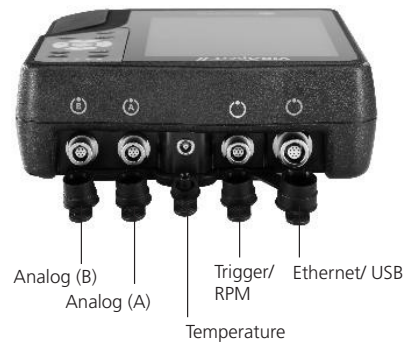
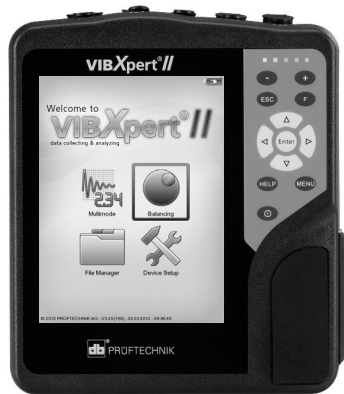


## VIBXPERT II Balancer - Field balancing in one plane or two planes

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VIBXPERT II Balancer is a high performance, full-featured portable measurement device for field balancing of rotating machinery in one plane or two planes. In addition to the balancing procedure, the device provides vibration analyses, resonance tests and phase measurements to support the diagnosis of an imbalance and to determine the optimum operating conditions for the rotor.

VIBXPERT II balancer can be upgraded by password to VIBXPERT II FFT data collector and signal analyzer (see Chapter 1).

### Key features

- **Intuitive** to operate on its graphical user interface and effective use of color.
- **Fast** thanks to optimized measuring workflow 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.

### Application

- One- or two-plane field balancing
- Vibration analysis
- Resonance analysis

### Analysis functions

- Overall values and process parameters
- Time waveform
- Amplitude spectrum
- Envelope acceleration spectrum
- Phase incl. recording
- Bump test, 1-channel
- Coast-down/run-up test
- Characteristic frequency markers
- Signal post-processing for time waveform (overalls)
- ISO standards for evaluation

### Valuable additional features

- Balancing reports can be stored on a USB memory stick and printed out
- Rugged hard case
- Extensive accessories
- Upgrade firmware modules available

### Hardware

- Two true synchronous channel capabilities for balancing in two planes
- Replaceable compact flash card
- Dust and splash proof (IP65) - ideal for use in demanding environments
- Connector for type K thermocouples
- Signal output for strobe light

### Ergonomics

- Large backlit VGA color display for easy reading, comprehensive data presentation and interpretation
- LED traffic light display: results evaluation according to ISO standards or user-defined alarm thresholds
- Daylight sensor controls keyboard illumination
- Easy-to-use navigation key pad
- Icon based user interface
- Color-coded cable connectors
- Online context-sensitive HELP.

### Power supply

- Powered by the latest Lithium-Ion battery technology for at least 8 hours operation
- Smart internal battery charging
- Power management (display illumination)

### Communication

- Fully networkable
- PC connection via USB, Ethernet, RS232.

## VIBXPRT II Balancer firmware

The VIBXPRT II Balancer firmware (VIB 5.317 B) provides all measurement function required to diagnose and correct an imbalance on rotating machinery.

The ‚Balancer‘ firmware can be upgraded to ‚Standard‘ firmware at any time by registering the required VIBXPRT II firmware module (see Chapter 1).

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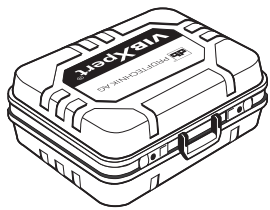
3

