



AT-2035

Portable Accelerometer Calibrator

AT-2035 is a premium portable vibration calibrator capable of sensitivity test in manual or automatic mode. Full automatic mode is capable of creating PDF certifications for most common sensor types. AT-2035 is the ideal calibrator for operators needing low cost, quick, and reliable accelerometer calibration; as well as system checkout.

AT-2035 offers a mix of features taken from our standard portable calibration shaker, AT-2030, and our executive-class portable vibration calibrator, AT-2040.

PVC with sensitivity

Applications

- Cabling and wiring troubleshooting
- Calibration of:
 - Accelerometers
 - Proximity probes and drivers
 - Monitoring systems
 - Charge amplifiers
 - Avionics equipment

Advanced Features

- Built-in sensor signal conditioner
- Programmable sensor voltage
- Automatic mass load correction
- Dual USB ports
- Advanced computer algorithms for accurate readout

Features

- Voltage, charge (piezoelectric), and proximity probe sensitivity readings.
- Adjustable current and voltage.
- Full-Automatic Test Mode.
- Superior accuracy.
- Color touch screen.
- Automatic PDF certificate generation tailored to your custom specifications.
- Two USB ports for attaching peripherals and exporting data via USB drive.

Functionality

- Create calibration certificates for vibration instruments.
- Test all types of vibration sensors and transducers from a variety of accelerometer and eddy current probe manufacturers.
- Test and verify performance of vibration system meters, portable data collectors, and cabling by using an accurate and traceable signal generator to simulate a variety of sensors.
- Identify and quickly address issues in vibration system setup with the assistance of user-friendly software tools.
- Control from a remote location.

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Performance		
Frequency Range (operating) ^[1]	7 Hz to 10 kHz	420 to 600000 CPM
Maximum Amplitude (100 Hz, with no payload)	20 g pk	196 m/s ² pk
	15 in/s pk	380 mm/s pk
	50 mils p-p	1270 μm p-p
Maximum Payload ^[2]	800 grams	
Sensor Test Method	Automatic sweep or manual operation	
Test Types	Manual sensitivity Automatic sweep	
Sensor Select	Built-in transducer library	
Calibration Sheets	Automatic creation in PDF format. Export to USB drive in PDF or CSV format No spreadsheet or user input required	
Memory	16GB (internal storage) MicroSD slot for additional storage	

Accuracy	
Simulation (1 Hz to 11 kHz)	± 1 %
Acceleration (7 Hz to 10 kHz)	± 3 %
Velocity (10 Hz to 1000 Hz)	± 3 %
Displacement (30 Hz to 150 Hz)	± 3 %
Amplitude Linearity (100 gram payload, 100 Hz)	< 1 % up to 10 g pk
Waveform Distortion (100 gram payload, 30 Hz to 2 kHz)	< 5 % THD (typical) up to 5 g pk

Input/Output	
Test Sensor Inputs	Accelerometer: <ul style="list-style-type: none"> • Charge • Voltage • IEPE Velocity Sensor Proximity probes
Bias Measurement	Yes
Built-in Excitation Current and Supply Voltages for Transducers	IEPE current source
External Source In (Max)	1 V AC RMS
Monitor Reference Out	10 mV/g (nominal) Internal Reference

Readout		
Acceleration	g pk m/s ² pk	g RMS m/s ² RMS
Velocity	mm/s pk in/s pk	mm/s RMS in/s RMS
Displacement (peak to peak)	mils p-p	μm p-p
Frequency	Hz	CPM

Power		
Internal Battery (sealed solid gel lead acid)	12 V DC	6 amp hours
AC Power (for recharging battery)	100-240 V	50-60 Hz
Operating Battery Life	100 gram payload, 100 Hz 1 g pk	10 hours
	100 gram payload, 100 Hz 10 g pk	3 hours
Charger Type	Internal / Built In	
Plug Type	Standard Wall Plug	

Physical		
Sensor Connectors	BNC	
Display	4.3" TFT LCD with 480x272 resolution	
Controls	2 dials with touch screen	
Dimensions (H x W x D)	10.62 x 9.68 x 6.87	27 x 24.6 x 16.4 cm
Weight	15.2 lb	6.9 kg
Sensor Mounting Platform Thread Size	1/4-28	
Operating Temperature	32 °F - 122 °F	0 °C - 50 °C
Agency Requirements and Certifications	NIST Traceable Accredited NIST Certified NVLAP Laboratory Tested EMC: EN61326-1 LVD: EN61010-1 RoHS	

Accessories		
Included Accessories	<ul style="list-style-type: none"> • Power cable • Micro dot (10-32) • 1/4-28 Stud • 2-56 UNC Adapter • Universal Velocity Adapter Disc • Universal Accelerometer Adapter Disc • Short-handle wrench • 10-32 UNF Stud • 6-32 UNC Adapter • 10-32 UNF Adapter • USB drive: loaded with setup software for custom sensor 	
Optional Accessories ^[3]	<ul style="list-style-type: none"> • Proximity Probe Adapter Kit (digital or manual micrometer) • Chadwick-Helmuth Velocimeter Cable • Triaxial Accelerometer Adapter 	
Warranty	2 years (includes drift/accuracy)	
Tech Support	Training webinars, email support	

[1] 100 gram payload.

[2] Maximum weight recommendations:

Frequency	0-100 Grams	100-250 Grams	250-500 Grams	500-800 Grams
10-100 Hz	10 g	4 g	2 g	1 g
100-1000 Hz	7 g	4 g	2 g	1 g
1000-10000 Hz	3 g	1.5 g	0	0

[3] For comprehensive list, please consult the Product Spec Sheet or contact sales.