

The PCH 1420 4-channel Monitor Keeps Your Machines Operational (with Safety level SIL-2 rated and GOST-R certificate)

The monitors measure the condition of a machine 24 hours a day, 365 days a year. The built in alarm function secures early knowledge of all machine faults e.g. imbalances or misalignment. This allows you to handle problems before they cause breakdowns.

Therefore, you can assure operational continuity of your production and avoid unplanned machinery downtime, material costs, etc.



In the standard IEPE version, each vibration channel operates within 2 simultaneously running frequency bands. The bands are configurable from 0.7 Hz up to 11.5 kHz and will typically monitor the 10-1000 Hz area (ISO 10816-3), as well as the high frequency area 2-10 kHz, where roller bearing resonances are detected.



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PCH 1420 uses several bearing fault detectors simultaneously, in order to detect faults as early as possible. Thus, PCH 1420 offers both broadband high frequency monitoring, Envelope, Kurtosis and Crest factor for bearing fault detection. All detectors are running simultaneously and are based upon inputs from up to 4 measuring points in real-time.

Vibration input channels

PCH 1420 supports various vibration sensors, like IEPE, 3-wire API678 accelerometer, proximity probes, velocity sensors as well as Low Frequency accelerometers.

Enhanced alarm functions

In case an alarm limit is exceeded integrated alarm relays can inform the user via a connected rotor light, beeper, a control system or by directly shutting down the machine. The 1420 also delivers 4-20 mA signals relatively to the vibration level, which can be used for trending in the users control system.

PCH 1420 software interface

The included user software Vibration Studio can be used trending and for recording of 4 time waveform signals simultaneously (raw data) and for FFT analysis of the recorded data. Simply plug in the USB cable or connect a permanent RS-485 wire for remote access!

EN / ISO 13849-1 Functional Safety

More features in PCH 1420 support Functional Safety requirements according to ISO 13849-1.

PCH 1420 Link Concept

More modules can be connected to the 1420 Vibration Monitor if needed. We offer the PCH EtherBridge for LAN/remote connection as well as for data logging and the PCH Relay Box for extra 12 isolated alarm relays.

More PCH expansion boxes are coming and creating the perfect Link Concept. You only pay for what you need, nothing more.





PCH 1420 Vibration Monitor features:

PCH 1420 Vibration Monitor features: 4 vibration input channels -2 process input channels -4 configurable outputs, relay or 4-20 mA ·Redundant Safety Relay ·User defined bandpass filters from 0.7 Hz up to 115000 Hz ·Bearing fault detectors, Envelope, Crest and Kurtosis ·Change alarm levels and delay times ·Time waveform recording of vibration sequence from 4 channels simultaneously ·Offline FFT analysis ·Connection to several monitors on bus system ·USB/RS 485 serial connection ·Safety level SIL-2 rated and GOST-R certificate

The monitor is ideal for OEMs as well, where individual solutions can be offered.