VIBRATION DATA LOGGER

PCE-VM 5000



- **Acceleration, speed, and displacement**
- **Long-lasting battery**
- **Precise measurement**
- **Large, LCD display with background lights**
- **Different measurement units**
- **Data storage on SD card**

The 4-channel PCE-VM 5000 Vibration Data Logger is especially designed for precise measurements of vibrations. Despite the fact that the 4-channel vibration Vibration Meter is a complex and sensitive device, its hardened design enables operation for many years. The PCE-VM 5000 Vibration Meter indicates a large, lighted LCD display for four channels of simultaneous vibration measurements from remote vibration sensors. The Vibration Meter measures in a frequency range of 10 Hz to 1 KHz for speed, acceleration, and displacement. The captured data values are saved on a SD memory card where you can choose between automatic and manual data storage. By means of the SD memory card the data can be transferred afterwards to a computer in order to analyze it in an excel file. With the PCE-VM 5000 Vibration Meter you can choose between different measurement units: for acceleration, the unit m/s^2, g, and ft/s^2 are able to be selected; for speed, mm/s, cm/s and inches/s can be used; and for the displacement, mm and inches can be choosen.

Specification

Acceleration	
Measuring range	0,5 ... 199,9 m/s²
Resolution	0,1 m/s²
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Acceleration	
Measuring range	0,05 ... 20,39 g
Resolution	0,01 g
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Acceleration	
Measuring range	2 ... 656 ft/s²
Resolution	1 ft/s²
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Speed	
Measuring range	0,5 ... 199,9 mm/s
Resolution	0.1 mm/s
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Speed	
Measuring range	0,05 ... 19,99 cm/s
Resolution	0.01 cm/s
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Speed	
Measuring range	0,02 ... 7,89 inch/s
Resolution	0.01 inch/s
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Path	
Measuring range	0 ... 1,999 mm
Resolution	0,001 mm
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz
Path	
Measuring range	0 ... 0,078 inch
Resolution	0,001 inch
Accuracy	±(5% of reading +5 digits) @ 80 and 160 Hz

General technical data	
Number of measuring channels	4
Measuring functions	MAX Team, HOLD, peak
Measuring interval	1 ... 3600 s
Frequency	10 ... 1000 Hz
Display type	LCD with backlight
Display size	4,02 Inch
Storage medium	SD card
Storage capacity	16 GB
Interface	RS232
Automatic power-off	10 min
Calibration	Calibration point: - Acceleration: 50 m/s² (160 Hz) - Velocity: 50 mm/s (160 Hz) - Displacement: 0.141 mm (160 Hz)
Dimensions	Probe: - 16 x 37 mm in diameter - Cable length: 1.2 m
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	Batteries Power supply: 9V DC
(Rechargeable) battery	8 x 1,5 V AA battery , Alkali-manganese
Capacity	3000 mAh
Operating conditions	0 ... 50 °C , 0 ... 85 % RH
Storage conditions	0 ... 50 °C , 0 ... 85 % RH
Dimensions (L x W x H)	203 x 76 x 38 mm
Weight	515 g

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