### Balancer firmware feature

PARAMETER		VIB 5.317-B
Operating modes	Multimode, Analysis	<ul style="list-style-type: none"> <li>Overall value for acceleration, velocity, displacement</li> <li>Amplitude spectrum w/ fixed parameters for accel., velocity, displacement</li> <li>Run-up/ Coast-down analysis as phase / overall value over RPM (displayed as Bode or Nyquist diagram (phase - RPM))</li> <li>Rotational speed</li> </ul>
	Multimode, Signals	<ul style="list-style-type: none"> <li>Time waveform for acceleration, velocity, displacement</li> </ul>
	Multimode, Advanced	<ul style="list-style-type: none"> <li>Envelope spectrum for acceleration (<math>f_{max}</math>: 800 Hz / HP: 10kHz)</li> <li>Phase measurement w/ recording, 1 channel / 2 channels</li> <li>Temperature</li> <li>Impact test w/o recording of the exciting force, 1 channel</li> <li>Overall value for user-defined quantity (AC)</li> <li>Amplitude spectrum w/ fixed parameters for user-defined quantity (AC)</li> <li>Time waveform for user-defined quantity (AC)</li> </ul>
	Balancing	<ul style="list-style-type: none"> <li>One-plane balancing with vibration minimization in the second plane</li> <li>Balancing in two planes under operating conditions</li> <li>Correction type: Fixed location, Fixed mass, Tape measure, Free correction</li> </ul>
Analysis functions	Cursor	<ul style="list-style-type: none"> <li>Single, delta, harmonics, sub harmonics, sideband cursor</li> </ul>
	Frequency markers	<ul style="list-style-type: none"> <li>Fixed and RPM-variable characteristic frequencies for machines, roller bearings and gearboxes can be displayed in 'Multimode' mode</li> </ul>
	Max 10 values	<ul style="list-style-type: none"> <li>List of the 10 highest amplitudes in the spectrum</li> </ul>
	Result display	<ul style="list-style-type: none"> <li>Linear scaling, Logarithmic scaling (Y axis)</li> <li>Trend, Cascade diagram (waterfall), Polar plot</li> <li>Order scaling for amplitude / envelope spectrum</li> </ul>
Measurement functions	Averaging	<ul style="list-style-type: none"> <li>none (not for temperature),</li> <li>linear (not for time waveform),</li> <li>peak hold (not for time waveform and temperature),</li> <li>exponential (not for time waveform &amp; temperature),</li> <li>time-synchronous (time waveform, balancing)</li> <li>Unlimited averaging if the imbalance pointer is unstable (balancing)</li> </ul>
	Trigger modes	<ul style="list-style-type: none"> <li>Free running, external (time-synchronous), internal</li> <li>Amplitude, Edge, Pre and post triggered.</li> </ul>
	FFT	<ul style="list-style-type: none"> <li><math>F_{min}</math>: 1 / 2 / 10 Hz, selectable acc. to meas. quantity</li> <li><math>F_{max}</math>: 0,2 / 0,4 / 0,8 / 1,6 / 12,8 kHz, selectable acc. to meas. quantity</li> <li>Lines: 800 / 1600 / 3200 / 6400, selectable acc. to meas. quantity</li> <li>Window: Hanning</li> </ul>

**VIB 5.310 B: VIBXPert II balancing package**

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- 2
- 3



VIB 5.328



VIB 8.970

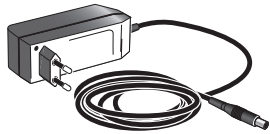


LIT 01.800



VIB 5.310

VIB 5.356



VIB 5.320-INT



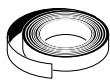
VIB 6.147



VIB 3.420



VIB 5.330 SUSB



VIB 3.306



VIB 6.631



VIB 6.632



VIB 5.436



VIB 5.437-2,9



VIB 5.339



VIB 5.432-2,9



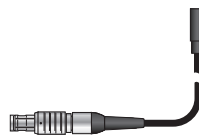
VIB 4.750 - 5



LIT 53.201  
LIT 53.202  
LIT 53.102



VIB 5.317-B



VIB 5.330 MEM

**Description**

The Balancing package includes the basic equipment for single / dual plane balancing and machine diagnostics with VIBXPert II. The instrument features the 'Balancer' firmware.

**Scope of supply**

- VIB 5.310 VIBXPert II instrument, incl. rechargeable battery VIB 5.325
- VIB 5.317-B Balancer firmware certificate
- VIB 5.320-INT VIBXPert II charger
- VIB 5.328 VIBXPert II case
- VIB 5.330MEM Adapter for USB memory stick
- VIB 5.330SUSB USB cable, PC communication
- VIB 5.356 VIBXPert II carrying bag

- VIB 3.306 Reflective tape
- VIB 3.420 Magnetic holder for curved mounting surfaces, 2x

- VIB 4.750-5 Cable extension for trigger cable, 5 m
- VIB 5.339 Cable extension for CLD-type accelerometers, 8 m
- VIB 5.432-2,9 Trigger cable
- VIB 5.436 Spiral cable, CLD-type accelerometers
- VIB 5.437-2,9 Straight cable, CLD-type accelerometers
- VIB 6.147 CLD-type accelerometer for low-speed machinery, 2x
- VIB 6.631 Laser trigger / Laser RPM sensor
- VIB 6.632 Trigger stand
- LIT 53.203.EN VIBXPert II Balancer manual
- LIT 53.103.EN VIBXPert II Balancer short instructions
- LIT 01.800 CD ROM, Condition Monitoring catalogs, brochures, magazines
- VIB 8.970 CD ROM, Condition Monitoring software & firmware (incl. OMNITREND demo ver.)