ACCELEROMETER

PCE-VT 3850



- **For mobile vibration measurement**
- **Data logger function**
- **Automatic ISO 10816-3 evaluation**
- **Measuring range up to 399.9 m/s² / 15744 in/s²**
- **Hand-held device for mobile vibration measurement**
- **Rechargeable battery**
- **2.8" LC display**
- **Micro-USB interface**

Accelerometer with external sensor / Peak value measurement / For machines and plant / Optionally with ISO factory certification / Software /
Various menu languages ⍰⍰/ PC connection via micro USB internal memory /

The accelerometer is the ideal companion for checking vibrating parts, machines and plant. With the external vibration sensor of the vibration meter, the vibration displacement up to 3.9 mm, the vibration velocity up to 399.9 mm/s and the vibration acceleration up to 399.9 m/s² can be determined. RMS, peak, peak-to-peak and crest factor are available as measurement parameters on the vibration meter. Another function of the vibration measuring device is the automatic evaluation according to ISO 10816-3. Accordingly, the vibration meter can determine the current vibration state of a machine via a good/bad evaluation. This means that the vibration meter is used, for example, for repair and maintenance work on machines. The built-in LiPo battery with a capacity of 2500 mAh allows a battery life of up to 20 hours. The LiPo battery can be recharged via the micro-USB interface on the vibration measuring device.

In order to process the measured values ⍰⍰further, they can be saved directly on the accelerometer. An internal memory is available for this. The measured values ⍰⍰can be saved manually as well as automatically by the vibration measuring device. After a measurement, the recorded measured values ⍰ can be read out on a PC.

Specification

Acceleration	
Measurement range up to	0 ... 399,9 ft/s²
Resolution	0,1 ft/s²
Accuracy	±2 %
Frequency range	10 Hz ... 10 kHz 1 kHz ... 10 kHz
Speed	
Measurement range up to	0 ... 399,9 km/h
Resolution	0.1 mm/s
Accuracy	±2 %
Frequency range	10 Hz ... 1 kHz
Path	
Measurement range up to	0 ... 3,9 inch
Resolution	1 inch
Accuracy	±2 %
Frequency range	10 Hz ... 200 Hz
Sensor	
Designation	PCE-VT 3xxx SENSOR
Dimension	Ø 17 x 46 mm
Additional description	Resonant frequency: 24 kHz Cross sensitivity: Δ 5% Destruction limit: 5000 g (peak) Housing material: stainless steel Mounting thread: ¼ - 28 in

General technical data	
Number of measuring channels	1
Measuring functions	RMS, peak, Peak-peak, Crest factor
Frequency	10 ... 10000 Hz
Display type	LCD
Display size	2,8 Inch
Storage medium	Internal memory
Storage capacity	2160000 Values
Storage interval from	1 s
Storage interval to	12 min.
Interface	Micro-USB, 3.5 mm jack
Menu language	English, German, French, Spanish, Italian, Dutch, Portuguese, Turkish, Polish, Russian, Chinese, Japanese
Protection class (device)	IP52
Power supply	Rechargeable battery: 3.7 V USB: 5 VDC, 500 mA
(Rechargeable) battery	1 x 3,7 V internal , Lithium polymer battery
Capacity	2500 mAh
Operating conditions	-20 ... 65 °C , 10 ... 95 % RH
Storage conditions	-20 ... 65 °C , 10 ... 95 % RH
Dimensions (L x W x H)	165 x 85 x 32 mm
Other dimensions	Vibration sensor Ø 17 x 46 mm Headphone connection 3.5 mm jack
Weight	239 g
Other weights	Vibration sensor 52 g