

# **VIBXPERT® II**

FFT Data Collector & Signal Analyzer





• Six international awards

# Turn to PRÜFTECHNIK

# for innovative and proven technology

### Pushing limits for 40 years,

PRÜFTECHNIK presents VIBXPERT® II, the latest vibration data collector and signal analyzer based on sophisticated and refined technology.

# A brilliant display yet long periods of use – VIBXPERT® II makes it possible.

VIBXPERT®II combines the proven features of its predecessor with the advantages of rapid processors and a brilliant energy-efficient color display. It demonstrates that the use of powerful components does not rule out low power consumption.

### VIBXPERT® II is ...

- Intuitive to operate on its graphical user interface with effective use of color.
- ▶ Fast thanks to optimized measuring workflows and advanced processor technology.
- **Ergonomic** with a handy design and brilliant color display.
- Powerful due to many practical analysis functions and measuring templates.
- Long-lived with a long battery life and a large data memory.



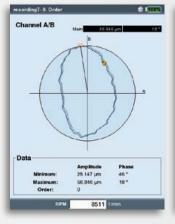
### Interfaces for every environment

Five industrial interfaces, color-coded for easy identification, connect to a wide variety of different sensor types and data links.

Meaningful icons offer guidance in selecting the measurement task.



Shaft vibration analysis with orbit, static shaft position and runout.



Narrow band and broadband monitoring of characteristic frequencies in the spectrum.



Simple to use with a wide range of applications

# Setting standards in vibration data collection

### VIBXPERT® II: Fast – ergonomic – user-friendly



A waterfall spectrum visualizes changes in machine condition over time.

#### Status LEDs

- Traffic light display for the evaluation of results according to the ISO standard or user-defined alarm thresholds
- ▶ Device and battery status

#### Ergonomic keyboard

- ▶ One-thumb operation
- Illumination automatically adjusts to ambient light
- ▶ Non-slip grip

### Brilliant color display

- ▶ 18-bit TFT LCD
- ▶ VGA (480 x 640 pixels)
- Non-reflective
- ▶ Automatic switch-off

### Sturdy housing

- ▶ Light and compact
- ▶ Protection class IP 65

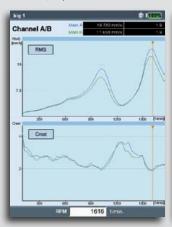
#### Large data memory

▶ 2 GB CompactFlash card

#### Powerful Li-Ion battery

- ▶ 8-hour operating life
- Exchangeable

One- or two-channel coast-down test with RMS, amplitude or waterfall.



Field balancing in two planes. A 'smiley' appears when the balancing grade is reached.



Route-based data collection with a clear display of measuring locations.



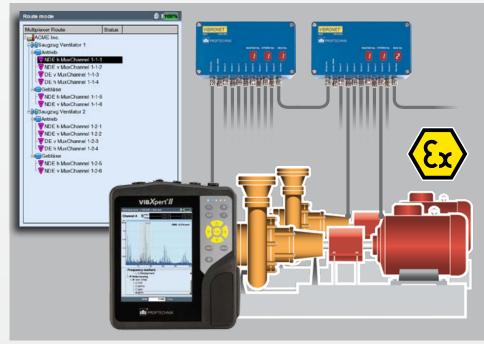
# Special VIBXPERT®II features that simplify your work

# Maximizing system availability - Optimizing production processes

### **Automatic Multiplexer Switch Box**

Make your VIBXPERT® II a mobile Online System by using the VIBRONET® Multiplexer as an automatic switch box for the instrument. One button press and up to 54 measurement locations can be recorded without any interaction. This is the perfect solution for fast and error free data collection at difficult to reach measurement locations.

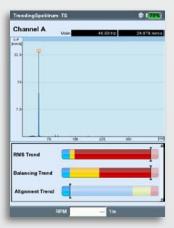
The Multiplexer solution is optionally also suitable for intrinsic safety areas.



