

VIBGUARD® portable

Operating manual



VIBGUARD® portable

Operating manual

Series VIB 7.800-MOB/VIB 7.800-MOBIPC
Firmware version 1.x



Date: November 2015
Article number: LIT 78.202.EN
Translation of the German manual

This manual and the product described therein are protected by copyright. All rights reserved by the authors. The manual may not be copied, reproduced, translated or made accessible to a third party in any form, neither in whole nor in part. Claims against the authors with respect to the product described in this manual are excluded. The authors assume no liability for the accuracy of the content of this manual. Moreover, the authors shall not be liable for any direct or indirect damage whatsoever resulting from use of the product or of this manual, even if the authors have pointed out the possibility of such damage.

The authors shall not be liable for any defects in the product. The warranty and limitation of liability also apply to sales partners and distributors.

All trademarks and registered trademarks referred to in this manual are denoted accordingly and are the property of the respective owners. Trademarks that are not specifically denoted as such may nevertheless be protected.

© PRÜFTECHNIK Condition Monitoring; All rights reserved

Contents

Chapter 1: Getting started	7
1.1 Checking the delivery	7
1.2 Service addresses	7
1.3 About this manual	8
Chapter 2: Safety	9
2.1 Safety symbols	9
2.2 Information for the owner/operator	11
2.3 Information for the operating personnel	12
2.4 Intended use	13
2.5 Residual risks and protective measures	14
Declaration of conformity	17
Chapter 3: Technical data	19
3.1 VIBGUARD portable case	19
3.2 VIBGUARD modules	20
Chapter 4: Description	23
4.1 System components	23
4.2 Interface panel	24
4.3 Industrial PC (optional)	25
4.3.1 LED status displays on the industrial PC	25
4.4 LED displays on the VIBGUARD module	26
4.5 Case	28
Chapter 5: Commissioning	31
5.1 Local requirements	31
5.1.1 Installation location	31
5.1.2 Tools and consumables	31
5.2 Connecting the sensors	33
5.3 Connecting and switching on the power supply	34
5.4 Connecting and switching on the laptop	34
5.5 Starting the industrial PC	34
5.6 Transfer of the measurement configuration	35
5.7 Function check	35
Chapter 6: Operation	37
6.1 Control elements	37
6.2 Operation	37

Chapter 7: Maintenance and troubleshooting	38
7.1 Care and maintenance	38
7.2 Accessories.....	38
7.3 Troubleshooting.....	39
Chapter 8: Decommissioning	40
8.1 Shutdown of VIBGUARD portable.....	40
8.2 Disconnecting sensors and cables	40
8.3 Disposal.....	40

Chapter 1: Getting started

1.1 Checking the delivery

Please check the delivery without delay for damaged or missing parts. In case of incomplete delivery or defective parts, indicate the respective items on the freight documents and contact the carrier or your local PRÜFTECHNIK partner.

VIBGUARD portable package without industrial PC, VIB 7.800-MOB

- VIBGUARD module, VIB 7.8xx*, including power supplies and switch, mounted on standard rail in a transport case.
- Supply cable
- Network cable
- Carrying strap
- Case keys (2)
- Operating manual, LIT 78.202.EN

* the module variant used can be selected as needed

VIBGUARD portable package with industrial PC, VIB 7.800-MOBIPC

- as above, and additionally with integrated industrial PC.

Optional

- Measuring equipment, such as sensors, connecting cables for sensors, mounting adapters.
- OMNITREND Center PC software (client-server or single license version)

1.2 Service addresses

If you have any questions, please contact us:

Hotline: +49 89 99616-0
E-mail: info@pruftechnik.com

Service address: PRÜFTECHNIK Condition Monitoring GmbH
Oskar-Messter-Str. 19-21,
85737 Ismaning, Germany

Note

When calling our hotline, please have the serial number of the system at hand.

1.3 About this manual

This manual is an integral part of the product and must be retained and updated throughout the entire service life of the product.

This manual must remain with the product if the owner or user changes.

Exclusion of liability

The information and data in this manual are provided for information purposes only. Although great care has been taken in the creation of this manual, errors cannot be ruled out.

PRÜFTECHNIK Condition Monitoring GmbH shall not be liable for direct or indirect damage resulting from errors, omissions or inaccuracies in this document.

PRÜFTECHNIK Condition Monitoring GmbH shall not be liable for damage resulting from failure to comply with this manual or parts thereof.

Document structure

This manual contains information on the commissioning, operation, maintenance and disposal of the system.

This manual has been created in accordance with the requirements of the German standard DIN EN 82079-1:2012.

Document layout

The text in this manual is formatted according to its purpose or function:

Explanatory text: Continuous text without indentation

Instructions, lists: List with • (bullets)

General notes: Continuous text with a separating line above and below and the signal word **Note**.

