ACCELEROMETER

PCE-VM 20



- **Real-time FFT analysis**
- **Robust housing**
- **Many vibration parameters**
- **Direct evaluation according to DIN ISO 10816**
- **Integrated LiPo battery**

The vibration measuring device PCE-VM 20 is a compact device for the direct evaluation of the vibration behavior of a machine. The device can measure and display various vibration parameters, such as vibration acceleration, vibration velocity or vibration displacement. Thanks to the integrated real-time FFT analysis, the condition of a machine can be analyzed and determined during the measurement.

The PCE-VM 20 vibration meter can evaluate and display signals from IEPE standard piezoelectric vibration sensors as well as piezoelectric vibration sensors with charge output.

Specification

Acceleration	
Measuring range	0 ... 200 m/s²
Resolution	0,0001 m/s²
Accuracy	±5% (measuring device only)
Speed	
Measuring range	0 ... 200 mm/s
Resolution	0.0001 mm/s
Accuracy	±5% (measuring device only)
Path	
Measuring range	0 ... 2000 µm
Resolution	0,1 µm
Accuracy	±5% (measuring device only)
Frequency	
Measuring range	1 ... 10000 Hz
Resolution	1 Hz
Accuracy	±5% (measuring device only)
Sensor	
Designation	Air conditioning unit 102-1A
Sensitivity	100 mV/g
Temperature range	-50 ... 121 °C
Housing	316L stainless steel
Cable length	1,8 m
Additional description	Frequency response: ±3 dB (0.5... 15000 Hz) / ±10% (2.0... 10000 Hz) Dynamic range: ±50 g, peak Spectral noise: At 10 Hz: 14 µg/√Hz At 100 Hz: 2.3 µg/√Hz At 1000 Hz: 2 µg/√Hz Connection: 2-pin MIL-C-5015
Power supply	18 ... 30V DC (IEPE)
Protection class	IP68

General technical data	
Storage medium	Micro SD card
Storage capacity	4 GB
Interface	Mini-USB
Operating time	8 h
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	3.7 V
Connector type	Device-europlug
Capacity	1000 mAh
Performance	3,7 Wh
Operating conditions	-10 ... 55 °C , 0 ... 80 % RH
Storage conditions	-10 ... 55 °C , 0 ... 80 % RH
Dimensions (L x W x H)	132 x 70 x 33 mm
Weight	150 g