



PVC with Sensitivity

Applications

- Troubleshoot cabling and wiring
- Calibrate:
 - Accelerometers
 - Charge amplifiers
 - Monitoring systems
 - Avionics equipment
 - Proximity probes and drivers

Advanced Features

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

Lithium Iron Phosphate Battery

- Longer lifespan & longer cycle life of up to 5,000 cycles at 80% depth of discharge, or 10 years.
- Lighter weight
- More environmentally friendly than lead-acid batteries
- Higher constant power ensures full battery power at low charge
- Ten times faster charging than lead-acid batteries
- Can withstand high temperatures without decomposing, and is non-flammable and non-toxic

AT2035

Portable Accelerometer Calibrator

Overview

AT2035 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. AT2035 is the ideal calibrator for operators needing low cost, quick, and reliable accelerometer calibration; as well as system checkout.

AT2035 offers a mix of features taken from our standard portable calibration shaker, AT2030, and our executive-class portable vibration calibrator, AT2040. Calibration of the AT2035 and its accuracy has been [accredited to ISO 17025](#) by a 3rd party, A2LA.

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 to CSV and PDF (via the 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 AT2035 from a remote location.

Portable Accelerometer Calibrator

| Performance | | |
|---|---|---|
| Frequency Range (operating) ^[1] | 5 Hz to 10,000 Hz | 300 to 600,000 RPM |
| Maximum Amplitude (100 Hz, with no payload) | 20g pk 15 in/s pk 50 mils p-p | 196 m/s ² pk 380 mm/s pk 1270 μm p-p |
| Maximum Payload ^[2] | 800 grams | |
| Sensor Input Connections | IEPE, Charge, and voltage sensors, Limited proximity probe input support | |
| Sensor Test Method | Automatic sweep or manual operation | |
| Test Types | Manual sensitivity Automatic sweep, with sensitivity and deviation relative to reference frequency. Includes phase data. | |
| Sensor Select | Built-in transducer library | |
| Calibration Sheets | Automatic creation to memory Export to PDF or CSV Certificate includes test point with graph | |
| Memory | 16 GB (internal storage) MicroSD slot for additional storage | |

| Vibration Signal Accuracy | |
|--|----------------------------------|
| Acceleration (5 Hz to 9 Hz) | ± 5 % |
| Acceleration (10 Hz to 10 kHz) | ± 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 |

| Physical | | |
|---|---|---------------------|
| Sensor Connectors | BNC | |
| Display | 4.3" TFT LCD with 480×272 resolution | |
| Controls | 2 dials with touch screen | |
| Dimensions (H × W × D) | 10.6 × 9.7 × 6.9 in | 27 × 24.6 × 17.4 cm |
| Weight | 14.4 lb | 6.5 kg |
| Sensor Mounting Platform Thread Size | ¼-28 | |
| Operating Temperature | 32–122°F | 0–50°C |
| Agency Requirements and Certifications ^[4] | A2LA Accredited NIST Traceable EMC:EN61326-1 LVD:EN61010-1 ISO/IEC 17025:2017 RoHS | |

| 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 | RPM |

| Power | | |
|-----------------------------------|---|---------------------|
| Internal Battery | 12V DC | 6 amp hours |
| Battery Type ^[3] | LiFePO4 | |
| Battery Charge Time | 1 hour | |
| Battery Life Expectancy | 5,000 cycles @ 80% depth-of-discharge, or 10 years | |
| AC Power (for recharging battery) | 100–240V, 50–60Hz, internal, standard plug | |
| Operating Battery Life | 100 gram payload, 100Hz 1 g pk 100 gram payload, 100Hz 10 g pk | 10 hours 1 hours |
| Charger Type | Internal / Built-in | |
| Plug Type | Standard PC Wall Plug | |

| Accessories | | |
|-------------------------------------|--|---|
| Included Accessories | <ul style="list-style-type: none"> Power cable Micro dot (10-32) ¼-28 stud 2-56 UNC adapter Universal Velocity Adapter Disc Universal Accelerometer Adapter Disc | <ul style="list-style-type: none"> 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 ^[4] | <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 (click [here](#) to visit our website for a larger chart). Limited at lower frequencies to 0.1 inch (2.54mm) Peak displacement.

[3] Lead-acid battery is an available option.

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