Note

Safety symbols are described in the **Safety** section.

Definitions

Abbreviations are used for the following designations:

- VIBGUARD portable Condition Monitoring System = “VIBGUARD portable” or “System”.
- Sensors, cables, mounting pad = “Measuring equipment”.

Chapter 2: Safety

VIBGUARD portable was designed and built in strict compliance with the required harmonized standards and other technical specifications. The system therefore conforms to the state of the art and ensures maximum safety.

Nevertheless, dangers can arise during commissioning and operation and must be avoided.

Always comply with the general safety instructions in this chapter and with the warnings throughout the manual. The safety instructions and warnings explain how to protect yourself and other persons as well as property and equipment from harm.

2.1 Safety symbols

In this manual

 **CAUTION**

Instructions for the prevention of injury.

Failure to comply with these instructions can result in minor or moderate injuries.

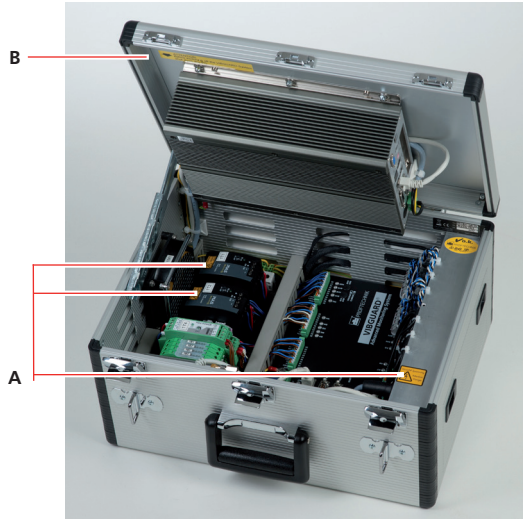
Note

General information

for preventing damage to property.

At the system

The safety symbols on the VIBGUARD portable are shown in the following illustration. Always comply with the safety symbols and do not cover or remove them.

**A Caution! Voltage**

One yellow label on the power supply feedthrough and on each of the two power supplies in the case.

B ATTENTION! Before switching off the VIBGUARD system shut down the IPC.

Yellow sticker in case lid "Before switching off the VIBGUARD system shut down the IPC"; only in systems with industrial PC.

2.2 Information for the owner / operator

Obligations of the owner / operator

During operation of the system, maximum safety can only be achieved if all necessary measures are taken. It is the obligation of the owner/operator to ensure that these measures are properly planned and implemented.

In particular, you must ensure that

- the system is used as intended;
- the system is operated only when in proper working condition;
- the system is installed only by sufficiently qualified and authorized personnel;
- the operating personnel are trained regularly in all relevant matters of occupational safety and environmental protection and are familiar with the operating manual and in particular the safety information contained therein;
- all safety and warning notices affixed to the system are not removed and remain legible.

Compliance with the operating manual

You must ensure that this operating manual

- is read, understood and complied with by the operating personnel for all work to be performed;
- is stored together with the system and is available to the operating personnel at all times;
- is handed over to any future owner of the system.

Training

Instruct the operating personnel regularly on the application of all safety regulations in safety instructions. It is your obligation to ensure compliance with all safety instructions.

You must also ensure compliance with all general statutory and other binding safety and accident prevention regulations, as well as the general safety instructions and specific warnings.

Ensure that the operating personnel work in a safety-conscious manner.

2.3 Information for the operating personnel

Qualification of the operating personnel

Commissioning and operation may be carried out only by persons who have been trained and authorized accordingly.

The operating personnel must read and act in accordance with the operating manual.

Personal protective equipment

No personal protective equipment is required during commissioning and normal operation of the system.

Rules for normal operation

The operating state of the VIBGUARD system module is displayed by the SYSTEM LED. In normal operation it lights up green, in case of a disruption orange and if the power supply is interrupted it is off.

The operating state of the industrial PC is displayed via the PWR-LED on the front. In normal operation it lights up green. If the power supply is interrupted, it does not light up.

- Regularly check for the following:
 - Is there any visible damage to the system components and the measuring equipment?
 - Are the cables pinched or damaged?
- Defects must be repaired or reported to the owner/operator without delay. The system and the measuring equipment must be in proper working order when in operation!
- In case of malfunctions, disconnect the system from the power supply and secure it against restarting.

If the system is shut down, this will not affect the operation of a machine. Therefore, the machine can continue operating during a shut-down.

2.4 Intended use

VIBGUARD portable is a mobile condition monitoring system for troubleshooting and condition diagnosis of machines with rotating components.

