FLUKE Reliability

TECHNICAL DATA

VIBSCANNER® 2

The next-gen high-speed vibration data collector

PRÜFTECHNIK

Boost efficiency and data quality with the VIBSCANNER 2

VIBSCANNER 2 is the ultimate tool for fast and accurate machine vibration measurements. This high-speed data collector heightens efficiency and data quality, and, in just a quarter of the time of a standard tool, precisely measures available data in three axes. Equipped with a triaxial sensor, VIBSCANNER 2 requires only one measurement point. Then, with just the click of a button, it begins collecting machine data.

Even untrained personnel can effectively use this tool to collect machine data. RFID technology inside VIBSCANNER 2, plus RFID hangtags on the assets, make it easy to find the right measurement point. It displays on the system's bright touchscreen. An intuitively guided user interface helps users avoid becoming the cause of measurement errors. With just a single button to activate and obtain measurements, handling is smart and secure.

You can utilize the integrated stroboscope to determine the exact rotation speed of your asset.

Key benefits of the VIBSCANNER 2

- **Quick, accurate measurements**
  This system delivers measurements up to four times faster than the industry standard.
- **Easy to use**
  Users get a highly intuitive user interface with a simple push of a button to collect machine data.
- **Speedfinder**
  You can always save the exact rotation speed from variable speed machines with your vibration data.

Tips for increasing machine life:

In a nutshell, machine vibration out of tolerances means a reduced machine lifecycle. To help extend asset health, heed these tips while using the VIBSCANNER 2:

- Measure machine vibration regularly to review the health of your assets.
- Adapt a maintenance schedule to the unique needs of the asset and avoid unnecessary costs.
- Spend less on spare parts and reduce unexpected downtime.
- Extend the life of parts such as bearings, couplings, sealings, etc.
- Save on labor costs and increase worker safety with fewer work orders.

The "Triax-Effect"

VIBSCANNER 2 minimizes the problem of finding the right measurement points on a machine. With the PRUFTECHNIK triaxial sensor, just one measurement point is required instead of three different ones. This "Triax-Effect" enables the VIBSCANNER 2 to save up to four times the amount of measurement time compared to industry-standard tools while increasing data quality.



Speed: the root cause of all fault patterns

A unique speedfinder tool is an exclusive feature of the VIBSCANNER 2 (and VIBSCANNER 2 EX). This tool directly evaluates the exact rotational speed of any machine from the raw measurement data. The rotational speed is crucial to determining fault patterns, particularly when operating on assets with variable rotational speeds. With the speed-finder tool, no additional measurements are necessary. Time is saved on-site, and the vibration analysis specialist has all available data in a single set.



Stay on track with RFID

After installing the on-site route on the handheld computer, RFID tags on the assets will help tool users quickly locate the right machine and its predefined measurement points. All information from the RFID hangtag is displayed on the screen. Just deploy the triaxial sensor in the right direction, as illustrated on the sensor housing, and push the button to begin collecting machine data.



Let the experts do the rest

Once the on-site route is finished, all machine data easily can be transferred from the handheld device to a PC via USB connection. However, machine data analysis is a job best suited for experts only. PRUFTECHNIK not only trains these specialists worldwide but also offers services to read and analyze machine data and provide advice on how to proceed regarding specific issues. PRUFTECHNIK provides global machine vibration experience by using the knowl-edge and know-how of its ISO CAT I-IV specialists.

Here's how to keep it simple: You measure and have PRUFTECHNIK evaluate your data.



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General specifications		
Measurement Channels	Number	3 synchronous analog channels (X/Y/Z)
	Z channel (0 ... 50 kHz)	-20 .. +20 V, input impedance: 78 kOhm IEPE Current 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
	Nominal voltage	7.2 V (Ex device: 7.3V)
	Energy density	72 Wh (Ex device: 50 Wh)
	Charge time, typical	5.0 h (0 ... 100 % @ 25 °C / 77 °F); Ex device: 3.5 h 3.5 h (0 ... 80 % @ 25 °C / 77 °F); Ex device: 2.5 h
	Charging temperature	10 °C ... 40 °C [50 °F ... 104 °F]
	Operating time, typical	12 h (cont. operation, rech. battery 100 %); Ex device: 10h 6 h (cont. operation, rech. battery 50 %); Ex device: 5h
	Power adapter	100-240 V~, 50-60 Hz (input) 12 V 3 A (output)
	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 transponder - ALI 50.628-25; EX device: ALI 50.628 EX0-25 Complies with ISO 14443a and ISO 15693 Reading distance: 2...3 cm (13/16" ... 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)

General specifications		
Environment / mechanical system	Connections	Socket for power adapter Micro USB for data cable Plug-in connector (8-pole) for signal cable
	Housing, non-EX device	2-component housing: PC and ABS Sheath: TPE, black
	Housing, EX device	Housing: PC Sheath: TPE, black, antistatic, conductive
	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	IP55
	Temperature range	Operation: -10 °C ... +50 °C [14 °F ...122 °F]; EX device operation: 0°C ... +50°C [32 °F ...122 °F] Storage: -20 °C ... +60 °C [-4 °F ... +140 °F]
	Air humidity	0 ... 90 %, non-condensing
	Certifications	CE, RoHS, FCC, FCC/IC; EX device: CE, RoHS, FCC, FCC/IC, ATEX, IECEx, NEC 500/505, CEC Annex J18, CEC sect. 18



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