

VIBSCANNER 2 / VIBSCANNER 2 EX – Data acquisition ingeniously simple

VIBSCANNER 2 is the new PRÜFTECHNIK data collector for preventive machine condition monitoring. The handy device convinces with a simple intuitive operation and very short measuring times. And is also available in an intrinsically safe version (VIBSCANNER 2 EX )



Applications

- Data acquisition with guided routine measurement tasks.

Features

- Intuitive operation
- Fast measurement and signal processing
- Comprehensive data acquisition for maximum status information
- Automatic identification of measurement location (RFID, VIBCODE)
- Shockproof and waterproof housing (IP65)
- Speed determination without tachometer
- Triaxial accelerometer

Ordering information

VIBSCANNER 2 is available in the following variants.

Item No.	Variant
VIB 5.210	VIBSCANNER 2, Data Collector
VIB 5.212	VIBSCANNER 2, Triaxial
VIB 5.214	VIBSCANNER 2, VIBCODE
VIB 5.212 EX	VIBSCANNER 2 EX, Triaxial 
VIB 5.210 EX	VIBSCANNER 2 EX, Data Collector 

The items delivered within the box for standard variants are shown in the following overview.

Items in the box

Item No.	CONTENT		Data	Triaxial	VIBCODE
	Description	Details	VIB 5.210	VIB 5.212	VIB 5.214
VIB 5.200	VIBSCANNER 2 instrument incl. battery	p. 29	✓	✓	✓
VIB 2.581.G	VIBSCANNER 2 inspection certificate	---	✓	✓	✓
VIB 5.256	VIBSCANNER 2 pouch	p. 37	✓	✓	✓
VIB 5.228	VIBSCANNER 2 case	p. 34	✓	✓	✓

CONTENT			Data	Triaxial	VIBCODE
Item No.	Description	Details	VIB 5.210	VIB 5.212	VIB 5.214
ALI 3.952	Micro USB cable		✓	✓	✓
ALI 50.651	Power supply / Charger	p. 227	✓	✓	✓
ALI 50.628-25	RFID transponder / tags - 25 pieces		✓	✓	✓
VIB 5.239	VIBSCANNER 2 safety release cable	p. 146	✓	✓	✓
LIT 52.100	VIBSCANNER 2 short instructions	---	✓	✓	✓
VIB 6.142 R	Mobile Industrial accelerometer, standard version,	p. 67	✓	✗	✗
VIB 3.420	Magnetic adapter for curved surfaces	p. 112	✓	✗	✗
VIB 5.236	Sensor cable for CLD-type accelerometer, TNC connector, spiralized	p. 146	✓	✗	✓
VIB 6.655	Triaxial accelerometer for mobile applications	p. 84	✗	✓	✗
VIB 6.656	Magnetic holder for Triaxial accelerometer VIB 6.655	p. 114	✗	✓	✗
VIB 5.237	Sensor cable for triaxial accelerometer, 4P Mini-MIL connector, spiralized	p. 146	✗	✓	✗
VIB 8.660	VIBCODE accelerometer without cable	p. 82	✗	✗	✓

The items delivered within the box for intrinsically safe variants are shown in the following overview.

Items in the box

 CONTENT			Data	Triaxial
Item No.	Description	Details	VIB 5.210 EX	VIB 5.212 EX
VIB 5.200 EX	VIBSCANNER 2 EX instrument incl. battery	p. 29	✓	✓
VIB 2.581.G	VIBSCANNER 2 inspection certificate	---	✓	✓
VIB 5.256 EX	VIBSCANNER 2 EX pouch	p. 38	✓	✓
VIB 5.228 EX	VIBSCANNER 2 EX case	p. 35	✓	✓
ALI 3.952	Micro USB cable		✓	✓
ALI 50.651	Power supply / Charger	p. 227	✓	✓
ALI 50.628 EX0-25	RFID transponder / tags - 25 pieces		✓	✓
VIB 5.239	VIBSCANNER 2 safety release cable	p. 146	✓	✓
LIT 52.100	VIBSCANNER 2 short instructions	---	✓	✓
VIB 6.142 EX0	Mobile Industrial accelerometer, intrinsically safe version	p. 67	✓	✗
VIB 3.420	Magnetic adapter for curved surfaces	p. 112	✓	✗

 CONTENT			Data	Triaxial
Item No.	Description	Details	VIB 5.210 EX	VIB 5.212 EX
VIB 5.236	Sensor cable for CLD-type accelerometer, TNC connector, spiralized	p. 146	✓	✗
VIB 6.658 EX0	Intrinsically safe triaxial accelerometer	p. 86	✗	✓
VIB 6.656	Magnetic holder for triaxial accelerometer	p. 114	✗	✓
VIB 5.237	Sensor cable for triaxial accelerometer, 4P Mini-MIL connector, spiralized	p. 146	✗	✓

Note: The items in the box for all variants are fixed.

