

Monitoring Machine Condition

VibroGard-R 1500



Advantages

- Data memory integrated
- Setup via PC software
- Data acquisition software for trend analysis
- Excellent price/ performance ratio
- Compact design
- CAN-Bus or Ethernet-interface as option
- Connection to eddy-current displacement sensors as option

Applications

- Condition monitoring of rotating machinery
- Simultaneous monitoring of overall vibration and rolling bearing condition
- Monitoring of process units (i.e. pressure, temperature)
- Machine monitoring under different operating conditions

Overall vibration v_{RMS} and roller bearing condition g_{SE} can be measured and monitored using up to three accelerometers. Other process units can be monitored by attaching the appropriate sensor with an output signal of 0 - 10 VDC to the sensor port or using a temperature sensor of the type PT 1000 or KTY 84.

The limit values to be monitored are set via PC software for the respective operating condition.

If a limit value is exceeded an alarm is activated by switching an optocoupler output. The outputs can be easily connected to a controller (e.g. for alarm or shut-off purposes).

All measurement values can be stored cyclically at an adjustable interval time or automatically when alarm limits are exceeded.

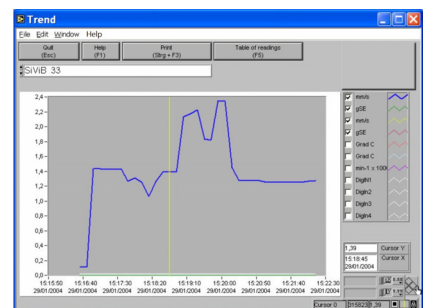
The transfer of the data to a PC for evaluation can be performed using the serial port or a memory card (Smartcard).

Additional software can be used to chart trends to visually plot the deterioration of the machine condition. For an in-depth analysis of the failure cause, a frequency spectrum of the vibration signal can be calculated and plotted.

Description

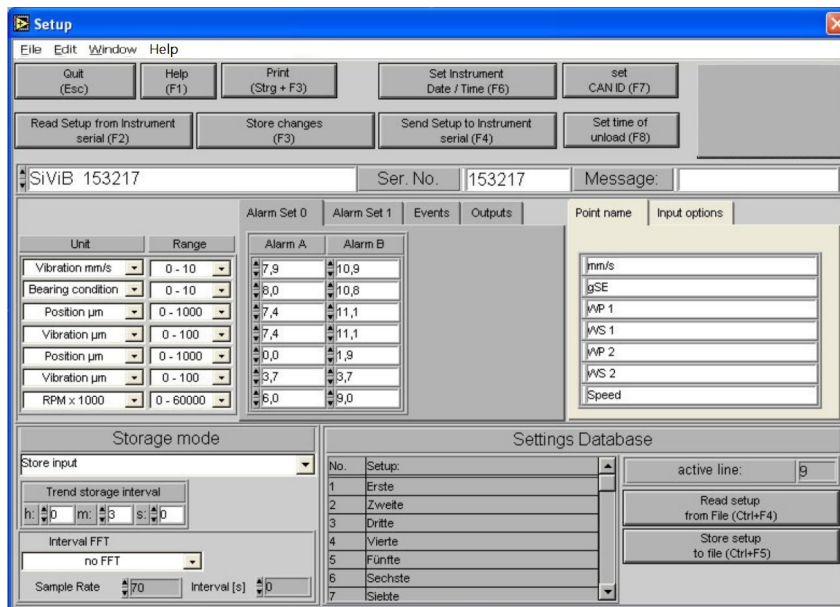
The compact vibration and rolling bearing monitor VibroGard-R is used for economical monitoring for example of electric motors, fans or pumps. It can handle different operating conditions, such as machining and idling of a machine tool.

Trend analysis



Technical data

VibroGard-R for acceleromeers 10 / 100 mV/g	1511 / 1501	1512 / 1502	1513/ 1503
Speed range	0 - 60,000 RPM (1 pulse per revolution)		
Measuring ranges			
Vibrations	0.1 - 10/20/40/80 (mm/sec) _{RMS}		
Rolling bearing condition	0.1 - 10/20/40/80 gSE		
Process values	0 - 10 VDC		
Temperature	0 - 200 °C / 32 - 392 °F		
Inputs (terminal strip)			
Accelerometer with ICP interface	1	2	3
Temperature probe PT 1000, KTY 84 or process unit 0 - 10 VDC	4	2	0
Machine operating condition	1	1	1
Speed	1	1	1
Trigger signal	1	1	1
Switching state (24 VDC)	3	3	3
Outputs (terminal strip)			
Alarm (via optocoupler)	3	3	3
Sensor fault	1	1	1
Terminal strip	30 pins		
Power supply	24 VDC, approx. 170 mA		
Interface	RS 232C, D-Sub 9-pin		
Status display	via LEDs		
Housing			
Protection class	IP 20		
Dimensions	100 mm x 75 mm x 110 mm		
Mounting	Top-hat (DIN) rail (35 mm), control panel		



Scope of supply

- VibroGard-R
- Memory card
- Null modem cable
- Configuration software
- Operating instructions

Options

- Setting / data acquisition software
- Additional memory card
- Card reader
- CAN-Bus interface
- Ethernet interface
- Analogue outputs

All information without obligation, subject to change without notice!

Configuration via PC software