One button press and multiple measurement locations can be recorded automatically with the Multiplexer – particularly practical when the locations are inaccessible.

### Bar graph with three-color indicator

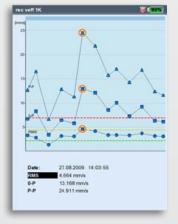
This simple diagnosis assistant will make your life easier: The three-color bar graph shows at a glance whether the machine is OK or if there is a problem. The example below shows a machine with an imbalance.



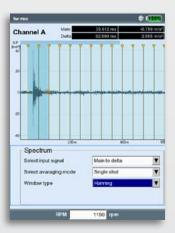
Automatic diagnoses simplify machine monitoring.

### Advanced recording feature

Using VIBXPERT® II as a 'temporary' online system, various measurement tasks can be recorded such as overall values, spectrum, orbits, phase, time waveform, etc. Several trigger conditions are available to automatically start and stop recording of measurement.



Recording of overall velocity signals, RMS, 0-p and p-p.



Transient event recording with the possibility of FTT post processing.

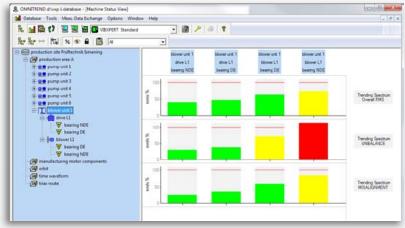
# **OMNITREND® – Condition Monitoring Software**

# Preparing, visualizing, archiving and exchanging data

### Machine Status View

The three brilliant indicator colors of the machine status view keep you on top of the status of your machine park at all times. The display can be set to show absolute values or a percentage of the limit value.

A click on the bar graph opens the associated trend diagram that shows the rate at which damage, if any, has been developing.

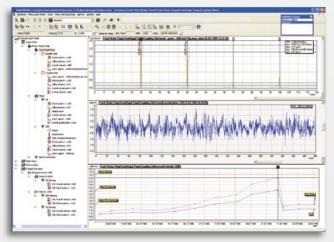


Machine status view – all machine signals at a glance.

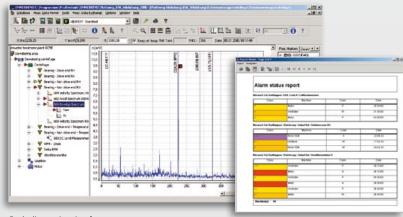
# OMNITREND® software, multi-user or single-user

OMNITREND® manages machine data, programs measurement tasks and routes, and archives the results in a database (MS Access or MS SOL).

A wide range of evaluation and documentation functions are available. These are described more closely in the OMNITREND® brochure.



OMNITREND® supports the evaluation of collected machine data on a PC.



Fault diagnosis using frequency markers in the spectrum.

The report shows color-coded alarm classes.

# VIBXPERT®II at a glance

## Don't miss out on these great features

### Versatile

- ▶ Route-based data collection
- Vibration diagnosis
- One- or two-plane field balancing
- ▶ Acceptance measurement with machine templates
- Troubleshooting
- Multimeter
- Data logging
- Visual inspection
- ▶ Print reports on USB stick
- ▶ EX version (optional)

### Analysis in detail

- ▶ Characteristic overall values & process parameters
- ▶ Time waveform
- Amplitude/envelope spectrum
- ▶ Cepstrum
- ▶ Phase, cross-channel phase
- Orbit
- Static shaft position
- ▶ Runout analysis (shaft vibration)
- ▶ Bump test
- ► Coast-down/run-up test
- Order analysis
- Modal analysis
- Operating Deflection Shape Analysis (ODS)









- Transient capture
- ▶ Long-term recording
- Characteristic frequency markers
- Signal post-processing
- ▶ ISO standards for evaluation

#### Valuable additional features

- ► Handles multiple measurement points automatically (Multiplexer switch box)
- Printing of measurement reports
- Rugged hard case
- Extensive accessories
- Optional measuring functions enabled by a password

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**Quality Service** 

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