Optional items may be ordered for either variant:

Optional accessories

Item No.	Reference	Description- optional accessories	Details
OMNITREND Center PC software			
5347050	VIB 8.200-KEY	OMNITREND Center Client Server	p. 190
5139600 / 5139617	VIB 8.201 / 8.202	Floating user licenses: 1 / 5	p. 190
5139621 / 5139639	VIB 8.203 / 8.204	Fix user licenses: 1 / 5	p. 190
5139642	VIB 8.205	10 additional database licenses	p. 190
5347061	VIB 8.210-KEY	OMNITREND Center single user	p. 190
Cables and connection adapters			
5158435	VIB 5.222	Sensor cable for IEPE-type accelerometer, MIL connector, spiralized	p. 146
5158447	VIB 5.234	Sensor cable for measuring low voltage signals with VIBSCANNER 2, spiralized	p. 146
5158473	VIB 5.238	Sensor cable for IEPE-type accelerometer, BNC connector, spiralized	p. 146

TECHNICAL INFORMATION

Technical data

Parameter	VIBSCANNER 2
	Measurement channels
Number	3 synchronous analog channels (X/Y/Z)
Z channel (0 ... 50 kHz)	-20 .. +20 V, input impedance: 78 kOhm IEPE Linedrive
X/Y channel (0 ... 10 kHz)	-20 .. +20 V, input impedance: 78 kOhm IEPE
Dynamic range	109.5 dB (total)
Sampling rate	up to 131 kHz per channel
Signal processing	3 x 24 bit ADCs
Measuring range / Accuracy	Vibration acceleration: dependent on used sensor Shock pulse: -10 dBsv to 80 dBsv +/- 2 dBsv
Fulfilled standard	DIN ISO 2954:2012 (2-1 kHz, 10 Hz -1 kHz, 10-10 KHz)
	Display
Type	Capacitive touchscreen Optically bonded for high contrast and increased shock resistance
Active area	95 x 54 mm [3 3/4" x 2 1/8"]
Size	10.9 cm [4 1/3"]
Color depth	16 million colors
Viewing angle	< 140°
Operation	Multi touch – gesture control Glove-compatible
Illumination	Background lighting, adjustable
Ambient light sensor	Yes
	Supply
Type	Li ion rechargeable battery
Rated voltage	7.2 V Intrinsically safe version: 7.3 V
Energy density	72 Wh Intrinsically safe version: 50 Wh
Charge time, typical	5.0 h (0 ... 100 % @ 25 °C / 77 °F); Intrinsically safe version: 3.5 h 3.5 h (0 ... 80 % @ 25 °C / 77 °F); Intrinsically safe version: 2.5 h
Charging temperature	10 °C to 40 °C (50 °F to 104 °F)
Operating time, typical	12 h (continuous operation, rechargeable battery 100 %); Intrinsically safe version: 10 h 6 h (continuous operation, rechargeable battery 50 %); Intrinsically safe version: 5 h
Power adapter	100-240 V~, 50-60 Hz (input) 12 V 3 A (output)

Parameter	VIBSCANNER 2
Energy saving mode	Yes
	Computer
Processor	ARM A9 - Quadcore 1 GHz
Operating elements	Touchscreen, ON/OFF key, Enter key
Memory	microSD card, 32 GB for measurement data, permanently installed 2 GB RAM
USB	1 x USB 2.0, device interface
RFID	RFID reader module for PRÜFTECHNIK tags (transponder) ALI 50.628-25; Intrinsically safe version: ALI 50.628 EX025 Complies with ISO 14443a and ISO 15693 Reading distance: 2 to 3 cm (13/16" to 1 3/16")
WiFi	IEEE 802.11a/b/g/n/ac Throughput: < 200 Mbps Security: WPA2
Stroboscope	Frequency range: 0.1 – 1000 Hz Resolution: 0.06 1/min. LEDs: Risk group 1 per IEC 62471
LED	1x RGB LED (display for battery status and charging process)
	Environment / Mechanical system
Connections	Socket for power adapter Micro USB for data cable Plug-in connector (8-pole) for signal cable
Housing	2-component housing: PC and ABS Sheath: TPE, black
Dimensions	203 x 143 x 76mm (LxWxH) [8 x 5 5/8 x 3"]
Weight	approx. 1.0 kg (35.3 oz)
Degree of protection	IP65, dust-proof and spray water-protected
Temperature range	Operation: -10 °C to 50 °C (14 °F to 122°F); Intrinsically safe version: 0 °C to 50 °C (32 °F to 122°F) Storage: -20 °C to 60 °C (-4 °F to 140°F)
Air humidity	0 ... 90 %, non-condensing
Certifications	CE, RoHS, FCC, FCC/IC Intrinsically safe version: CE, RoHS, FCC, FCC/IC NEC 500/505, CEC Annex J18, CEC sect. 18

Firmware features

Parameter	Standard firmware (VIB 5.283-FM)
Route	• Set of measurement tasks for machine condition monitoring and diagnosis. • Automatic identification of the measurement location using RFID transponder tags or VIBCODE sensor system. • Determining the rotational speed without tachometer via evaluation of the measured vibration signal. Verification of the speed value via integrated stroboscope.
Measuring parameters and signals	• Vibration acceleration, velocity, displacement • Shock pulse (bearing condition) • Amplitude Trending Spectrum for machine diagnosis • Envelope Trending Spectrum for bearing condition diagnosis and analysis of shock-excited vibration • Time waveform
Process parameters and visual inspection	• Low-voltage signal (AC/DC: ± 20 V) as user-defined measurement task • Manual input of reading values • Checklists for visual inspection tasks
Averaging	linear, exponential, peak-hold
Alarm bands	Monitoring of narrow band characteristic defect frequencies
FFT	• $F_{\min}$: between 0.5 Hz and 10 Hz programmable • $F_{\max}$: between 100 Hz and 51.2 kHz programmable • Lines: 400, 800, 1600, 3200, 6400, 12800, 25600 • Window: Rectangular, Hanning, Hamming, Flattop, Kaiser
SETUP & EVALUATION	
Units	ISO and US units, selectable
Comments	Given events with editable comments
OPERATION	
User interface	• Touchscreen with gesture control • User guidance via graphical interface with realistic machine images and display of the measurement location position. • Online help
Languages	German, English, French, Spanish, Italian, Portuguese, Dutch, Polish, Turkish, Russian, Japanese, Chinese