

Mobile Calibrator CV-10

One-Stop Solution for On-Site Calibration



Application

- On-Site calibration of vibration transducers (acceleration, velocity, displacement)
- On-Site calibration of proximity probes (optional)
- Quick, simple and mobile in-field inspection/ calibration of vibration transducers

Features

- Including international recognized calibration certificate (ISO 17025, traceable to PTB, NIST,...)
- Different operation modes (manual, sweep, stepped sine) for quick checks as well as automatic operation
- Hi-Res color display
- Optional PC software allowing to
 - ◆ define calibration setups easily
 - ◆ store transducer data
 - ◆ store and print calibration certificates
 - ◆ organize measurement campaigns
- Integrated signal conditioning for transducers with voltage, IEPE, charge and AC current output
- Optional signal conditioning e.g. for piezo-resistive transducers available via extension connector
- Internal reference accelerometer (standard) or external back-to-back accelerometer (option)
- High max. payload up to 900 gram
- Rugged case for daily on-site operation
- Mobile solution for convenient transport, e.g. as cabin bag or checked in bag in airplanes

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Technical Data:

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|---|--|----------------------------|
| Frequency Range | 7 Hz ... 10 kHz | 420 ... 600,000 CPM |
| Max. Acceleration | 200 m/s ² pk | 20.39 g pk |
| Max. Velocity | 700 mm/s | 27 in/s |
| Max. Displacement | 5 mm pk-pk | 196 mils pk-pk |
| Op. Temperature Range | 0 °C...+50 °C | 32 °F...122 °F |
| Max. Payload | 900 g | 31.7 oz |
| Max. Torque for mounting of transducers | 2 Nm | 17.7 lbf in |
| Weight | 8.5 kg | 18.7 lbs |
| Dimensions (HxWxD) | 146 mm x 347 mm x 295 mm | 5.7 in x 13.7 in x 11.6 in |
| Reference Accelerometer | quartz reference accelerometer mounted inside the shaker armature (connector for optional external back-to-back reference accel. available) | |
| Transverse amplitude (% of main axis amplitude) | according to ISO 16063-21 | |
| Distortion | <3% (using SPEKTRA's unique distortion compensation technology) | |
| Measurement Uncertainty (acceleration) | 7 Hz - 2 kHz ±3% >2 kHz - 10 kHz ±6% | |
| Mounting thread | 1/4"-28 UNF female | |
| Power supply | 100V ... 240 V, 50 ..60 Hz (external) | |
| Rechargeable Battery | sealed gel lead acid rechargeable battery (internal) typical battery operation up to 10 hours (100 gram payload, 100 Hz, 1g pk) (batteries with higher capacities on request) | |
| Operation Modes | Manual Operation, Sweep Mode (automatic), Stepped Sine Calibration (automatic) Transfer Calibration Mode (calibration or check of the system via calibrated reference transducer) | |
| Signal Conditioning | Integrated for IEPE, Charge, 4 ..20 mA transducers Optional signal conditioners, e.g. for piezo-resistive transducers, available via extension connector | |
| Data Exchange | Exchange of transducer data, calibration setups, calibration records via CSV (comma-separated values) text files Optional data exchange with SPEKTRA CS laboratory calibration systems Data exchange via USB flash drive (Ethernet, WLAN or Bluetooth optional) | |