

VIBRONET[®] Signalmaster

Online Condition Monitoring for
industrial plants and distributed operating facilities



- Cost-effective installation for more than 120 measurement locations
- Intelligent, ATEX compliant system architecture
- Integration of Condition Monitoring and Automation levels
- More than 10 years proven reliable systems installed worldwide

Affordable Online Monitoring with V



Why online?

Online systems pay off:

- Less unplanned downtime
- Optimal planning of manpower
- Reduced spare part warehousing
- Avoidance of secondary damage
- Improved plant safety

Online systems enable:

- Reliable alarm notification
- Monitoring of inaccessible measurement locations
- Machine condition analysis by external experts (Telediagnosis)
- Integration of the measurement data in control systems.



First steps ...

VIBRONET® Signalmaster is the ideal introductory solution for the online monitoring of standard aggregates such as motors, pumps, fans and simple gear transmissions. Premounted in a robust switching cabinet, the system is designed for quick and easy commissioning, while being easily expandable.



... or upgrade

Whether you are already using our of-line systems or VIBRONET® Signalmaster is your first step into Condition Monitoring, you can expand either way by using OMNITREND®, the software platform which assures compatibility between all PRÜFTECHNIK Condition Monitoring tools. Think about the time, effort and cost you will save in training and implementation.

All functions at a glance



Vibration



Bearing condition



Temperature



Variable speed



Process parameters



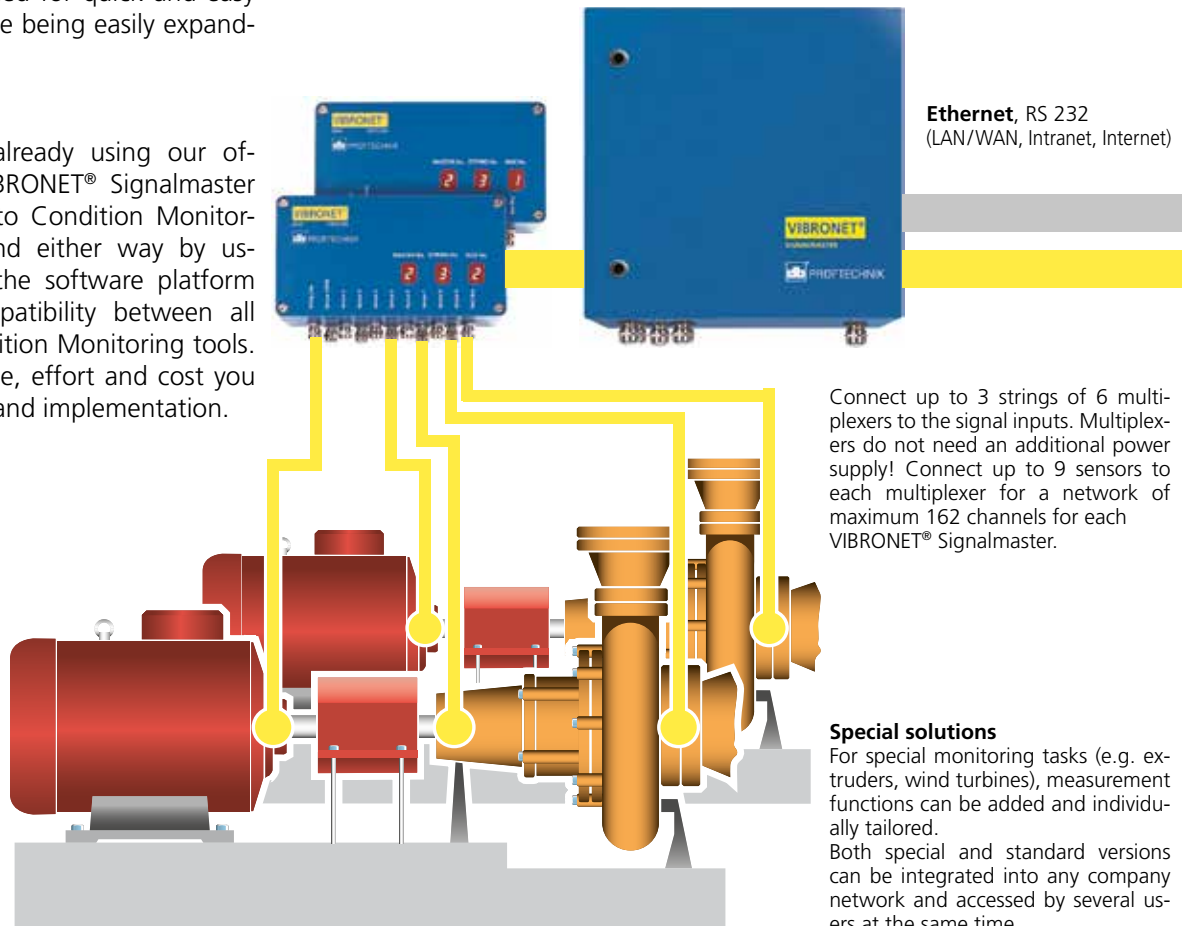
FFT spectrum



Envelope

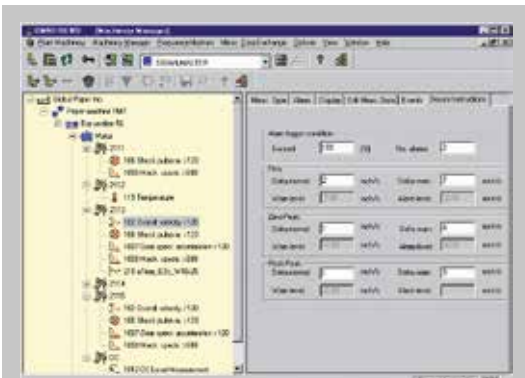


Time signal



VIBRONET® Signalmaster

Programming, evaluation and archiving
in OMNITREND® PC software



Setting of the measurement parameters and programming of the measurement cycles.



