VIBRATION METER

PCE-VM 400B



- **4 channels for measuring and evaluating vibrations**
- **Measurement on shafts and bearings**
- **Reliable piezoelectric acceleration sensors**
- **Wide frequency range: 1 ... 25000 Hz**
- **Acceleration measurement range: 0.001 ... 200 m/s²**
- **Velocity measurement range: 0.001 ... 200 mm/s**
- **Balancing - up to 8 correction planes**
- **Evaluation according to ISO 10816**
- **USB interface and 4 GB data storage**

The vibration meter is a technically advanced instrument for the precise measurement and evaluation of vibrations in industrial applications. It enables the simultaneous measurement of vibrations on shafts and bearings across four independent channels. Equipped with high-quality piezoelectric acceleration sensors, even the smallest vibrations can be accurately captured.

The vibration meter has various measurement functions, including acceleration, velocity, displacement, and rotational speed, to cover a wide range of applications. It also offers the capability of balancing with up to 8 correction planes to counterbalance imbalances in rotating machinery. Additionally, the vibration meter allows for route measurement, specifically for recurring measurements at identical measuring points. Evaluation according to ISO 10816 "Evaluation of mechanical vibrations" is also possible.

For data transmission and storage, the device is equipped with a USB interface and an internal storage capacity of 4 GB. The vibration meter is robustly constructed and protected against dust and moisture to ensure its operation in demanding industrial environments.

Engineers and technicians can utilize this vibration meter to precisely monitor and analyze machines, ensuring smooth operation and an extended lifespan.

Specification

Acceleration	
Measuring range	0,001 ... 200 m/s²
Resolution	0,001 m/s²
Accuracy	±5 %
Frequency range	1 ... 25000 Hz
Optical speed	
Measuring range	10 ... 200000 rpm
Resolution	1 rpm
Accuracy	±5 %
Speed	
Measuring range	0,001 ... 200 mm/s
Resolution	0.001 mm/s
Accuracy	±5 %
Frequency range	1 ... 25000 Hz
Path	
Measuring range	0,001 ... 2000 µm
Resolution	0,001 µm
Accuracy	±5 %
Frequency range	1 ... 25000 Hz
Sensor	
Designation	PCE-VM 400B-SENS
Additional description	additional standard sensor 1.5 m cable magnetic holder

General technical data	
Number of measuring channels	4
FFT	0
Frequency	1 ... 25000 Hz
Display type	VGA colour display
Display size	3,5 Inch
Storage medium	Internal memory
Storage capacity	4 GB
Interface	USB
Operating time	8 h
Automatic power-off from...to	30 ... 99999 s
Menu language	English, Polish, Spanish, German, Chinese, Russian, French, Indonesian
Protection class (device)	IP20
Power supply	5 V DC / 1 A
Connector type	Device-europlug
(Rechargeable) battery	1 x 3,6 V 18650 , Lithium-ion battery
Capacity	3200 mAh
Performance	11,52 Wh
Operating conditions	-10 ... 50 °C , 0 ... 90 % RH
Storage conditions	-10 ... 50 °C , 0 ... 90 % RH
Dimensions (L x W x H)	220 x 100 x 42 mm
Weight	460 g