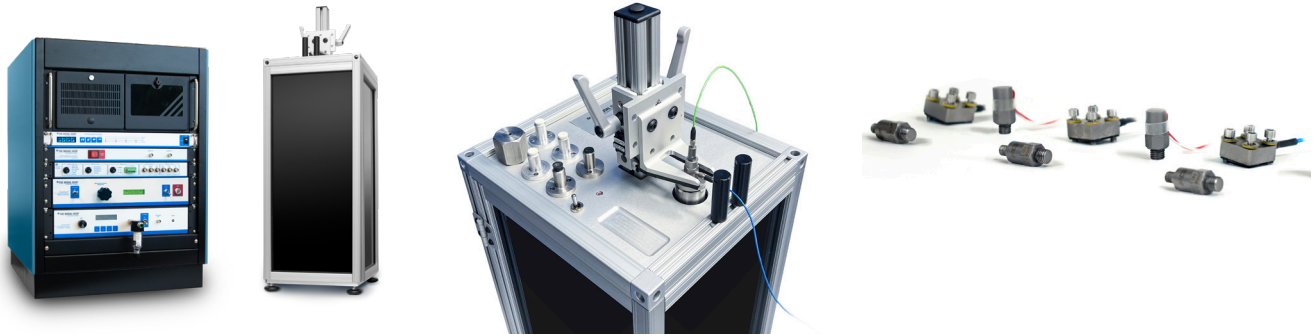




MODEL 9155D - 535

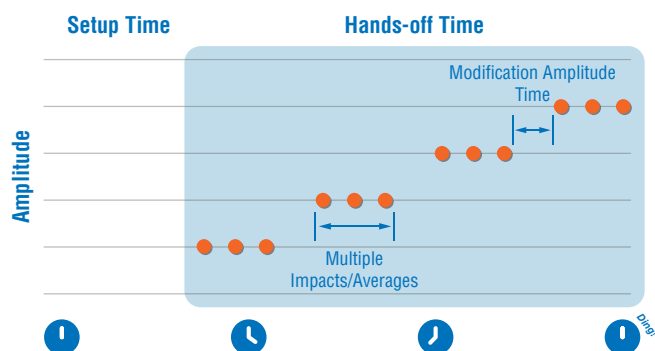
SHOCK ACCELEROMETER CALIBRATION

- Provides calibration and linearity check from 20 g to 10 000 g
- Automated control and acquisition of test points up to 10 000 g allowing for less operator hands-on time
- Uses state-of-the-art pneumatically actuated exciter (requires 80 to 150 psi) 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 accelerometers
- Provides graphical indication of sensor amplitude linearity
- Electronic control unit provides user control of projectile drive pressure and pulse width
- Digital pressure indication aids in control and repeatability

CONTROLLED & CONSISTENT IMPACT

The 9155D Calibration Workstation with Model 9155D-535 Automated Shock Calibration option allows the user to measure the sensor sensitivity at high acceleration levels up to 10 000 g in accordance with ISO 16063-22 to perform a linearity check. The state-of-the-art shock exciter makes use of a pneumatically operated projectile to strike an anvil and excite the sensor under test. The automated solution controls the air pressure, fires the projectile, records the data, and progresses to the next test point automatically allowing for less operator hands-on time during the calibration process.

This system seamlessly integrates with the Model 9155 Calibration Workstation, making the shock test quick and easy via the 9155D software interface. The 9155D-535 Automated Shock Calibration option features an ICP® reference accelerometer, PCB Model 301A12, for to perform the back to back shock calibration. Printed certificates fulfill the requirements set forth by ISO 17025 for calibration certificates, and are fully customizable using the Microsoft Excel® environment.



Shock Calibration Timeline

Significantly reduce hands-on time when calibrating high amplitude accelerometers. Fires, records data, and proceeds to the next amplitude automatically

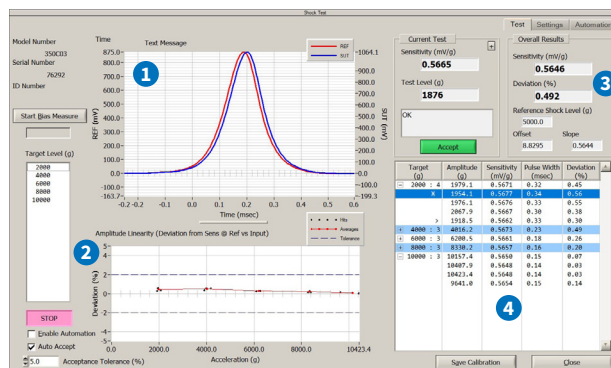
SPECIFICATIONS		
Acceleration Range	20 g – 10 000 g	196 – 98 000 m/s ²
Reference	PCB Model 301A12	
Type	ICP® Accelerometer	
Sensitivity	0.5 mV/g	
Pulse Width	0.1 - 3.0 ms	
DUT Mass	50 gram max.	
Uncertainty ^[1]	2.2%	
Automated Calibration	up to 10 000 g	
Sensor Mounting	¼ – 28 UNF Thread Size	
Air Supply Pressure	90 – 150 psi [6.2 – 10 bar]	
ISO 8573.1 Quality Class	4	

OTHER SYSTEM OPTIONS

Exciter Options

9155D-830C	Adds precision air-bearing shaker 5 Hz - 15 kHz.
9155D-831	Adds precision high-frequency air-bearing shaker 5 Hz - 20 kHz.
9155D-771	Adds low frequency precision air bearing shaker 0.5 Hz - 200 Hz.
9155D-779	Adds ultra-low frequency precision air bearing shaker 0.1 Hz - 200 Hz.
9155D-919	Adds acoustic microphone calibration 20 Hz to 20 kHz.

9155-535 Software



1. Displayed time data allows technician to view waveform and check for anomalies in the shock pulse
2. Toggle between Deviation vs input or output vs input for real-time overview of test results
3. Software automatically computes sensitivity, acceleration, deviation, and detects errors such as zero shift
4. Condensable results table provides data on each shock pulse and averaged results at a glance

OTHER SYSTEM OPTIONS (CONTINUED)

Signal Conditioner Options

9155D-USC-100	Universal Signal Conditioner. PC controlled by 9155 Calibration Software and rack mounted. Supports ICP®, Charge, Piezoresistive, Bridge, Capacitive sensor types and TEDS read/write capability.
9155D-427	Supports ICP®, Charge, Piezoresistive, Bridge, and Capacitive sensor types (Includes PCB model 482C27 and 422E52)
9155D-405	Supports ICP® and Charge sensor types (Includes PCB model 482C05 and 422E52)

Additional Testing Capability

9155D-680	Visual Output Sensor Option.
9155D-650	Automated 4-20 mA Velocity Sensor Calibration
9155D-600	Automated Velocity Sensor Calibration
9155D-550	Automated Resonance Test, up to 50 kHz (requires 9155D-830C or 9155D-831)
9155D-516	Input and output resistance measurement option used for piezoresistive sensors. Includes software and hardware.
9155D-501	Automated Linearity Check, up to 40 g pk (requires 9155D-830C or 9155D-831)

Usability Options

9155D-120	Shaker Mount Option (provides wood pedestal to support calibration shaker)
9155D-160	Tool Kit Option for Model 9155 Calibration System.
9155D-350	Automated Label Printing (includes label printer)
9155D-400	Automated TEDS Sensor Support (requires 9155D-USC)
9155D-901	Environment Monitoring option for Model 9155 Calibration System. Includes calibrated external temperature, humidity and pressure gauge.