The following characteristic values are measured:

- Wide and narrow band overall vibration values
- Time signals
- Spectra
- Temperature
- Process variables

The system operates continuously and measures the signals on up to 20 channel simultaneously. It is therefore suitable for machines with dynamic operating behavior in which numerous operating and process parameters have to be recorded simultaneously and at short intervals.

Operate the system only within the specifications stated in this manual. PRÜFTECHNIK shall not be liable for any damage resulting from incorrect use of the system.

2.5 Residual risks and protective measures

VIBGUARD portable is proven to be safe if used as intended. Operating errors or improper use of the system can result in the following:

- Personal injuries
- Damage to the system or machine

CAUTION

Risk of injury from electric shock!

When the case is open there is a danger of injury from high voltage (240 V).

- Observe the safety marking of the live components in the case.
- Disconnect the power supply cable prior to performing any installation, repair or maintenance work on the system.

CAUTION!

Danger of injury from laser beam

The speed sensor uses a red laser beam for the RPM measurement. In the event of incorrect assembly, the laser can shine into the eyes, resulting in injury.

Align the speed sensor so that the laser beam poses no danger.

CAUTION!

Danger of injury due from improperly installed cables

Install cables so that they do not pose a trip risk. Use cable ties and Velcro tapes to fasten the cables.

⚠ CAUTION**Danger of injury from crushing!**

When adjusting or closing the lid of the case it can slam shut and hands or fingers can be crushed on the edge of the case.

- Do not let go of the lid until it has locked securely into place.

When raised past the topmost locking position the locking mechanism is released to allow closing of the lid.

- Use both hands when closing the lid.
- Do not apply pressure to the edge of the case when adjusting or closing the lid.

Note**Danger from incoming analog signals**

If analog process signals are fed without electrical isolation, this can result in potential differences that can damage measuring inputs and cause faulty measurements.

- Feed only galvanic isolated analog process signals.
- Use suitable buffer amplifiers.

Note**Damage from electrostatic discharge!**

During installation, repair and maintenance of the system the electronic components can be damaged by electrostatic discharge if touched.

- Connect an earth strap if contact cannot be ruled out.

Note**Damage from pollution!**

In a harsh industrial environment, system components can be damaged by impurities or moisture when the case is open.

- Keep the case closed and locked whenever possible.
 - Before opening the case, take suitable measures to prevent impurities or moisture from entering the case.
-

Note**Faulty measurement due to electromagnetic interference**

High-frequency radiation and electrostatic discharge (ESD) near the sensors and the measuring equipment can cause faulty measurements.

- Do not install sensor cables in power cable ducts.
 - Choose a setup location with minimal emissions.
-

Note**Damage due to excessive impact loads**

The case can be damaged mechanically in case of accidents at the installation location.

- Secure installation location properly with warning tape.
- In case of installation on a platform, make sure that the platform is sufficiently stable and that the case is safeguarded against falling.

CERTIFICATE

Declaration of conformity

according to EN ISO/IEC 17050-1



PRÜFTECHNIK Condition Monitoring GmbH,
Oskar-Messter Str. 19-21, 85737 Ismaning, Germany
hereby declares that the product

Designation: **VIBGUARD portable**
Product no.: **VIB 7.800-MOB / VIB 7.800-MOBIPC**
Description: **Mobile online condition monitoring system**

conforms to the applicable European Directives and standards. The product fully complies with the relevant safety requirements defined in the directives.

Directive

EMC Directive 2004/108/EC

Applied standards

DIN EN 61326-1:2006

EMC, General requirements

DIN EN 61326-2-2:2006

EMC, Special requirements for use in
low-voltage power supply networks

DIN EN 55011 Class A/B, DIN EN 61000-3-2, 61000-3-3

EMC emissions


DIN EN 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-11

EMC, Interference immunity

The CE mark was applied in 2013.

Ismaning, October 24, 2013

Place, date


Johann Lösl – Managing Director

Chapter 3: Technical data

3.1 VIBGUARD portable case

PARAMETER		VIB 7.800-MOB	VIB 7.800-MOBIPC
ENVIRONMENT / CASE	Temperature range	-20 °C ... +60 °C	-20 °C ... +45 °C
	Weight	approx. 11 kg	approx. 14 kg
	Protection type	IP 64	
	Dimensions, case (L x W x D)	445 x 220 x 355 mm	
	Material, case	Aluminium	
	Connections	20x TNC (sensors), 8x M12 (dig. I/O; tacho/pulse), 1x power plug, 1x Ethernet (RJ45)	

Note

See next page for technical data on the built-in VIBGUARD module.

Information on all other components, such as industrial PC, switch and power pack, is available on request.