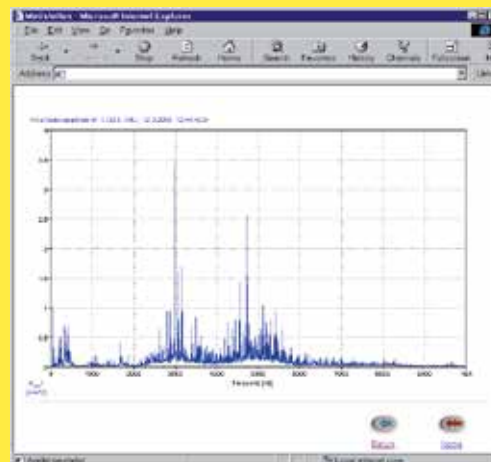
Evaluation of the data and archiving in the OMNITREND® database.

The OMNITREND® PC software is used to configure the measurement locations and to program the measurement cycles. This software also evaluates, documents and archives the measurement data (trend, spectrum, time signal).

Alarm notification and telediagnosis
in any Internet browser



User interface with machine overview and alarm displays (option).



Damage diagnosis in the Internet browser with the aid of an FFT spectrum.

The condition of the system can be queried online from any PC via an Internet connection. If the condition of the machines has led to an alarm, the cause of any faults can be localized immediately by diagnostic measurements (spectrum, time signal).

PLC / PCS
RS 232 (Profibus, ModBus,...)



Technical Data

VIBRONET® Signalmaster

Basic unit - VIB 5.802

Analog inputs

6 differential inputs (3 of them synchronous)

Measurement ranges, analog input

±10 V, ±1 V, ±100 mV, ±10 mV

Dynamic range / Resolution

96 dB / 16 bit

Sampling rate, analog input

153.6 / 76.8 / 38.4 / 19.2 / 9.6 kHz
SW downsampling: 4.8/ 2.4/ 1.2/ 0.6/ 0.3/ 0.15 kHz

Frequency range

0...50 Hz to 0...50 kHz, divided into 11 ranges

Frequency resolution

400, 800, 1600, 3200, 6400, 12800 lines

Envelope analysis

Selectable digital input filter

Tacho inputs

RPM / Counter: 2 x TTL...30 V
Keyphaser: ± 30 V AC and DC

Digital inputs/outputs

4 x, TTL...30 V

Digital outputs

8 x, 5 V, 5 mA

FET switching output

12 V DC, 1 A, switchable

Measurement functions

Time signal, spectrum, integration of the spectrum, envelope, orbit, shock pulse, acceleration (RMS), vibration velocity (peak, RMS)

RAM memory capacity

128 MB

Flash memory storage capacity

1 GB

Ethernet interface

1x, data rate: 100 Mbit

RS 232 interface

2x, data rate: 115.2 kbit



System Components

VIBRONET® Signalmaster

Standard package - VIB 5.890-1
for 1 string line (connection for max. 6 multiplexers)

VIB 5.802	VIBRONET Signalmaster basic unit
VIB 5.962	Power supply, 5V
VIB 5.963	Power supply, 12V
VIB 5.956-2	Systembus cable with two connectors
VIB 5.815-1	Shock pulse module for one string line
VIB 5.917	Output module with two SPDT relays
VIB 5.973	Terminal with voltage limitation 5V, 5 pcs.
VIB 9.520.G	Installation instructions
LIT 01.800	CD ROM, Condition Monitoring catalogs, brochures, magazines

Standard package - VIB 5.890-3

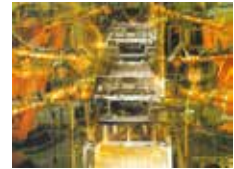
for 3 string lines
same as VIB 5.890-1 package except for VIB 5.815-3 shock pulse module for 3 string lines

PC software

VIB 8.957 OMNITREND® for VIBRONET® Signalmaster

Hardware for field installation

- Multiplexer
- Transducers
- Cabling



VIBRONET® and OMNITREND® are registered trademarks of PRÜFTECHNIK Dieter Busch AG. No copying or reproduction of this information, in any form whatsoever, may be undertaken without express written permission of PRÜFTECHNIK Dieter Busch AG. The information contained in this leaflet is subject to change without further notice due to the PRÜFTECHNIK policy of continuous product development. PRÜFTECHNIK products are subject to patents granted or pending throughout the world.

© Copyright 2017 by PRÜFTECHNIK Dieter Busch AG.



PRÜFTECHNIK Condition Monitoring GmbH
Oskar-Messter-Str. 19-21
85737 Ismaning, Germany
Tel.: +49 89 99616-0
Fax: +49 89 99616-200
info@pruftechnik.com
www.pruftechnik.com

A member of the PRUFTECHNIK group