Specifications

vPod Pro analyzer/data collector

Processor	ARM® Cortex®-A8, 1GHz
Display	3.5" color TFT LCD, 240x320
Storage	24G flash memory
Input Channels	1 analog & 1 digital input
Input Connector	8 pin Lemo connector
Input Range	±5V
Input coupling	IEPE, 2mA/ 19V ±1V
A/D Resolution	24 bits
Max. Sampling Rate	25.6 kHz
Input Impedance1MΩ	
Maximum frequency	10kHz
Analog high pass filter	-10% at 3Hz, -5% at 5Hz
Max. Input voltage	±20V
Power supply	18650 battery x2
Battery life	6 hours continuous operation
Operating temperature	-10°~60°C
USB	USB 2.0 Client, Type-C connector
Bluetooth	Bluetooth 4.1 For headset
Wifi	802.11 b/g/n 2.4GHz
camera	640x480 pixels
housing	ABS Plastic and rubber sleeve
Certification	IP65, CE Mark, Rohs
Size	204x85x45 mm (8x3.3x1.8 inch)
Weight	0.49 kg (1.05 lb) (with batteries)

Spectrum measurements

Band & resolution	1kHz (1600 lines) or 10kHz (6400 lines)
Window	Hanning window
Cursor	single cursor with auto marking 10 peaks

A52-IR dual output sensor

Vibration sensor	IEPE type accelerometer
Measurement Range	±50 (g)
Sensitivity	100 (mV/g) typical
Frequency Response	1-8 kHz (±1dB), 0.3-10 kHz (±3dB)
Resonance Frequency	34 kHz
Non-Linearity	±1%
Transverse Sensitivity	5%
Shock Limit	5000g
Residual Noise	0.0004 (g RMS)
Temperature sensor	Digital Infrared thermometer
Resolution	0.1°C
Measurement Range	-40°~115°C

Meter Mode

Overall vibration	0-50g (peak)
Units	um,mm,mil;mm/s,in/s; g,mg,m/s2
Filters	3Hz-1kHz, 5Hz-1kHz, 10Hz-1kHz, 10Hz-10kHz
Detections	rms, peak, peak-peak (equivalent)
Bearing condition	0~50g (true peak), 1kHz~10kHz
Temperature:	-40°~115°C

Route Mode

Number of routes	unlimited
Hierarchic levels	2, machine and point
Archive data	overall vibration,bearing condition, temperature, Spectrum (1kHz/1600 lines), raw data (2 seconds)

BENSTONE
Condition monitoring

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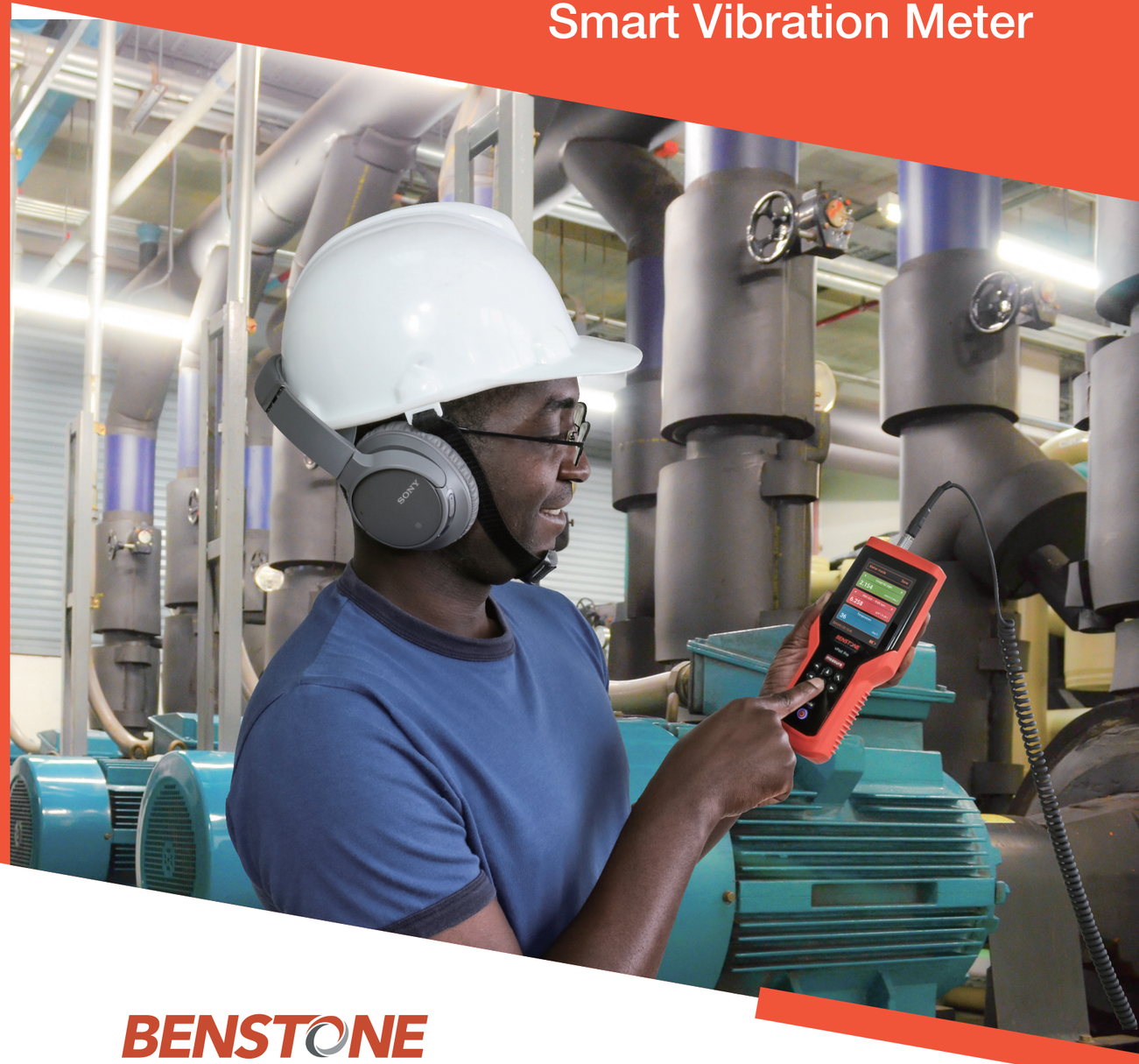
vPod Pro

