

VIBRATION MEASUREMENT VIBRATION ANALYZER

PCE-VT 3800 / PCE-VT 3800S

Vibration analyzer with external sensor / data logger function

The vibration analyzer 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.

ISO cal option

- » 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
- » 2.48" LC display



APPLICATION



TECHNICAL SPECIFICATIONS

Measuring range	Acceleration 0.0 ... 399.9 m/s ² / 0.0 - 15744 in/s ²	Housing material	stainless steel
Resolution	0.1 m/s ² / 3.94 in/s ²	Mounting thread	¼ - 28"
Accuracy @ 160 Hz	±2 %	Dimensions	Ø 17 x 46 mm / 0.67 x 1.8"
Frequency range	10 Hz ... 10 kHz 1 kHz ... 10 kHz	Weight (without cable)	52 g / 1.8 oz
Measuring range	Velocity 0.00 ... 399.9 mm/s / 0.00 - 15.74 in/s	Sensor PCE-VT 3800	Sensor with spiral cable PCE-VT 3xxx SENSOR Magnet adapter PCE-VT VMH
Resolution	0.1 mm/s / 0.0039 in/s	Sensor PCE-VT 3800S	Sensor with spiral cable PCE-VT 3xxx SENSOR Needle sensor PCE-VT NP Handle PCE-VT 3xxx HANDLE Optional
Accuracy @ 160 Hz	±2 %	accessories:	
Frequency range	10 Hz ... 1 kHz	PCE-VT NP	Needle sensor
Measuring range	Displacement 0.000 ... 3.9 mm / 0.000 - 0.154 in	PCE-VT VMH	Magnet adapter
Resolution	1 µm / 39.4 µin	CAL-PCE-VT 3xxx	ISO Calibration Certificate
Accuracy @ 160 Hz	±2 %	PCE-VT 3xxx SENSOR	Replacement vibration sensor
Frequency range	10 Hz ... 200 Hz	Further models:	
Measurement parameters	RMS, Peak, Peak-Peak Crest factor	PCE-VT 3850	incl. sensor, magnetic adapter, headset
Manual memory	99 folders with 50 measured values each	PCE-VT 3850S	incl. needle sensor with handgrip, headset
Data logger	Various start/stop triggers Measurement interval between 1 s ... 12 h 50 memory locations with 43.200 measured values each		
Units	can be switched to metric / imperial		
Display	2.8" LC display		
Menu languages	English, German, French Spanish, Italian, Dutch Portuguese, Turkish, Polish Russian, Chinese, Japanese		
Power supply	internal: LiPo battery (3.7 V, 2.500 mAh) external: USB 5 VDC, 500 mA		
Operating time	approx. 15 ... 20 h (depending on display brightness)		
Operating and storage conditions	temperature: -20 ... +65 °C / -4 ... 149 °F humidity: 10% RH ... 95% RH, non-condensing		
Protection Class	IP52		
Dimensions	165 x 85 x 32 mm / 6.5 x 3.3 x 1.3"		
Weight	239 g / 8.4 oz		
Technical Data Vibration Sensor			
Resonance frequency	24 kHz		
Transverse sensitivity	≤5 %		
Destruction limit	5000 g (peak)		
Operating and storage temperature	-55 °C ... +150 °C / -67 °F ... 302 °F		



PCE-VT 3800



PCE-VT 3800S



Subject to change without notice