3.2 VIBGUARD modules

PARAMETER		VIB 7.800-PS	VIB 7.810-PS	VIB 7.815-PS
Inputs and outputs	Analog inputs	20 synchronous channels: 16 x vibration, 4 x process variable (Process channels can be configured in pairs for voltage or current signal)		
	Signal type	16 x U, 4 x U/I	16 x U (ICP), 4 x U/I	8 x U (ICP) + 8 x U, 4 x U/I
	Sensor types	Sensor with current/ voltage output, Displacement sensor	ICP sensor, Sensor with current/voltage output, Displacement sensor	
	Digital inputs	4 optocoupler inputs 0–30 V, threshold 3 V		
	Tacho/pulse inputs	2 frequency inputs ± 30 VDC and AC. Threshold DC: 2.5 V (default)		
	Digital outputs	2 relay changeover contacts, configurable, 30 VDC/30 VAC/2 A		
	System OK output	Relay NC, 30 VDC/30 VAC/2 A		
	Ethernet	Baud rate: 100 MBit, half duplex		
	Serial port	2x RS232, 115200 baud		
	Services	Modbus/TCP		
LED status display	20x Analog-IN, 1x System, 2x Status, 2x Ethernet, 4x Digital-IN, 2x Tacho-IN			
Measurement	Dynamic range	110 dB @ 24 bit		
	Sample rate	131 kHz/50 kHz bandwidth		
	FFT lines	6400 (standard), 102400 (analysis)		
	Measurement range, process channel	± 24 V or 4–20 mA, ± 20 mA		
	Measurement range, vibration channel	± 24 V	--	± 24 V
General	System supply	24 \pm 6 VDC/0.5 A		
	Sensor supply	CLD (Current LineDrive), ICP		
	Memory	Flash: 1 GB (expandable), RAM: 128 MB		
	Housing material	Aluminum		

PARAMETER		VIB 7.820-PS	VIB 7.825-PS
Inputs and outputs	Analog inputs	20 synchronous channels: 16 x vibration, 4 x process variable (Process channels can be configured in pairs for voltage or current signal)	
	Signal type	16 x I (CLD*), 4 x U/I	8 x I (CLD) + 8 x U, 4 x U/I
	Sensor types	CLD sensor, Sensor with current/voltage output, Displacement sensor	
	Digital inputs	4 optocoupler inputs 0–30 V, threshold 3 V	
	Tacho/pulse inputs	2 frequency inputs ± 30 VDC and AC. Threshold DC: 2.5 V (default)	
	Digital outputs	3 relay changeover contacts, 30 VDC/30 VAC/2 A	
	System OK output	Relay NC, 30 VDC/30 VAC/2 A	
	Ethernet	Baud rate: 100 MBit, half duplex	
	Serial port	2x RS232, 115200 baud	
	Services	Modbus/TCP	
LED status display	20x Analog-IN, 1x System, 2x Status, 2x Ethernet, 4x Digital-IN, 2x Tacho-IN		
Measurement	Dynamic range	110 dB @ 24 bit	
	Sample rate	131 kHz/50 kHz bandwidth	
	FFT lines	6400 (standard), 102400 (analysis)	
	Measurement range, process channels	± 24 V or 4–20 mA, ± 20 mA	
Measurement range, vibration channels	--	± 24 V	
General	System supply	24 \pm 6 VDC / 0.5 A	
	Sensor supply	CLD (Current LineDrive), ICP	
	Memory	Flash: 1 GB (expandable), RAM: 128 MB	
	Housing material	Aluminum	

Chapter 4: Description

4.1 System components

A VIBGUARD module with standard components

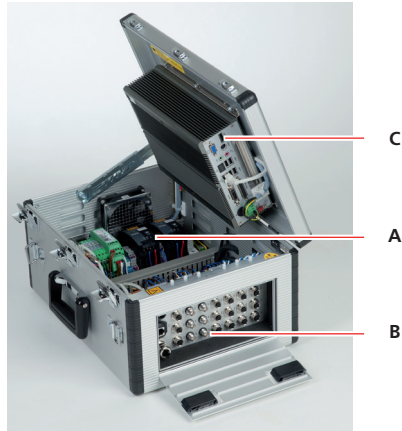
For details, see below.

B Interface panel

Interfaces for sensor, data and supply connections.
For details, see 4.2

C Industrial PC

Optional; mounted in case lid.
For details, see 4.3



A1 Power supplies

For supply of the VIBGUARD module and the industrial PC.

