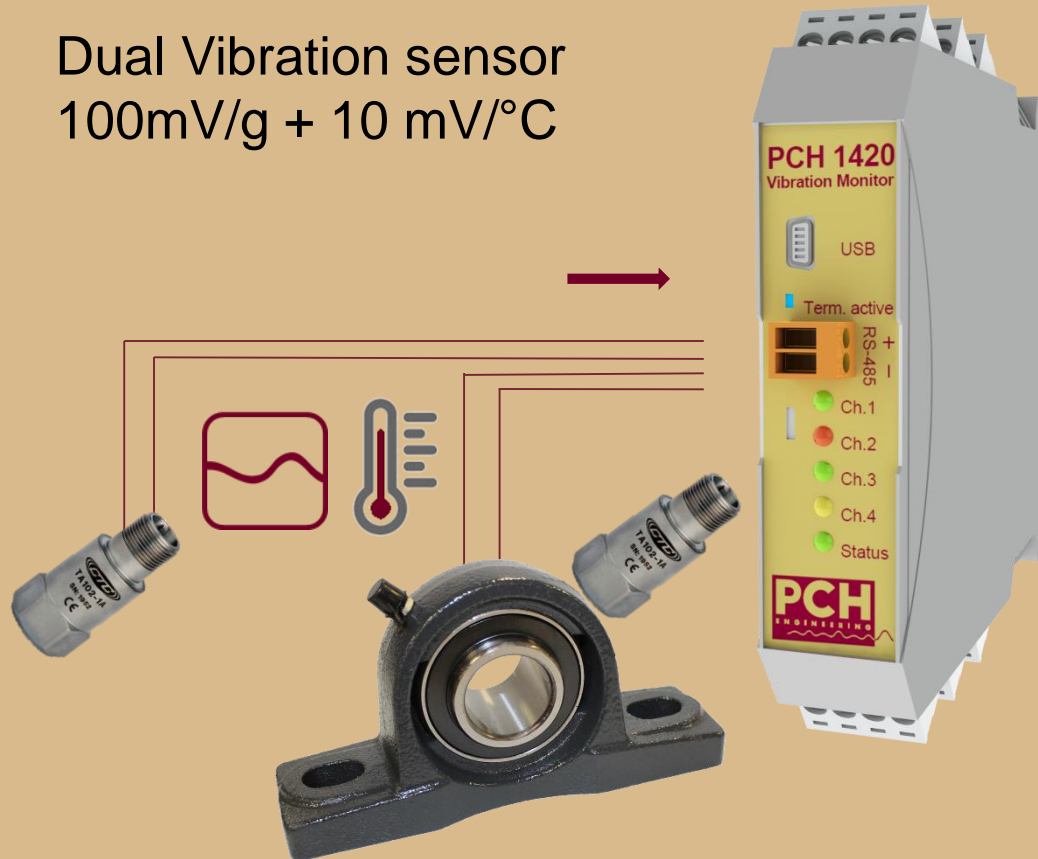


# PCH 1420 Vibration Monitor

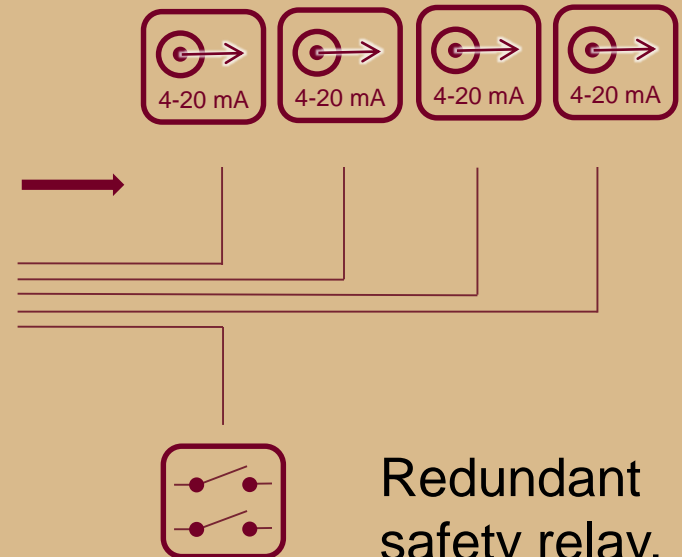


2 Input channels 100mV/g AC  
2 Input channels 0-10V DC

Dual Vibration sensor  
100mV/g + 10 mV/°C

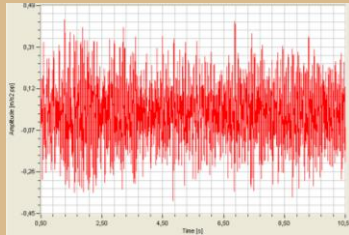


2 Vib outputs, 2 Temp outputs

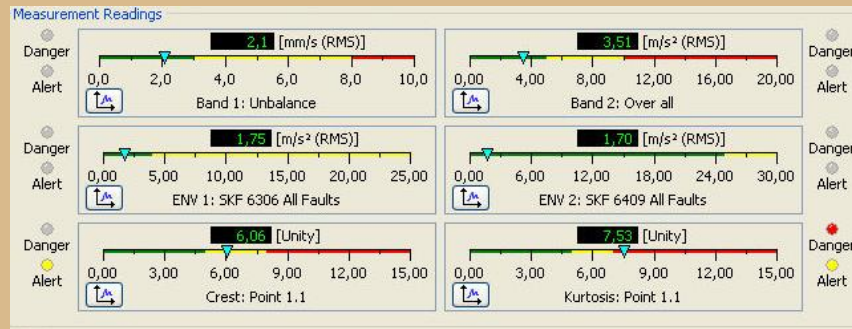


Redundant  
safety relay,  
ISO 13849

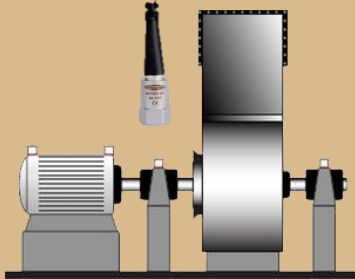
# PCH 1420 Vibration Monitor



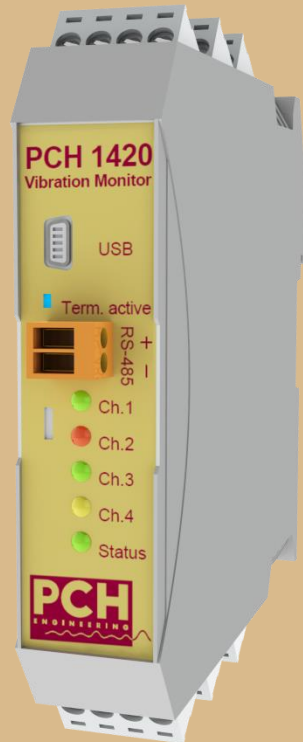
6 scalar values based upon time domain data from same sensor,  
