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## Technical Vibration Analyzer PCE-VM 3D

### PCE-VM 3D Vibration Meter

**for machines and facilities / with internal data storage / analogue interface for head phones  
 / with several sensor tips**

The PCE-VM 3D Vibration Meter provides quick and simple measurements of acceleration and displacement to check the acceleration of machines and construction parts, allowing for defects and larger unbalances to be determined. The PCE-VM 3D Vibration Meter is able to record vibration in three dimensions: on the x-, y-, and z- axes. With a weight of only 305 g, the PCE-VM 3D Vibration Meter proves to be a light and easy to use accessory in any workplace, whether it is a larger or smaller business that needs to measure oscillations in its machines. The determination of errors, defects, or larger unbalances can increase the life time of machines and engines significantly. By checking the oscillation movement of your machines by means of the Vibration Meter you can prevent larger damages by locating the source of any problem. The large display of the PCE-VM 3D Vibration Meter allows capturing momentary values as well as recording a whole vibration spectrum. The large display also features background lights and is very eligible. Additional measuring sensors and ISO certification can be purchased with the Vibration Meter optionally.

- Measures acceleration and speed
- Measures rotational speed and frequency
- LCD display with background lights
- Large frequency range
- Three options for display
- Common mode
- Spectral mode: shows spectrum
- Bars to show battery state with alarm function

#### Technical Specifications

##### Measuring ranges

	0.1 m/s <sup>2</sup> ... 400.0 m/s <sup>2</sup> (Peak)
Vibration acceleration	0.3 ft/s <sup>2</sup> ... 1312.3 ft/s <sup>2</sup> (Peak) (0 ... 40 g / 0.09 lb force)
Vibration velocity	0.01 mm/s ... 400.0 mm/s 4.0 x 10 <sup>-4</sup> in/s ... 15.7 in/s

Vibration amplitude 0.001 mm ... 4.000 mm (Peak-Peak)  
4.0 x 10<sup>-5</sup> in ... 0.16 in (Peak-Peak)

**Range of Frequencies**

Vibration velocity 10 Hz ... 10 kHz  
Vibration acceleration 10 Hz ... 10 kHz  
Vibration amplitude 10 Hz ... 10 kHz  
Resolution 0.25 Hz  
Accuracy ±5 %  
Interface RS-232C  
Batteries AA 1.5 V  
Surrounding temperature 0 ... +50° C / 32° F ... 122° F  
< 95 % rel. error  
Dimensions 130 mm x 70 mm x 30 mm  
5.1 in x 2.8 in x 1.2 in  
Weight 0.3 kg / 0.67 lbs

**Delivery contents** 1 x PCE-VM 3D Vibration Meter

- 1 x magnetic sensor
- 1 x external sensor with 1.5 m cable
- 2 x measuring tips
- 1 x instruction manual
- 1 x hard case