

VIBXPERT® EX

High performance intrinsically safe vibration analyzer



- ATEX zone 1 rated
- Fast data collection with "trending spectra"
- Highest resolution for in-depth analysis
- Interface to protection systems for additional analysis
- Rugged aluminum housing

VIBXPERT® EX

The new two channel FFT data collector and signal analyzer for hazardous areas

VIBXPERT® EX is a high performance, intrinsically safe, fully featured data collector, vibration analyzer and field balancer for easy condition monitoring and troubleshooting of rotating equipment in explosive environments such as petrochemical plants, refineries, offshore oil rigs, etc.

VIBXPERT® EX collects field data including vibration information, bearing condition, inspection and process data and seamlessly integrates with the PRUFTECHNIK universal OMNITREND® software platform.



- ▶ 102,400 lines of resolution
- ▶ Simple joystick operation
- ▶ Acceptance measurements
- ▶ Runup / coastdown analysis
- ▶ Time waveform analysis
- ▶ Balancing, 1 plane or 2 planes
- ▶ Intrinsic safety II 2 G Ex ib IIC T4

Vibration transducers (accessories)



VIBCODE® – type VIB 8.660-XVS

Hand-held transducer with automatic location identification	reliable identification of the coded measurement location reproducible measurement conditions intrinsic safety: II 2 G Ex ib IIC T4
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Industrial accelerometer – type VIB 6.142 DEX

Mobile industrial accelerometer for standard machines	machine vibration & roller bearing condition (shock pulse) medium and high rotational speed (> 600 rpm) magnetic, bonded or threaded mounting Marking, gas explosion protection  II 2 G Ex ib IIC T4 Dust explosion  II 2 D ExibD 21 T187°C
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Industrial accelerometer – type VIB 6.147 DEX

Mobile industrial accelerometer for 'low-speed' machines	machine vibration low rotational speed (> 120 rpm) magnetic, bonded or threaded mounting Marking, gas explosion protection  II 2 G Ex ib IIC T4 Dust explosion  II 2 D ExibD 21 T187°C
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VIBXPERT® EX – Technical data

Input

Analog, 2x	Voltage (AC/DC, ±30 V max.)
	Current (AC/DC, ±30 mA max.)
	ICP-type accelerometer (2 mA, 24 V max.)
	Current Linedrive (CLD) accelerometer (10 V, 10 mA max.)
Frequency range	DC ... 51.2 kHz (Acceleration from 0.5 Hz)
Dynamic range	96 dB (measurement) / 136 dB (total)
Sampling frequency	up to 131 kHz per channel
Analog, 1x	Thermocouple (type K)
Digital	RPM, Trigger, Keyphaser with pulse and AC signals: 0 V ... +26 V
(1+1 Pulse/Tacho), 1x	or -26 V ... 0 V

Output

Stroboscope control	TTL output
Signal-Out	Connection for headphones to listen to the analog input signal; signal processing (oscilloscope)

Meas. range / Accuracy

Vibration acceleration	depends on the transducer connected
Shock pulse	-10 ... 80 dBsv / ± 3dBsv
RPM	10 ... 200 000 min ⁻¹ / ±0.1% or ± 1 min ⁻¹ (the lower accuracy is applicable)
Temperature type K	-50 ... +1000°C / 1% or ±1°C (the lower accuracy is applicable)

Hardware

Display	LCD, backlit, 1/2 VGA (480 x 320 pixel), 16 grey scales
Battery type	Li Ion rechargeable battery pack (7.2V / 4.8Ah - 34 Wh)
Charging time	< 5 hours in the device or external with optional charging station
Charging temperature	0°C ... +50°C
Memory	Internal: 64 MB RAM; Compact Flash: 1 GB or 4 GB
Dimensions	250 x 220 x 37 mm (LxWxH)
Weight	approx. 2.3 kg
IP rating	IP65, dust and splash-proofed
Temperature range	-10°C ... +50°C (Operation) -20°C ... +60°C (Storage)
Intrinsic safety	 II 2 G Ex ib IIC T4

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PRUFTECHNIK
Condition Monitoring GmbH
Oskar-Messter-Str. 19-21
85737 Ismaning, Germany
Tel.: +49 89 99616-0
Fax: +49 89 99616-300
info@pruftechnik.com
www.pruftechnik.com

A member of the PRUFTECHNIK group