Smart Vibration Meter



BENSTONE
Condition monitoring

Introduction

The vpod Pro is built for tough environments with an IP65 dustproof and waterproof rating along with an anti-drop rubber sleeve. Equipped with 3.5-inch color display for intuitive and easy-to-understand operation interface; its built-in 24G flash memory provides sufficient storage space along with an innovative sensor design allowing simultaneously measure vibration values, bearing condition and temperature at the same time. Optional spectrum analysis function and route-based measurement function for a large amount of data collection. The lens on the back allows you to add a photo taken on-site as a note when storing data. In addition, vPod Pro supports Bluetooth headset listening function, USB 2.0 and wifi transmission interface when transferring data to / from a computer.

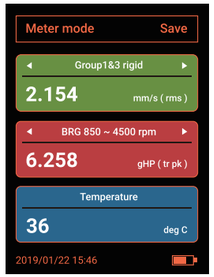
Innovatively designed sensor A52-IR (patent pending)

Accurately measure vibration signal in the frequency range of 1~8kHz. Use a high-strength magnetic base for sensor installation, enhancing the transmission and test accuracy of high-frequency signals such as bearings and gears. In addition, an infrared temperature sensor is arranged under the sensor, and the vibration signal and temperature value of the object can be simultaneously measured through the opening in the center of the magnetic seat. This innovative design provides very quick measurements.

Innovatively designed dual output sensor A52-IR

Overall vibration measurement

The overall vibration level is a basic vibration measurement used to detect low-frequency vibration of rotating equipment. For example; measure dynamic balance problems with the rotating parts, shaft misalignment, looseness problems and others can be detected by using this method. The vPod Pro's built-in ISO 10816-3 vibration standard displays the vibration severity in green, yellow and red colors, allowing users to see the operation condition of the equipment at a glance. If necessary, the user can also edit the custom vibration standard value and use it on vPod Pro.

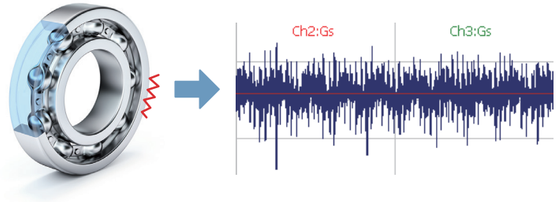


Bluetooth headset connection function

vPod Pro has a built-in Bluetooth feature that can be connected to Bluetooth headsets. After each measurement, the user can have the vPod Pro automatically play 2~8 seconds of vibration signal through the Bluetooth headset. Experienced users can use this auxiliary function to tell whether an equipment is abnormal or not.

Bearing condition detection

The vPod Pro measures the vibration signal in the 1 kHz to 10 kHz bandwidth and implements the "true peak" value when detecting bearing damage.
This superior method detects and tracks the early damage phase of bearing problems. With a built-in alarm value, vPod Pro will display the bearing measurement data in green, yellow and red background colors, so that the user can easily understand the health condition of the bearing to take necessary maintenance measures.



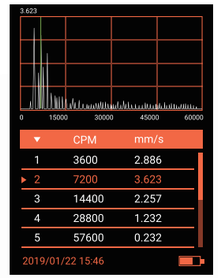
A damaged bearing shows periodic spikes in the time waveform. It can be effectively detected by true peak measurements.

Camera function (standard)

The vPod Pro built-in camera on the back. It can also be attached to a live shot as a record while storing measurement data. This photo will be linked to the measurement data and sent back to the PC as an attachment to the data review.

Spectrum analysis function (optional)

In addition to measuring the overall value of vibration, bearing condition and temperature, the spectrum data is also measured at the same time, and used to diagnose vibration problems. The measured spectrum can be selected from 1 kHz bandwidth of 1600 resolution lines or 10 kHz bandwidth of 6400 resolution lines.



Route-based measurement function (optional)

The route capability of the vPod Pro is full featured; providing a large amount of data in a timely manner. In the Route mode; basic vibration, bearing condition and temperature are measured, while in the background the raw vibration signal is stored for further data analysis. This significant step makes advanced measurement simple because in the iSee computer program, this raw signal is then automatically converted into a time waveform, two sets of spectrum analysis, envelope spectrum, and cepstrum to provide the most complete predictive maintenance monitoring parameters. Quickly track problematic measurement points, trend changes, problem diagnosis and generating reports.