Note: 100 ms response time API 670



Scalar values and alarms can be addressed freely to outputs



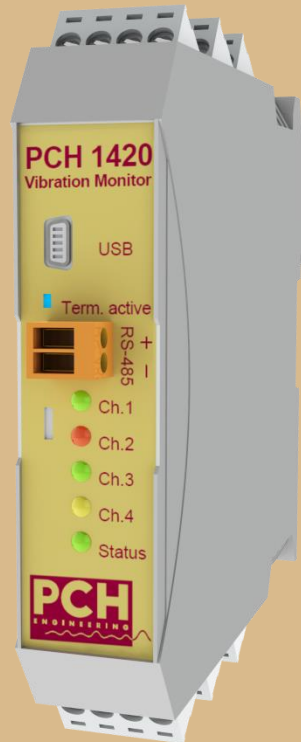
# PCH 1420 Vibration Monitor



Each vibration measuring channel includes 2 configurable measuring bands:

<u>Band 1: General vibration measurements</u>	
Measuring range Vel + Displ.:	From 0.7 Hz to 1200 Hz
Measuring range Acceleration:	From 0.7 Hz to 10 kHz
Selectable detectors:	True RMS, Peak, Peak-Peak
Measuring parameters:	mm/s, m/s <sup>2</sup> , $\mu$ m, mm, mils

