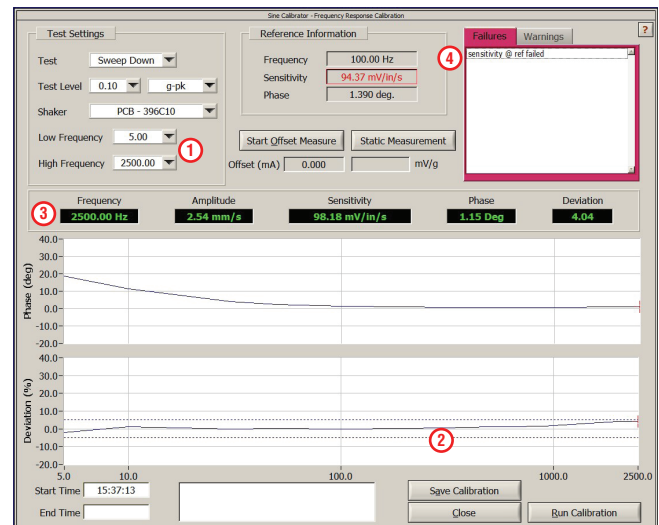
1. User-defined test frequencies

2. Easy-to-read graphical display of results

3. Cursor control shows point-by-point results

4. Pass/Fail automatically determined based on sensor specification

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