PRÜFTECHNIK

VIBGUARD®

Advanced Condition Monitoring

40 Years db PRÜFTECHNIK 1972 2012

- **fast**
- **synchronous**
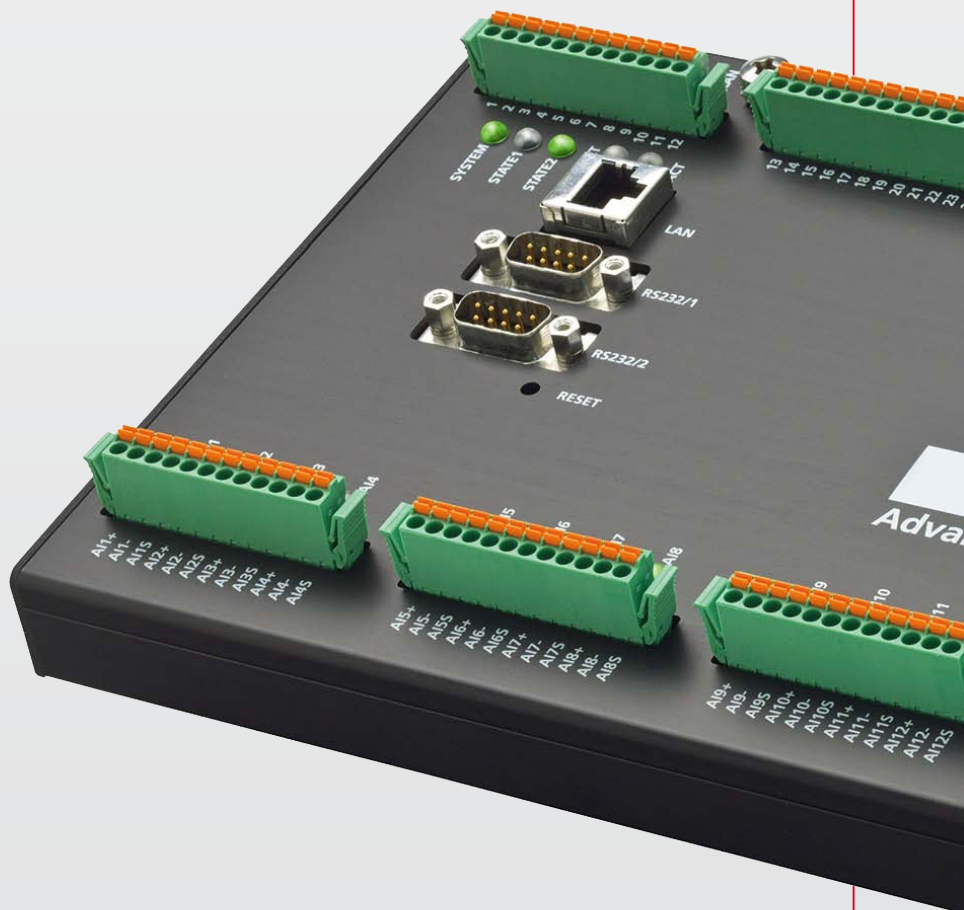- **reliable**

VIBGUARD® – the safe system for protection of your machines

Seamless monitoring for greater machine safety

PRÜFTECHNIK values safety! VIBGUARD® is a Condition Monitoring System that not only protects your machines from damage but also provides production security and improves the efficiency of your assets.
Try it for yourself!

The facts about VIBGUARD®

▶ 20 synchronous measurement channels

▶ Continuous data recording on every channel

▶ Tachometer pulse channels for triggered measurements

▶ Automatic check for sensor and cable defects

▶ Digital inputs and outputs

▶ Networkable (Ethernet, Modbus TCP)

▶ Compact and robust

▶ No active cooling required

Intelligent data management

Every channel is able to measure continuously two time signals or one envelope curve signal and – at intervals of one second – up to 6 characteristic overall values, such as vibration severity and bearing condition. The 20 measurement channels supply sufficient data every day for seamless documentation of the machine status.

Intelligent data management ensures that important information is not lost and that the flow of information does not become overwhelming. This keeps the network load at an acceptable level and data can even be sent over a wireless connection without problems.

VIBGUARD® – monitoring at top level

especially developed for your critical machines

VIBGUARD® – a new level of Online Condition Monitoring that for the first time allows critical machines with highly dynamic processes and complex monitoring tasks to be included in a reliability-oriented maintenance schedule.

VIBGUARD® is ...

▶ **fast**
Powerful processors, optimized measurement routines and intelligent data management place VIBGUARD® in the formula-1 class of online systems.

▶ **synchronous**
VIBGUARD® measures continuously and simultaneously on up to 20 channels. This allows it to be used to monitor even complex machines with many variable operating parameters.

▶ **safe**
VIBGUARD® protects your systems from sudden failure by seamless recording and evaluation of all status parameters.

▶ **autonomous**
Data recording, evaluation and alarming are all included in the VIBGUARD® module.

▶ **modular**
VIBGUARD® can be expanded at any time. Connect additional measurement channels or install additional VIBGUARD® modules in the switching cabinet.