# PCH 1420 Vibration Monitor



Each vibration measuring channel includes 2 configurable measuring bands:

<u>Band 2: High frequency measurements</u>	
Measuring range Acceleration:	From 0.7 Hz to 10 kHz (over all)
Roller bearing fault detectors:	2 x Envelope 1-500 Hz, Crest and Kurtosis factor
Selectable detectors:	True RMS, Peak, Peak-Peak
Measuring parameters:	m/s <sup>2</sup> , g

Note: or configured as Band 1 without bearing detectors

# PCH 1420 Vibration Monitor



Alarm Setup for each scalar value

**Alert Alarm Setup**

Enabled:

Is Low Limit:

Alert Limit [mm/s]: 3,0

Alert Delay [s]: 10,00

Alert Latchable by HW:

Alert Relay: Relay 1

---

**Danger Alarm Setup**

Enabled:

Danger Limit [mm/s]: 8,0

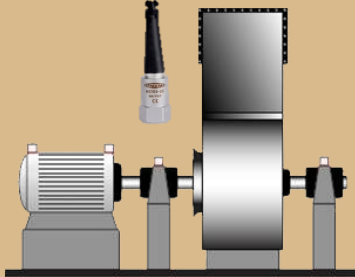
Danger Delay [s]: 5,00

Danger Latchable by HW:

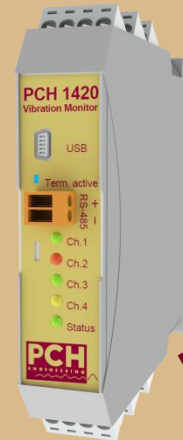
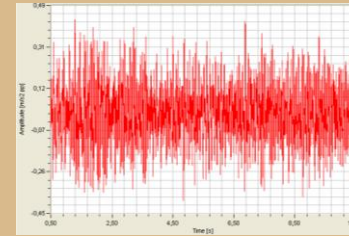
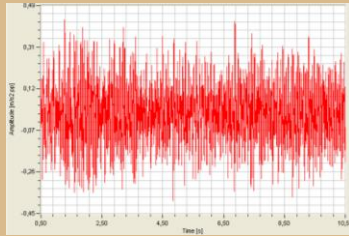
Danger Relay: Relay 2

## Configurable Outputs

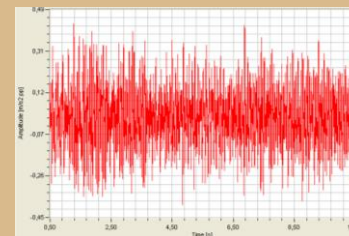
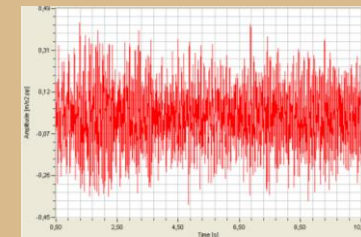
Parameter	Value
Output 1	Type: Relay
Output 2	Type: Relay
Output 3	Type: 4-20mA
Output 4	Type: 4-20mA



# PCH 1420 Vibration Monitor



Time waveform recording up to 10kHz (realtime) on 4 input channels simultaneously



Tacho



Pulse

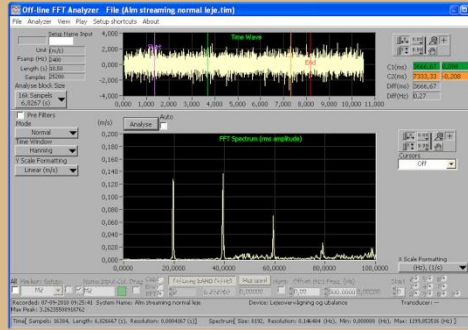
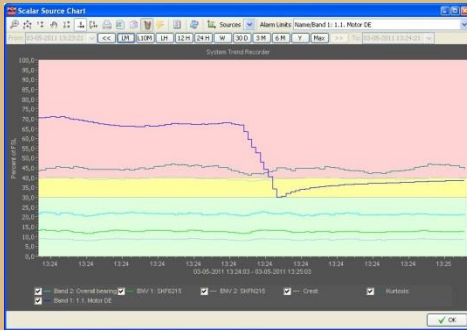
Process