A2 Power sources (24 V)

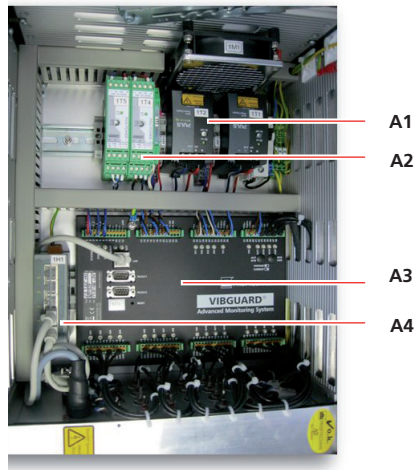
For supply of displacement sensors
(1T3: +24 V/1T4: -24 V)

A3 VIBGUARD module

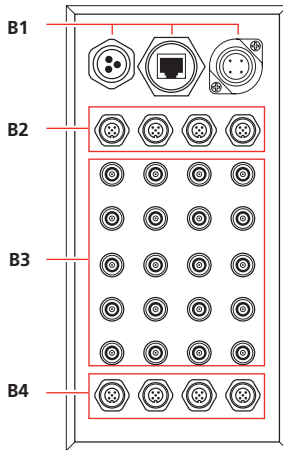
Central system unit for data acquisition, processing and storage.

A4 Switch

For network connection.



4.2 Interface panel



B1 Network / supply

Left: Unused/reserve (e.g. antenna)
Center: ETH – Ethernet connection
Right: 100–240 VAC power supply

B2 Digital outputs (M12)

DO1...DO3: digital switch outputs
SYS: System OK

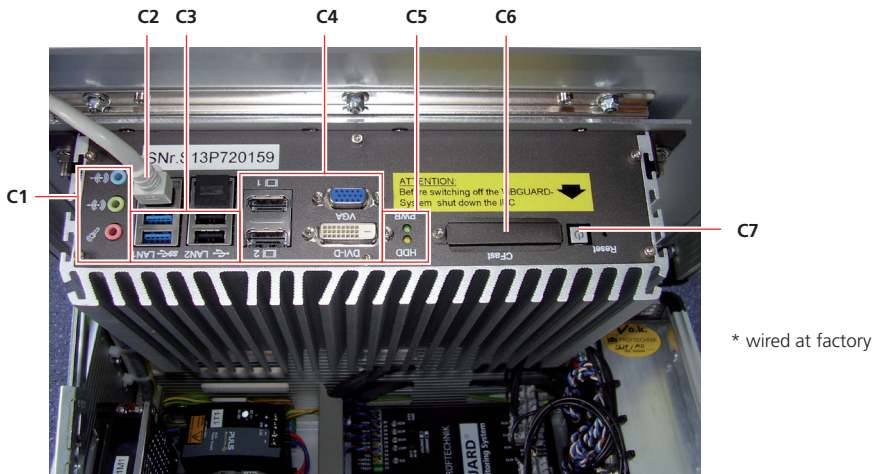
B3 Analog inputs (TNC)

AI1...AI16: Analog sensor inputs
AI17...AI20: Analog process channels

B4 Dig. Inputs / keyphaser (M12)

TP1...TP2: Tacho/pulse inputs.
DI1/2 ...DI3/4: Digital control signals

4.3 Industrial PC (optional)



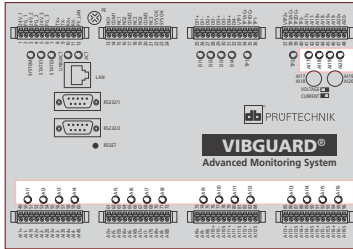
* wired at factory

- | | |
|--------------------------------|-------------------------------|
| C1 Microphone / headset | C5 LED status displays |
| C2 Network* (LAN1) | C6 CF memory card |
| C3 USB ports, 4x | C7 On/Off switch |
| C4 Ext. Video inputs | |

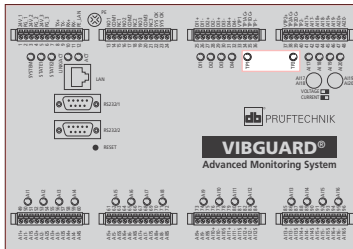
4.3.1 LED status displays on the industrial PC

LED status, industrial PC	
Display	Status
HDD	Flashes yellow: Access to hard disk
PWR	Lights up green: Power supply OK

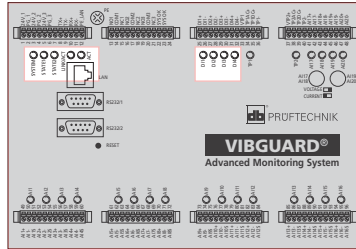
4.4 LED displays on the VIBGUARD module



Analog inputs – AI1 to AI20 LEDs	
Display	Status
Off	Channel not configured
Green	Sensor ok
Orange flashing	Sensor disruption
Green, orange flashing	Pre-warning
Orange	Warning
Red	Alarm



Tacho/pulse inputs – TP1-/TP2 LEDs	
Display	Status
Off	Channel not configured
Green flashing	Sensor ok, pulses are being registered
Orange flashing	Sensor disruption
Green, orange flashing	Pre-warning
Orange	Warning
Red	Alarm