▶ **flexible**
The measurement channels can be configured to measure vibration and process values. The digital high and low pass filters can be set as required to derive the appropriate characteristic overall values.
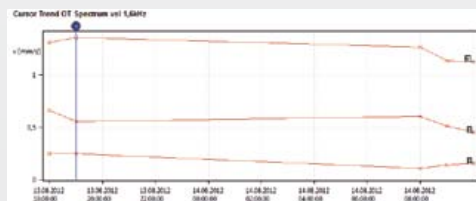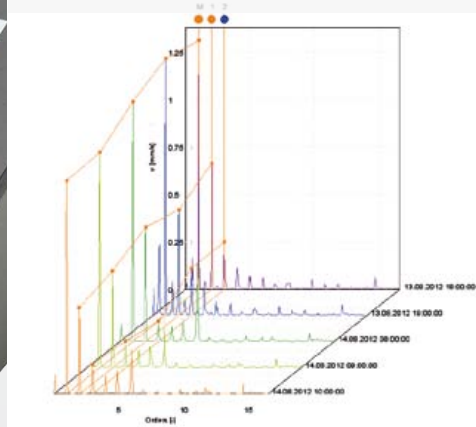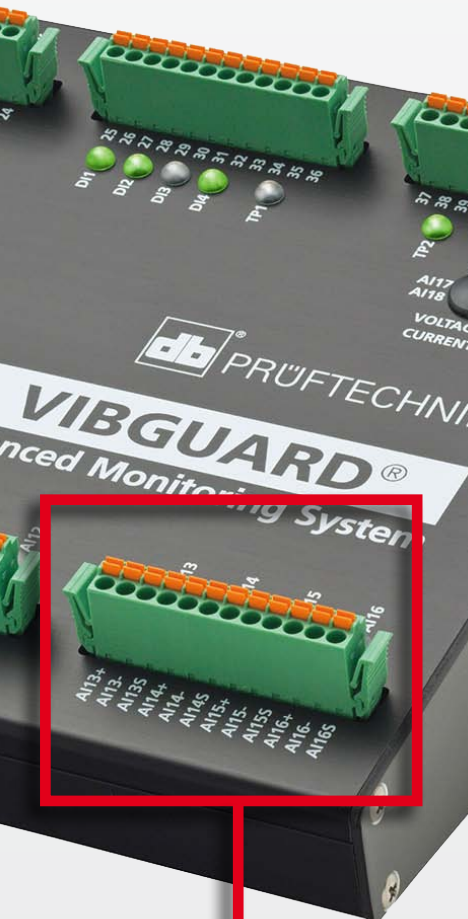
VIBGUARD® Viewer – the software

... for convenient and efficient working ...

A reliable partner on the PC

VIBGUARD® Viewer is the perfect companion for configuration of measurement channels, data analysis and reporting. A clear structure makes it very easy to use and provides a working environment where the user feels at home immediately. Advanced functions and the perfectly tailored user interface fulfill even the highest requirements.

Convincing arguments

- Clearly arranged interface.
- Context-dependent perspectives for improved overview and simple operation.
- Multi-screen operation: separate windows can be distributed over multiple monitors.
- Open reporting formats (HTML, DOC,...).
- Single or multi user version
- Kinematics model for calculation and management of characteristic machine frequencies – including complex systems
- Practical analytical tools: waterfall, cursor family, frequency markers, trend forecast, ...
- Data analysis with reference to up to three operating states.
- High operating speed with optimized data organization.
- User administration with project-dependent roles.
- Online manager for convenient configuration of measurement tasks.
- 'To-do' outputs for tasks distribution and action-related system messages.

Practical installation help

The terminal diagram shows the assignment of sensors and cables for the specific connection. A valuable reference during preparation for installation or for documentation.

... with many perspectives

VIBGUARD® Viewer adapts its interface to the application and displays only the content that you currently require for your work.

For example, when measurement data is analyzed, the software shows the tree view of the machines and a measurement data diagram. For administration, configuration and reporting, the software shows the applicable views.