Vibration

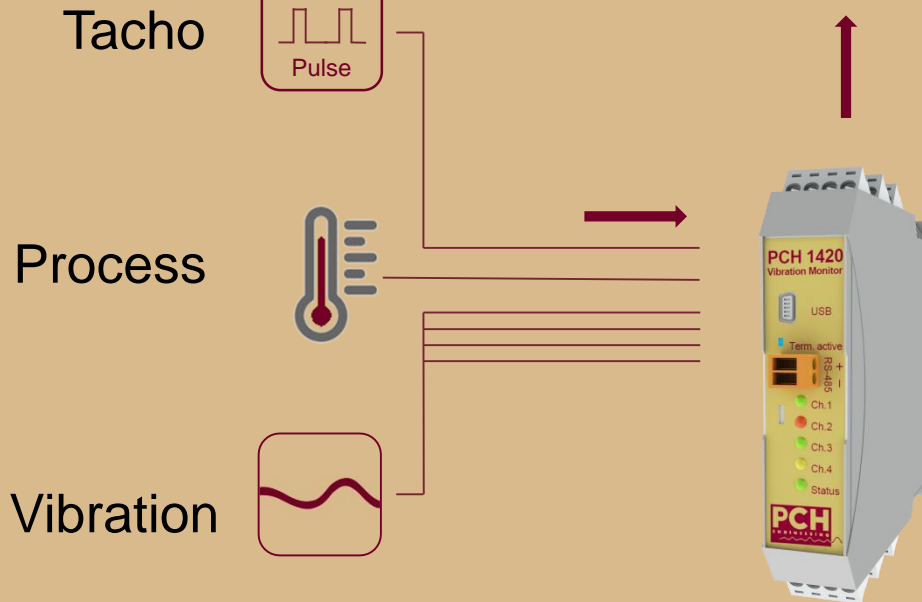


# PCH Vibration Studio®

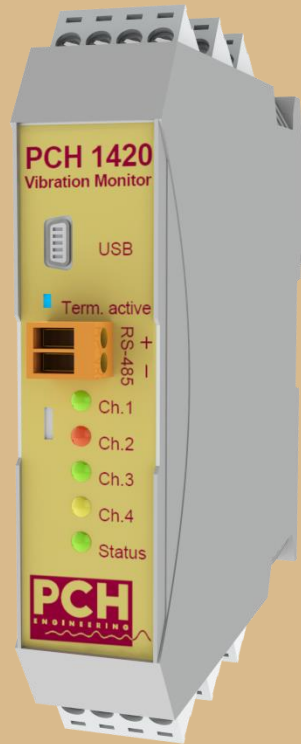


User software offers:

- Parameter setup and backup of monitors
- Trending of several scalar values in the same chart
- Data storage
- Offline analysis of time recording



# PCH 1420 Link Concept



The new protection concept from PCH:

- Expansion modules can be connected to PCH 1420 with common power supply and bus communication





# PCH 1420 Link Concept



## PCH EtherBridge

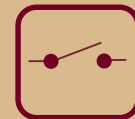
- LAN connection for several PCH monitors
- Modbus TCP / RTU
- OPC UA server
- Storage media for local data logging
- Remote access through 3G connection(option)

# PCH 1420 Link Concept

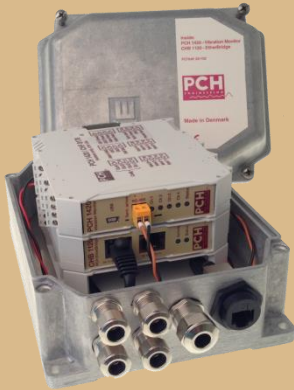


## PCH Relay Box

- 12 Relays (30V/100mA)
- Galvanic isolated
- Configurable through PCH 1420 PC interface
- Connected by DIN rail bus
- Failsafe (NO as non-energized)



# PCH 1420 Link Concept



IP 67 casings available

- EMC glands in aluminium or polycarbonate housing
- Fibox 200/175 XT(outer dimensions 255x180x175)
- PCH W25 casing



24V DC power supply for DIN rail available