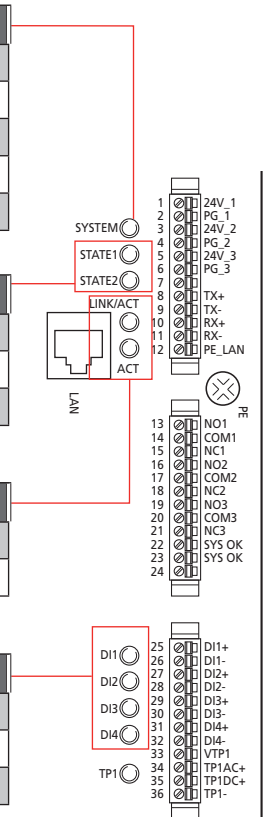


SYSTEM LED	
Display	System status
Off	VIBGUARD is without power (switched off)
Orange	VIBGUARD is initializing
Orange flashing	VIBGUARD is updating
Green	VIBGUARD is ready for operation

STATE 1/STATE 2 LED		
Display	STATE 1 System status	STATE 2 System status
Off	VIBGUARD is not OK	User defined
Green	VIBGUARD is OK	User defined

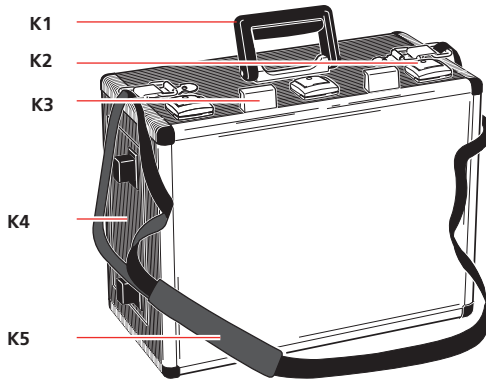
LAN LEDs		
Display	LINK ACT	ACT
Green	VIBGUARD is connected to LAN	Data transfer active

Digital inputs – DI LEDs	
Display	Signal status
Green	Static signal is present
Green flashing	Dynamic signal is present



4.5 Case

The measurement hardware is housed in a robust aluminum case. The interfaces to the sensors and external components are in a side compartment.



K1 Carrying handle

K2 Locks (3), lockable

K3 Handle for lid

K4 Side compartment

K5 Carrying strap (optional)

⚠ CAUTION

Danger of injury from crushing!

When adjusting or closing the lid of the case it can slam shut and hands or fingers can be crushed on the edge of the case.

- Do not let go of the lid until it has locked securely into place.

When raised past the topmost locking position the locking mechanism is released to allow closing of the lid.

- Use both hands when closing the lid.
- Do not apply pressure to the edge of the case when adjusting or closing the lid.

Note

Damage to system due to excessive impact loads

The case can fall off of a platform.

- Secure case against falling.
- Check platform for sufficient stability.

Opening / closing the case

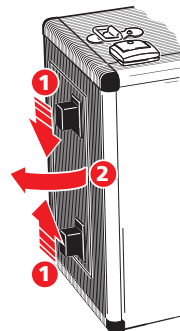
- Place the case on a stable surface so that the lid can be opened upward.
- Unlock the three locks, if locked, and open the case.
- Use both handles to open the lid until the hinge locks into place.
- To close the case, use both handles and open to the stop to release the locking mechanism.
- Carefully close the lid.
- Close and lock the locks.

Opening the side compartment

- Set the case upright so the side compartment lid can be opened.
- Simultaneously push both black locking levers on the side compartment inward (1).
- Open the side compartment lid (2).

Note

When the side compartment is open, the two locking mechanisms support the lid in horizontal position. This relieves the load on the hinges.



Chapter 5: Commissioning

5.1 Local requirements

VIBGUARD portable must be set up and operated in the vicinity of the machine to be measured.

5.1.1 Installation location

The following conditions must be fulfilled for correct operation:

- Connection for power supply according to specification:
100–240 VAC / 2.5–1.3 A / 50–60 Hz
- Permissible ambient conditions must be fulfilled (see Technical Data).
Strong electromagnetic fields, such as from generators, electric drives, high-voltage cables, etc. must be eliminated from the immediate vicinity of the system.
- Stable, vibration-free surface or platform with sufficient load bearing capacity.
- Installation location must be able to be secured against unauthorized access.
- Optional: Wireless data transfer (for detailed requirements contact PRÜFTECHNIK support: support@pruftechnik.com).

5.1.2 Tools and consumables

The tools and consumables you need depend on which sensors are used:

- Fasten the vibration sensors and speed sensors to the machine using the magnetic holders included in the scope of delivery.
- For shaft vibration measurements it is preferable to measure the signals of the already installed displacement sensors at the measuring amplifier outputs. If additional installations are necessary you will need suitable mounts and assembly tools.

