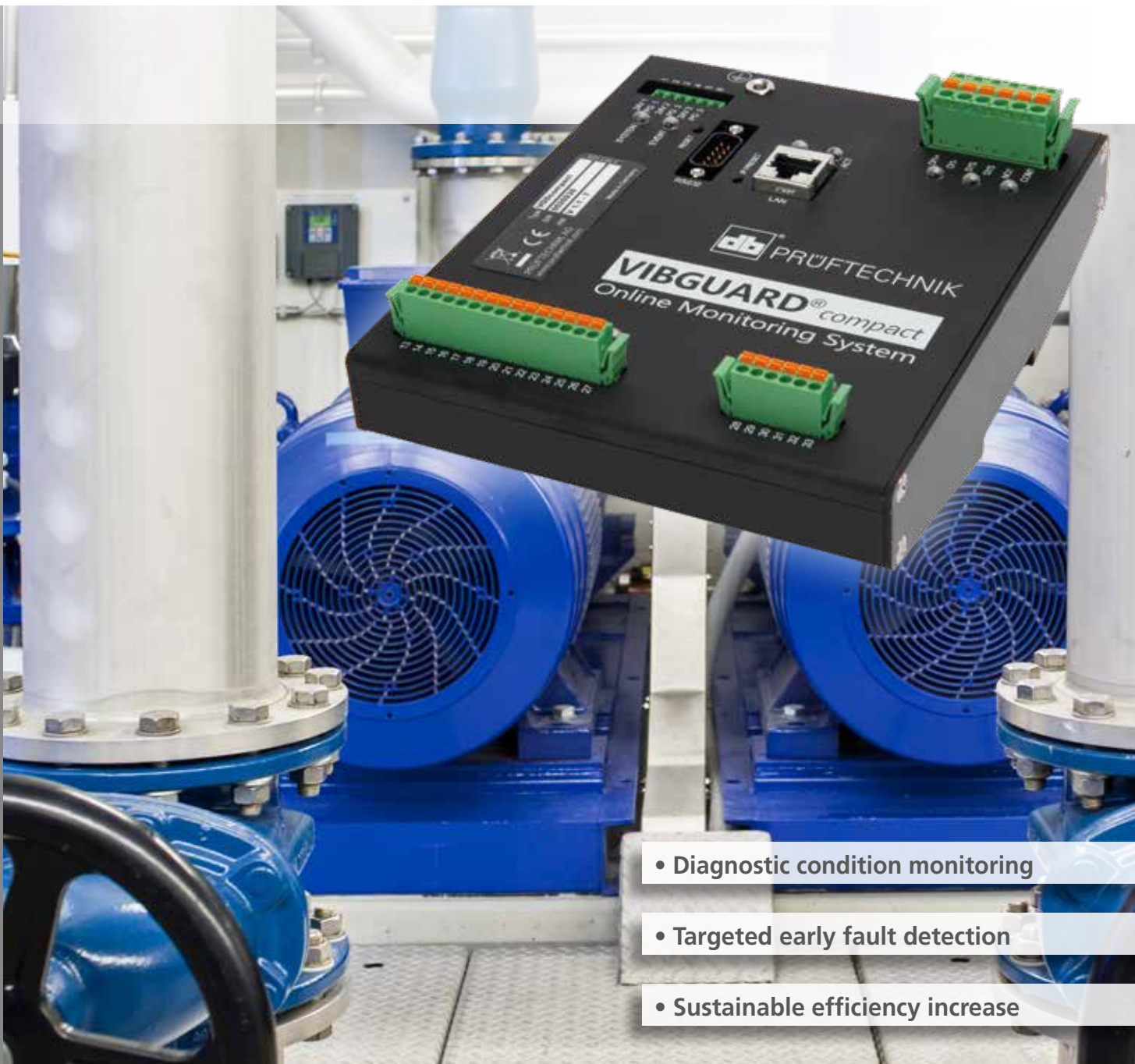


# VIBGUARD<sup>®</sup> compact

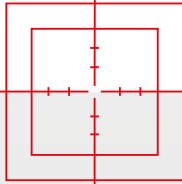
Online Condition Monitoring for Individual Assets



