

VIBRATION METER

PCE-VT 3850S



- » **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**
- » **incl. headset**

The vibration meter 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 vibration meter. 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. The software for the vibration meter can be used to analyse the measured data using the graphic display and tabular listing. The measurement data can be exported as a CSV file for further processing.

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 3xxxS

Dimension Ø 29 x 81 mm

Additional description Resonant frequency: 24 kHz
Cross sensitivity: Δ 5%
Destruction limit: 5000 g (peak)
Housing material: stainless steel and plastic
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 29 x 81 mm
Headphone connection 3.5 mm jack

Weight 239 g

Other weights Vibration sensor 119 g