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Your processes in safe hands

SpectraNG

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Process monitoring Process optimization Protect machines Machine diagnostics Predictive maintenance

Professionell

Standard

Ultimate

7 10

Better be safe. Safely be better.

Applications, areas of application and functionality

Process monitoring

- Tool monitoring (tool breakage, tool wear, tool missing)
- Collision monitoring
- Vibration, structure-borne noise, power, force and oscillation measurement for the detection of process errors
- Tools, also less than 3 mm in diameter
- Detection of micro-breakouts on cutting inserts
- Thread quality
- Strong fluctuations allowance
- Material differences (micro-cavities, inclusions, ...)

Process optimization

- Detect unwanted deviations from the planned machining process
- Optimize processing and cycle times
- Effectively generate and read analytical data

Machine protection

- Collision monitoring
- Vibration overload detection
- Reduce costs by avoiding machine shut downs

Machine diagnostics

- Increase processing quality
- Process and cutting data optimization
- Detect wear of machine components
- Detect tool or spindle imbalance
- Predictive maintenance

Area of application



Extensions



SpectraNG versions	
Light	Digital sensors, expandable with SensorHub NX. Communication with the controller via discrete I/O
Standard 1 station	Analog and digital sensors, expandable with SensorHub AD
Professionell 2 stations	and SensorHub NX.
Ultimate 3-4 stations	Communication with the control via Profibus / Profinet

SensorHUB AD



Analog sensors

To expand the monitoring options with analog Montronix or third-party sensors

CNC-I/O module Discrete I/O wiring possible

AMP module / IFA module connection to amplifiers and sensors

- ➡Torque- and force sensor AT100
- ➡Broadband vibration sensor BV100
- Force sensor RetroBolt-Mxx-ICA
- ➡ Force sensor RetroBolt-Mxx
- Strain measuring sensor StrainLink250DA
- ➡Power sensor PS200-NG
- ➡Analog third-party sensors max. +/- 10 V

SensorHUB NX

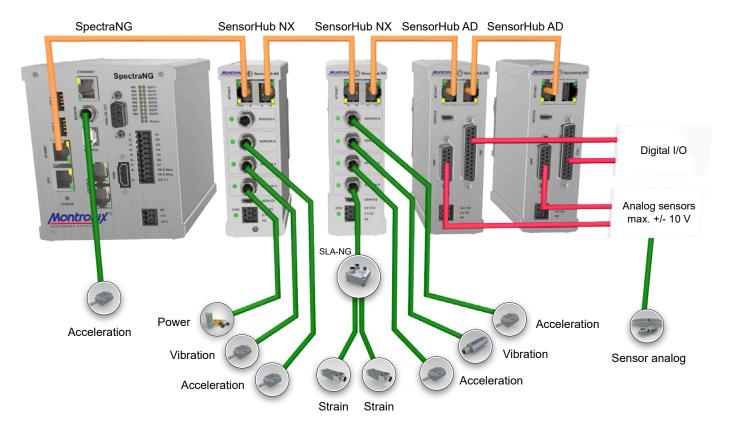


Digital sensors

To expand the monitoring options with digital Montronix sensors

- 4 x RS485 connection for digital sensors
 - ➡PulseNG 3-axis accelerometer
 - ➡ PulseNG M12 3-axis accelerometer
 - ➡StrainLink250DA Strain measuring sensor
 - ➡PS200-NG Power sensor

System overview



Represented worldwide

Advice from a single source! From the first idea to the finished system.

- Conception
- Installation
- Commissioning
- Training
- Optimization
- Service

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