Note**Danger from incoming analog signals**

If analog signals are fed without electrical isolation, this can result in potential differences that can damage measuring inputs and cause faulty measurements.

- Feed only galvanic isolated analog signals.
 - Use suitable buffer amplifiers.
-
- To install the cables you will need cable ties or Velcro fastening tapes as well as suitable labels for the respective measuring sections.

5.2 Connecting the sensors

- Mount the sensors on the machine.

Note on speed sensor

Align the sensor to the measurement mark on the shaft so that no reflections or other light sources impair the data acquisition.

CAUTION!

Danger of injury from laser beam

The speed sensor uses a red laser beam for the RPM measurement. In the event of incorrect assembly, the laser can shine into the eyes, resulting in injury.

Align the speed sensor so that the laser beam poses no danger.

- Connect the sensors to VIBGUARD portable.

CAUTION!

Danger of injury due from improperly installed cables

Install cables so that they do not pose a trip risk. Use cable ties and Velcro tapes to fasten the cables.

- Mark the cables on both ends with suitable labels according to the designations in the measurement program (e.g. A11, A12,...).
- Tighten the cable connections by hand to prevent damage to the threads.
- Check to ensure that the connections are tight.

5.3 Connecting and switching on the power supply

- After connecting the sensors, connect the system to the power supply. Use the supplied power supply cable.
- Switch on the power supply.
The system starts up and the VIBGUARD module starts the measurement configuration that is currently present on the system. If it is outdated, upload the new measurement configuration to the system (see below).
- Check the LED status on the VIBGUARD module.
The system is ready for operation when the green LED lights up. Watch the LEDs on the analog channels for fault alarms (see section 4.4).

5.4 Connecting and switching on the laptop

- Connect the laptop to the Ethernet interface and switch it on.

Note

In the version without an industrial PC (VIB 7.800 MOB) the laptop is used for system configuration and data queries. For this purpose the OMNITREND Center software is installed on the laptop.

5.5 Starting the industrial PC

(only in version VIB 7.800 MOBIPC)

- Switch on the industrial PC (IPC) and wait until it boots.

Note

In the version with an industrial PC the IPC is used for system configuration and data queries. For this purpose the OMNITREND Center software is installed on the IPC.

- Contact the IPC via a remote desktop connection. The connection data (IP address, gateway) can be found in the system documentation.

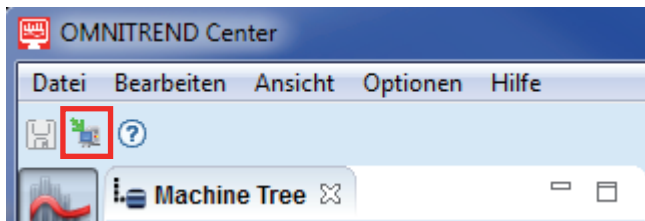
5.6 Transfer of the measurement configuration

- Start the program 'OMNITREND Center'.
- Check the following prior to transfer of the measurement configuration:
 - Do the labels in OMNITREND Center match the labels at the measurement locations/cable section?
 - Are the measurement locations connected at the analog input that is configured in the measurement configuration?
 - Are the connections for digital inputs and outputs configured, labeled and connected correctly?
- Contact the VIBGUARD module. The connection data (IP address, gateway) can be found in the system documentation.
- Transfer the measurement configuration.

The measurement configuration starts automatically as soon as the transfer is complete.

5.7 Function check

- Manually download the measurement data from the system. To do so, click 'Upload to PC' in the OMNITREND Center Client.

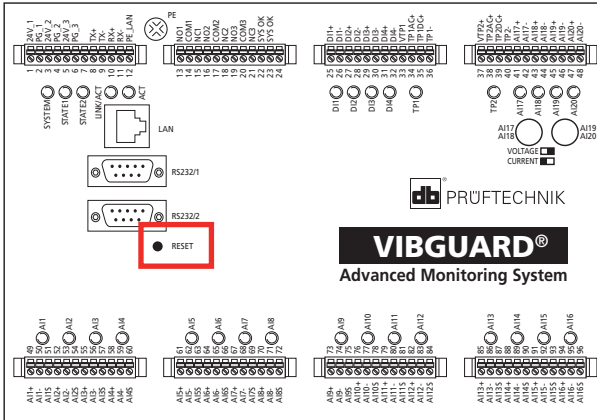


- Check the measurement data for plausibility.

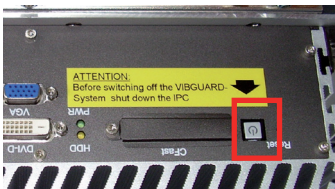
Chapter 6: Operation

6.1 Control elements

There are no control elements on the VIBGUARD module except the RESET button for restarting the system.