- Diagnostic condition monitoring
- Targeted early fault detection
- Sustainable efficiency increase

# VIBGUARD® compact

## Intelligent Online Condition Monitoring for Individual Assets



PRUFTECHNIK Condition Monitoring increases the efficiency of your machines. VIBGUARD® compact is an intelligent online condition monitoring system for diagnostic condition monitoring, capable of meeting the high demands of machines and assets with high availability and frequently changing operating conditions. Thus VIBGUARD® compact provides premium asset drive unit and machinery manufacturers, along with their operators, with the benefits of predictive maintenance combined with Industry 4.0 requirements.

### Welcome to Industry 4.0

The 6 measuring channels each provide in-depth diagnostic data (e.g., time signals or envelope signals) as well as up to 6 overall readings – for example overall vibration value or bearing condition – for continuous monitoring purposes.

To put it simply, "Big Data" alone would not be enough for us. Smart preprocessing and analysis of generated "machines state data" is both demand and reality for the VIBGUARD® compact.

The VIBGUARD® compact 'Event Recorder' captures and saves relevant results automatically and comprehensively, thereby providing a fundamental basis for full machine diagnostics. Its bidirectional Modbus TCP interface allows VIBGUARD® compact to be integrated to Industry 4.0 environments as an intelligent online condition monitoring system in the blink of an eye.

### Highlights of the VIBGUARD® compact

- ▶ 6 fully synchronous measuring channels
- ▶ Continuous data acquisition on each channel with a 130 kHz sampling rate
- ▶ TachoPulse input for speed synchronous measurements (order tracking, orbit analysis)
- ▶ Continuous parallel data acquisition for overall value monitoring and diagnostic monitoring
- ▶ Overall value trends storage with adjustable data reduction
- ▶ Event recording
- ▶ Digital input and output for integration of control signals (e.g., triggers from diagnostic measurements)
- ▶ Network capable (Ethernet, Modbus TCP)
- ▶ Multicolored LEDs on all measuring channels for fast channel status evaluation (OK, alarm state, sensor error)
- ▶ Compact design – can be rail mounted



# VIBGUARD® compact

More security, more efficiency, more Industry 4.0

## Perfect for high demands

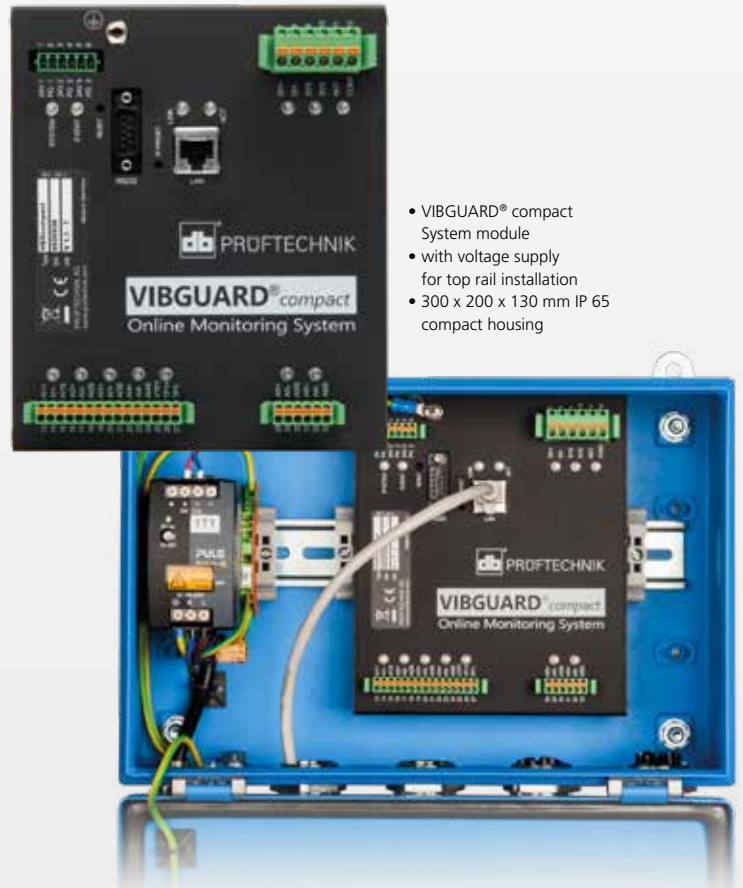
As an intelligent online condition monitoring system, the VIBGUARD® compact performs complex monitoring tasks in real time, particularly for critical single aggregates with high availability requirements, variable operating conditions, and complex components. All 6 measuring channels are designed as highly dynamic analog input channels and can be configured with either ICP® vibration sensors or voltage input signals for process parameters.

## Multiple fields of application

The VIBGUARD® compact is perfect for diagnostic condition monitoring of extruders, large fans, multiphase or vacuum pumps, turbo compressors, roller stands and centrifuges. In connection with speed and digital additional single aggregate information, VIBGUARD® compact can ensure reliable monitoring, and can protect against unplanned downtimes, secure production, and sustainably increase the efficiency of the aggregate.

## Variant rich

The VIBGUARD® compact adapts to its point of use – as a system module for a cabinet, or pre-installed to an IP 65 compact housing.



- VIBGUARD® compact System module
- with voltage supply for top rail installation
- 300 x 200 x 130 mm IP 65 compact housing

## Wi-Fi Ready Solution

The VIBGUARD® family of devices can easily be fitted with a Wi-Fi client for wireless monitoring applications. In connection with an industrial secure router and one or more wireless AP/bridge(s), the Wi-Fi enabled VIBGUARD® ensures reliable, high-speed data transfer on concurrent channels.

Multiple industrial wireless AP/clients using IEEE standards are compatible. We recommend systems that comply to local radio regulations.

For more information, please contact your local PRUFTECHNIK partner.



### Wireless client specifications:

- Power supply: 24V
- Range: up to 100m to access point
- Separate bridges, routers and additional equipment may be required

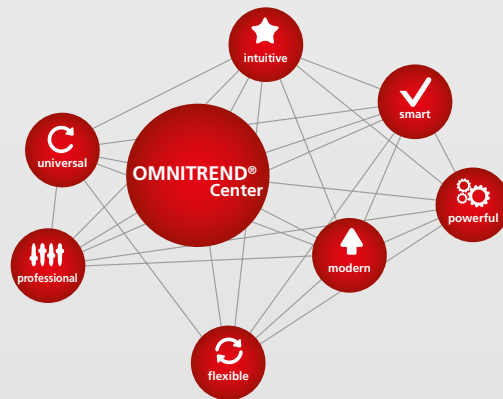
# VIBGUARD® compact

## Technical data

Number of channels	6 (either ICP/U/I)
synchronous measuring channels	all
Speed inputs	1
Digital inputs	1
Digital outputs	2 relay outputs
Dynamic	110 dB for 24 Bit
FFT number of lines	Up to 102,400
Interfaces	Ethernet 100Mbit, 1x RS232
Services	Modbus TCP
Data storage	2 GB Flash, 256 MB RAM
Supply voltage	24V / 0.5A
Housing	Aluminum IP22 or housing

## OMNITREND® Center

With OMNITREND® Center, VIBGUARD® compact uses a modern, powerful, and easy to use software platform for configuration and measured data analysis.



**PRUFTECHNIK offers solutions in the following areas:**



**Alignment Systems**



**Condition Monitoring**



**Nondestructive Testing**



**Service & Support**

# www.pruftechnik.com

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