

## Versatile, portable vibration analyzer with balancing feature



The AVM 1000DC/P is a single channel device recording vibration time signals together with machine's rotational speed registered on the second channel. Thanks to advanced vibration diagnostics methods the system detects in advance slowly developing machine failures like: bearings or gears damage, imbalance, misalignment and weak foundation. Early warning against failures makes it possible to replace the faulty elements before they cause further, greater damage to the machine.

- Analysis configurable independently for each measurement point: RMS, VRMS, Peek to Peek, Kurtosis, Energy in the band
- Machine balancing feature included
- Harmonic cursor, sidebands, energy in the band
- Frequency/order, envelope frequency/order
- Detection of changes in analysis values in comparison with previous measurement (threshold in percent)
- Single channel vibration measurement + speed measurement
- Accelerometer sensibility: 100 mv/g
- Sampling frequency up to 24 kHz
- Sampling time from 1 second to 5 minutes (limited only by devices memory and CPU's performance)
- Measurement averaging

The AVM 1000DC/P has a very friendly, modern user interface based entirely on a big (7") touch screen. All the fundamental features have been designed in such manner, that it is possible to use them just with the fingers. Only the advanced operations, such as e.g. scaling the graphs, require using the stylus. Efficient industrial computer it is based on, advanced software included and full compatibility with the stationary condition monitoring system make the AVM 1000DC/P a very powerful and versatile device.

### New feature, extended functionality - BALANCING

Wide usage of rotating elements in machines have risen the need for proper machine balancing, which nowadays become a common process. Imbalance may have inconvenient impact on machine bearings and foundation. Moreover, it can lead all machine parts to vibrate and cause serious damage. This is why, in the newest software version we have added machine balancing function. The process contains 4 steps, which require taking a series of measurements:

- initial
- tentative
- correcting
- finishing

### The set comprises of:

- Suitcase
- Analyzer
- Piezoelectric accelerometer compliant with ICP standard (VIS 311)
  - Sensitivity (+/-10%) 100mV/g
  - Measuring range +/-50g
  - Frequency range (+/-3dB) 0.5-10000Hz
- Optical speed sensor
- Sensor mounting brackets

### Technical data :

- Intel Atom Z530 CPU, 2GB RAM, SSD 64GB, Windows 7, LAN 1Gb, Wi-Fi, 1 USB, Audio In/Out
- 7" touchscreen (1024x600, resistive)
- Operation on batteries up to 8 hours
- Sampling frequency 24kHz
- Sensor power circuit control
- The set comprises of:
  - Suitcase
  - Analyzer
  - Piezoelectric accelerometer compliant with ICP standard (VIS 311)
    - Sensitivity (+/-10%) 100mV/g
    - Measuring range +/-50g
    - Frequency range (+/-3dB) 0.5-10000Hz
    - Nonlinearity +/-1%
  - Optical speed sensor
  - Sensor mounting brackets