On the industrial PC the only control element is the On/Off button.



Note

Danger of data loss!

Switch off the industrial PC before disconnecting VIBGUARD portable from the power supply.

6.2 Operation

The system is operated only by means of the OMNITREND Center software.

Chapter 7: Maintenance and troubleshooting

7.1 Care and maintenance

Like every electronic measuring device VIBGUARD portable should be handled with care.

If necessary, the housing can be cleaned with a moist cloth to maintain readability of the two status displays and the safety symbols. Damaged cables and plugs must be replaced immediately.

VIBGUARD portable is maintenance-free. Handle the industrial PC like any normal PC. Backups of the measurement database should be made regularly.

7.2 Accessories

The following accessories are available for VIBGUARD portable:
VIB 8.200 OMNITREND Center PC software, client-server
VIB 6.632 Stand for laser trigger sensor VIB 6.631

Note

For different versions of other sensors and cables, refer to the PRÜFTECHNIK Condition Monitoring Sensor Catalog (LIT 01.700), which you can request from us free of charge or download from the PRÜFTECHNIK website.

7.3 Troubleshooting

Symptom: Sensor status LED on the VIBGUARD module shows a fault alarm (flashing orange).

Possible causes: Sensor line interrupted.

Solution:

- Check the connections on the sensor and system to ensure they are tight.
- Replace damaged cables.

Symptom: The system status LED STATE 1 on the VIBGUARD module does not light up.

Possible causes: Fault in the VIBGUARD module.

Solution:

- Contact the PRÜFTECHNIK TechSupport hotline:
+49 89 99616-0

Symptom: Data from the RPM measurement not plausible.

Possible causes: RPM sensor not mounted correctly. Incorrect measurements due to reflections, sunshine or other external light sources.

Solution:

- Check the installation of the sensor and realign the sensor, if necessary.

Chapter 8: Decommissioning

8.1 Shutdown of VIBGUARD portable

- Only for VIB 7.800 MOBIPC:
Shut down the industrial PC. Press the On/Off button.
- Switch off the power supply for the system.
- Unplug the power plug.

8.2 Disconnecting sensors and cables

- Remove the sensors from the measurement locations.
- Disconnect the cables. Make sure to store the cables without kinking them.
- Remove all cable holders, cable ties, etc. from the measurement location.

8.3 Disposal



VIBGUARD portable is intended for industrial use only. Sensors and connecting cables therefore may **not** be disposed of in public recycling centers. After the end of the useful life you can dispose of the system, the sensors and the connecting cables through PRÜFTECHNIK:

PRÜFTECHNIK Condition Monitoring
Oskar-Messterstr. 19-21
85737 Ismaning, Germany
WEEE reg. no. DE 72273578

Printed in Germany LIT 78.202.11.2015.0EN

VIBGUARD® und OMNITREND® are registered trademarks of PRÜFTECHNIK AG. The information provided is subject to updates and revisions, especially as a result of technological developments, without prior notice. Reprinting, including excerpts, is permitted only with the written permission of PRÜFTECHNIK Condition Monitoring GmbH.

© 2014 by PRÜFTECHNIK Condition Monitoring



Faithful companion

VIBSCANNER® is the ideal partner for your daily measuring and inspection rounds. Integrated transducers record all important machine signals. Process parameters can be supplied as analog signals or entered manually. A checklist of visual inspection tasks, e.g. "Check oil level", assists in tracing faults. FFT and balancing is also included. Graphic user guidance and intuitive joystick navigation make operating child's play.

VIBSCANNER® – Machine evaluation, data collection & balancing



Machine vibration
Bearing condition

Condition monitoring made feasible

Economical modular components and simple installation make condition monitoring with VIBREX® feasible even for smaller production aggregates. Alarm-activated switching via PLC and direct mA signal output allow machine control and measurement trending by external systems.

VIBREX®: On-site monitoring and control for 1 or 2 locations



wwwatch me now

VIBROWEB® lets you monitor and analyze your machine condition from around the globe. It is the first telediagnosis system in the world to take advantage of Internet technology for communication and data transmission. When the situation at hand demands immediate attention, the VIBROWEB® instantly notifies the specialists by eMail or SMS.

VIBROWEB®: Telediagnosis via Internet & mobile phone

Productive Maintenance Technology



PRÜFTECHNIK
 Condition Monitoring GmbH
 Oskar-Messterstr. 19-21
 85737 Ismaning, Germany
 www.pruftechnik.com
 Tel. +49 89 996160
 Fax +49 89 99616300
 E-mail: info@pruftechnik.com

A member of the PRÜFTECHNIK group