

Compact, simple, agile, precise and powerful

## Smart Meter/Analyzer

Acceleration, Velocity, Displacement, and Envelop

Automatic diagnostics with alerts like:

- Bearing state and Lubricating film
- Vibration Severity according to ISO standard 10816-13
- Recently repaired motors as per IEC 60034

## Spectral measurements

The VibPro can record individual reports or function as a data collector

Balancing, 1 or 2 planes

Multilanguage: English, Spanish, Portuguese or Chinese



The VibPro is a portable vibration meter, of small size, ideal for predictive maintenance and diagnosis of rotating machines.

The VibPro is capable of measuring, processing, displaying, and storing a great variety of values.

The VibPro can function as a stand-alone instrument or its measurements can be downloaded into the software, using it in the data collector function

This high performance unit has a 3.5" and 320x240 pixel resolution color display with high contrast for its best performance in sunlight

This equipment allows to measure spectra from 400 to 25,000 lines in routes and waveforms from 512 to 16,384 samples. This acquires acceleration, velocity, displacement, and envelope measurements, integrating fully digital velocity and displacement. The equipment has an 8GB internal memory that gives an almost unlimited storage capacity for reports in PDF and/or CSV format.

## Technical Specification:

Data Acquisition and Processing  
16 bit analog digital converter (ADC)

Languages: English, Spanish, Portuguese and Chinese

### Frequencies

Frequency Response: 1 Hz a 38.4 KHz

Sampling Frequency: 25.6 Hz a 15 KHz

### Data block lengths

Samples: 512, 1.024, 2.048, 4.096, 8.192, 16.384, 32.768

Spectral lines: 400, 800, 1.600, 3.200, 6.400, 12.800, 25.600

### Entries

AC channel / ICP type input / 10Vpp, Acceleration

Trigger: Tachometer for RPM/ 10 to 20.000 RPM'

DC channel: Generic DC, 0-1V, and temperature

### Digital integration

Velocity and Displacement, with high pass filters programmable

Windows: Hanning / Flat Top / Rectangular

Display 3.5"/ Color / QVGA (240x320)

8-key keyboard

Headphone Out

USB connection (microUSB connector)

Dual core 1GHz processor, Real Time Clock

RAM: 256Mb DDR2

Internal storage: 512Mb Flash + microSD

Operating temperature: 0 to +60 ° C

### Case:

Dimensions: 174mm x 92mm x 39mm

Approximate weight with battery: 415g

Protection: IP 65

Material: ASA + PC-FR (UL 94 V-0)

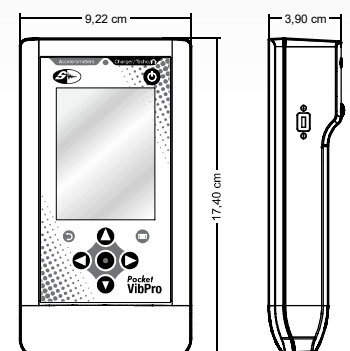
### Power

3.7V / 5100mAh Li-ion battery

Charger: 12VDC/3A

Allows for USB charging

Autonomy: 10 hours



## Main Applications:

### Meter / Analyzer

On the start-up screen check:

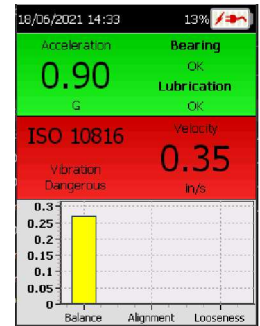
- Acceleration in g RMS
- Envelop in Ge RMS
- Velocity in mm/s (in/s) RMS
- Displacement in  $\mu\text{m}$  (mils) P-P
- Simultaneous display of all variables
- Real-time Measurements



### Automated ISO Standard

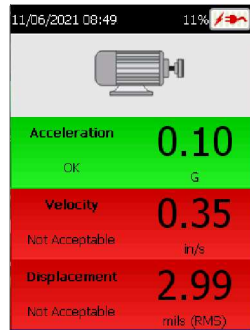
Input RPM and HP and the VibPro will give you:

- Bearing state
- Lubricating film state
- General machine state as per ISO 10816
- Unbalanced condition
- Misalignment condition
- Rotary looseness condition



### Automated IEC Standard

IEC 60034 standard is perfect for releasing recently repaired motors. With this function of the VibPro, the general condition of a motor can be determined according to the IEC 60034 standard according to the acceleration, velocity, and displacement values.



### Data Collector \*

It performs, automatically, measurements of routes loaded from the software DSP Machinery Control. Collects quickly and accurately spectral measurements of Acceleration, Velocity, Displacement and Envelope. The measurements are then downloaded to the software for later analysis. It shows automatic route diagnostics of lubrication state and bearing state.

### Spectra measurement

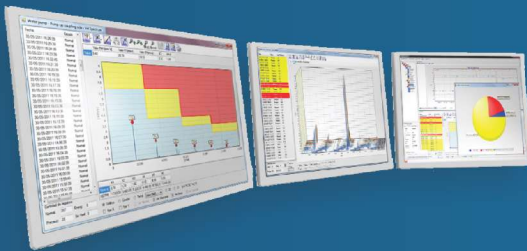
It shows acceleration spectra, velocity, displacement and envelope. It allows you to select different max frequencies control (between 50 to 10,000Hz). Select different lines of resolution (between 400 and 3200).

### Balancing, 1 or 2 planes \*

Fully intuitive and intelligent guided process for the correction of rotor unbalance in 1 or 2 planes, using velocity or acceleration of Velocity or Acceleration. Clearly sequenced in identifiable steps with indication of weight and correction location. Report generation with initial spectrum, final spectrum, and the correction values.

\*Optional

## Software DSP Machinery Control



The DSP Machinery Control software is designed for organization and visualization of measurements in a simple way determining the status of each machine. It has a large number of diagnostic tools that ensures the early detection of mechanical and electrical failures.

The entire line of field meters and analyzers are fully compatible with this software, allowing in a single database to manage all the measurements.

## Compatible equipment:

