Expert Vibro – The vibration specialist

Focusing on your systems! We show you how to see behind the scenes of your installation and gain a detailed picture of its condition. Acquiring vibration data and processing it online.
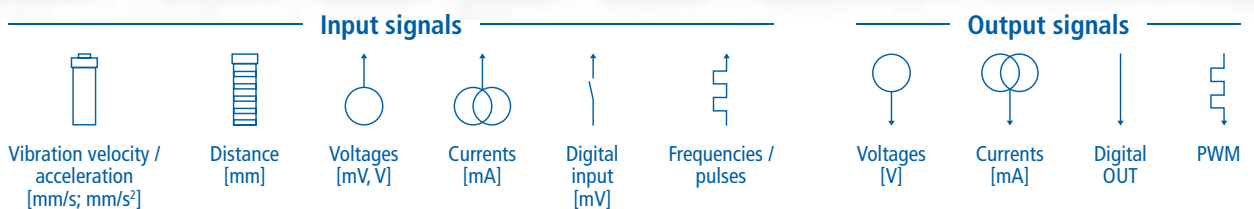
Vibration measurement becomes understandable with Expert Vibro. State-of-the-art processor technology in a compact design enables 4, 8, 12 or 16 synchronous vibration measurement channels with sampling rates of up to 50 kHz per channel, tailored to your needs. 24-bit A/D converters guarantee extremely high precision.

Flexible switching is possible between measuring voltages, currents, IEPE or shaft vibration sensors. Integrated comparators and digital inputs enable flexible and speed-synchronised triggering. Measurement data is monitored online and digital outputs can be switched in milliseconds when limit values are exceeded. Process data can also be recorded by using the relevant modules.

Vibration measurement using Expert Vibro is easy, even for newcomers. Intuitive configuration guarantees fast installation and short learning times.
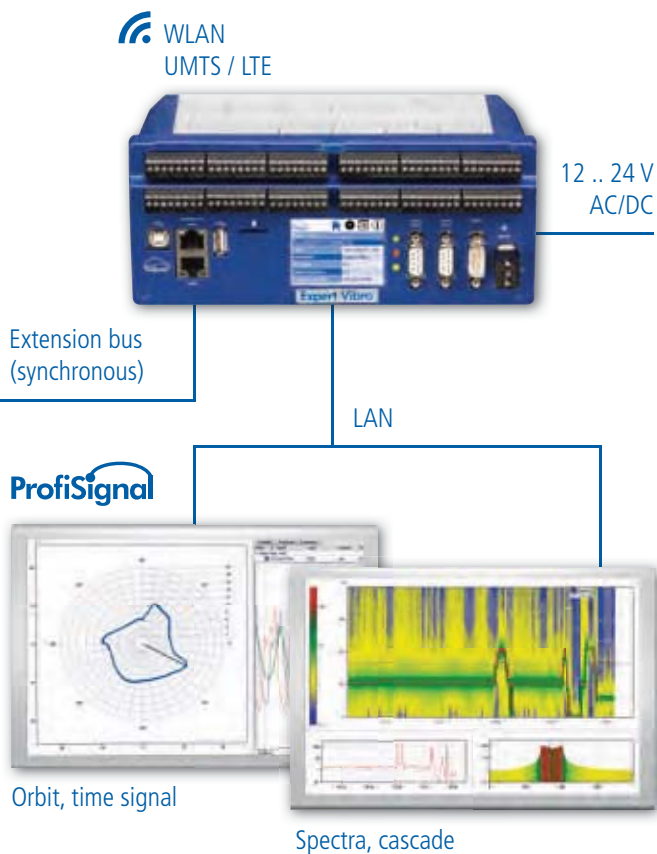
Expert Vibro

Input signals						Output signals			
Vibration velocity / acceleration [mm/s; mm/s^2]	Distance [mm]	Voltages [mV, V]	Currents [mA]	Digital input [mV]	Frequencies / pulses	Voltages [V]	Currents [mA]	Digital OUT	PWM

Inputs / outputs	Type 4	Type 8	Type 12	Type 16
Analog inputs (mV, mA)	4	8	12	16
Analog outputs (mV, mA)	4	4	4	4
Digital / frequency inputs	4	4	4	4
Digital outputs	8	8	8	8

Applications

- Shaft vibration monitoring and analysis

- Monitoring of vibrations in machines and housings

- Rolling bearing monitoring and bearing damage diagnosis

- Spindle monitoring and balancing

- Combustion chamber vibration monitoring

- Gearbox vibration analysis

- Air-gap monitoring

- Mobile vibration measurement

WLAN
UMTS / LTE

12 .. 24 V
AC/DC

Extension bus
(synchronous)

LAN

ProfiSignal

Orbit, time signal

Spectra, cascade

Interfaces

- Modbus TCP/RTU
- PROFIBUS DP, CAN RAW
- RS232, RS485

- OPC UA*

Product features

- 4, 8, 12 or 16 individually triggerable vibration inputs

- Calculation and monitoring of characteristic values

- Online computation of measurement data

- Integrated analysis functions for gear and roller bearing monitoring, air-gap etc.

- Spectrum – online – up to 12,800 lines (FFT)

- Integration functions (two-stage)

- 50 kHz sampling rate per channel

- 24-bit A/D converter

Sensor connection

- Software switchable analog inputs
  - Shaft vibration / distance sensors
  - Acceleration sensors
  - Vibration velocity sensors
  - mV / mA signals (pressure etc.)

- Switchable IEPE power supply

- Integrated comparators for KeyPhasor® sensors

- Measuring range up to ± 25 V

- Pluggable screw terminals

Interfaces

- LAN, USB, WLAN (optional), LTE (optional)

- Serial interfaces RS232, RS485

- OPC UA*, Modbus TCP/RTU

- PROFIBUS DP, CAN RAW

- Individual ASCII protocols

Data storage

- 2 GB or 14 GB internal storage

- External storage media (USB, NAS)

- Triggered storage with pre and post histories

Product highlights

- Synchronous analog inputs, 50 kHz sampling rate per channel

- Calculation and monitoring of characteristic values

- Spectrum – online – up to 12,800 lines (FFT), integrated IEPE power supply

- Extendible