Analysis
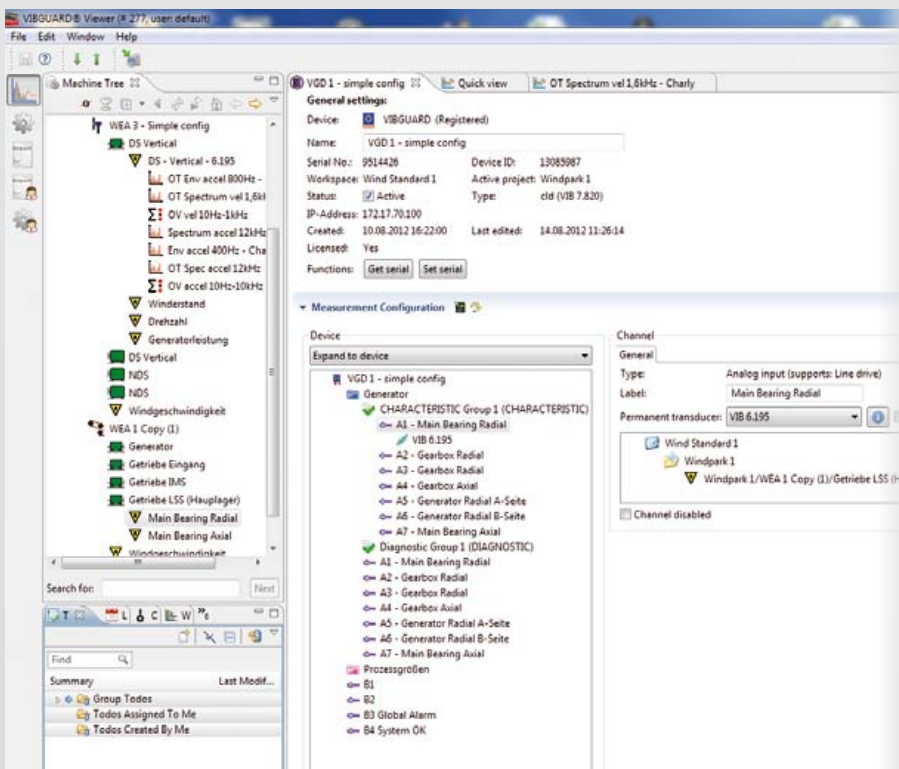Visualization and evaluation of measurement data

Configuration
Setup of measuring points and measurement tasks

Administration
Management of projects and system components

Report
Creation of interactive reports and tasks

Central system settings

The measurement tasks, the trigger and alarm conditions and additional parameters for data management are defined in the online manager for every channel.

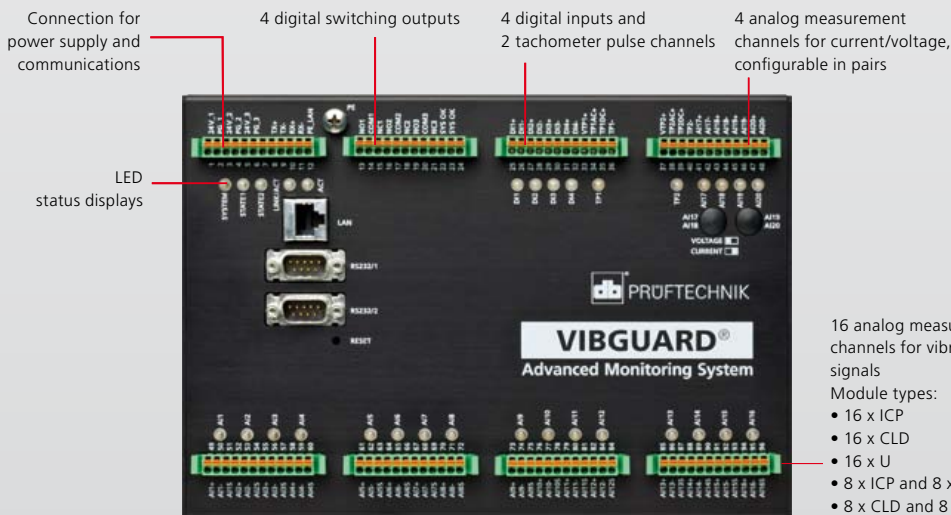All settings are hardware-based and do not require connection to the machine and measuring point hierarchy.

Interactive elements save time

A click of the mouse opens every referenced element. For example, click on a measurement and the corresponding diagram opens, click on a sensor and the sensor editor opens.

VIBGUARD® – part of the PRÜFTECHNIK strategy

VIBGUARD® forms an integral part of the PRÜFTECHNIK Condition Monitoring concept – consisting of handheld instruments and on-line monitoring systems. This allows the optimum monitoring solution that meets budgetary and technical requirements to be realized for each machine park.

Hardware modules - VIB 7.8...

Measurement channels	20 synchronous channels each with one ADC
Dynamic range	110 dB at 24 bits
FFT lines	standard: 6400 / analysis: 102400
Channel monitoring	continuous over a separate signal path on every channel
Digital inputs	4
Speed inputs	2
Digital outputs	4 relay outputs
Communication	TCP/IP, Modbus TCP
Comm. ports	Ethernet (100 Mbit); 2x RS232
Power supply	24 VDC / 0.5 A
Memory capacity	1 GB
Housing material	aluminium
Degree of protection	IP 22, in switching cabinet without protective housing IP 65, in protective housing

Connection for power supply and communications

4 digital switching outputs

4 digital inputs and 2 tachometer pulse channels

4 analog measurement channels for current/voltage, configurable in pairs

LED status displays

16 analog measurement channels for vibration signals
Module types:
• 16 x ICP
• 16 x CLD
• 16 x U
• 8 x ICP and 8 x U
• 8 x CLD and 8 x U

▶ Compact housing suitable for standard rail

▶ Plug-in terminals for easy cable connections

Three models

▶ VIBGUARD® module for installation in a switching cabinet on a standard rail

▶ VIBGUARD® in the compact PRÜFTECHNIK protective housing

▶ VIBGUARD® in the standard PRÜFTECHNIK protective housing

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Q PROVEN QUALITY
▶ Made in Germany
▶ Global Presence
▶ Qualified Support
▶ Quality Service

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