SMART MONITORING SOLUTIONS

GEPA

SMART SENSOR FOLLOWS · DIGITAL SENSOR SOLUTIONS · DIN ISO 10816 DIN
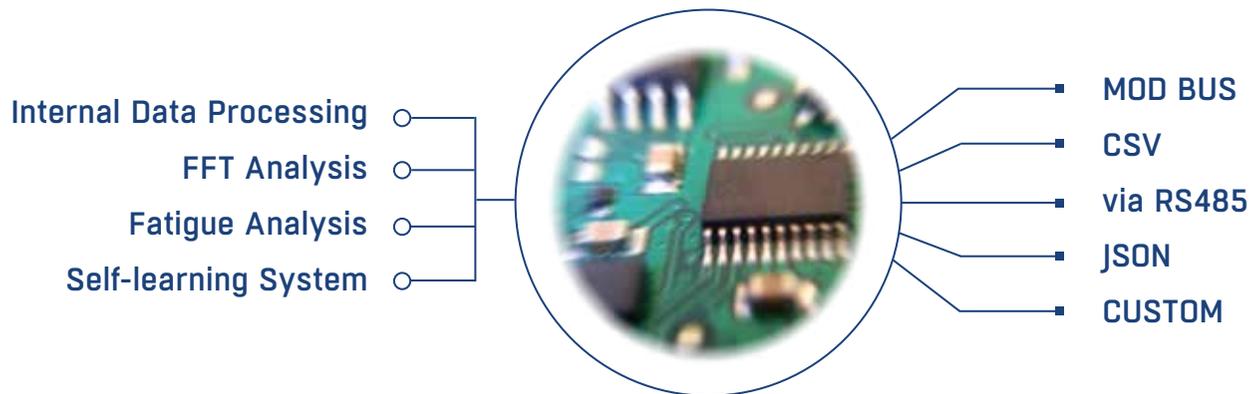
PREDICTIVE MAINTENANCE

SENSORS AS A SERVICE

- Rate the runtime of your machines
- Avoid interruptions & machine breakdowns
- Save costs in service & maintenance
- Offer remote-controlled diagnostics

FLEXIBLE MONITORING SOLUTION

▷ DIGITAL MEMS TECHNOLOGY

Internal Data Processing ○———
FFT Analysis ○———
Fatigue Analysis ○———
Self-learning System ○———

———■ MOD BUS
———■ CSV
———■ via RS485
———■ JSON
———■ CUSTOM

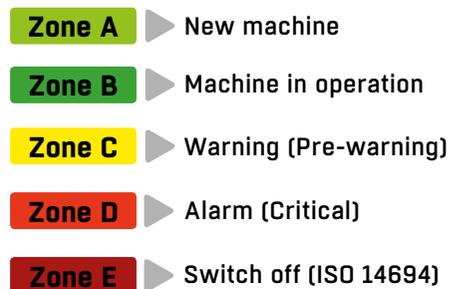## ▷ ADVANTAGES OF SMART DIGITAL SENSORS

Our smart Sensor measures physical quantities (e.g. acceleration, inclination, frequencies), processes them according to given functions (FFT analysis) and outputs them as digital information (CSV Dataset).

It is an intelligent sensor equipped with internal data processing capabilities.

The integrated microprocessor has low power consumption and converts sensordatas to custom data formats.
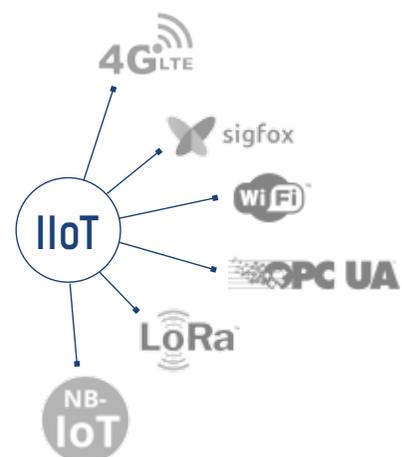
▷ MONITORING ACCOORING TO RELEVANT STANDARDS

• Thresholds according to DIN ISO-10816
• Max. vibrations according to DIN ISO-14694
• Alerting if threshold is exceeded
• Vibration monitoring in 3 dimensions
• Acceleration, Inclination, Frequency
• Real-time data processing
• Sensor status notification, self-diagnostics
• Network connectivity WAN, LAN, OPC-UA
• Retro fit plug & play solution

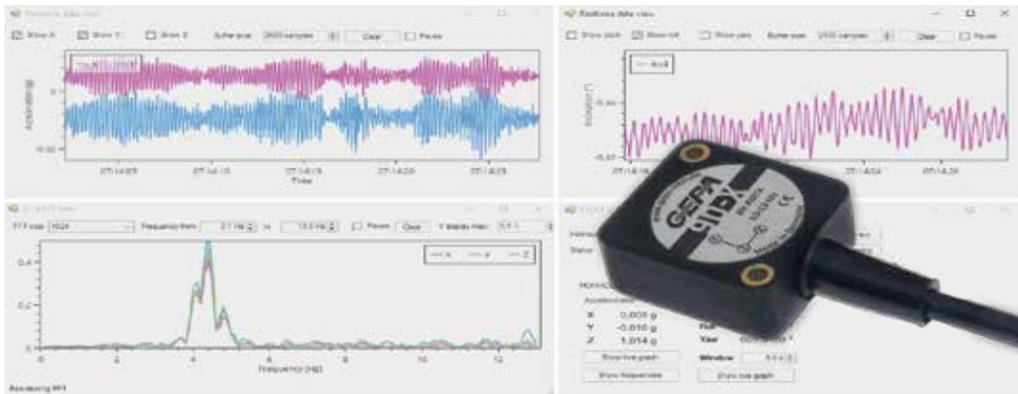| Zone A | ▷ New machine |
Zone B	▷ Machine in operation
Zone C	▷ Warning (Pre-warning)
Zone D	▷ Alarm (Critical)
Zone E	▷ Switch off (ISO 14694)

▷ MULTIPLE INTERFACE SUPPORT

• Our Smart Sensors provide measured value acquisition, signal conditioning and data processing.
• They offer a variety of bus Systems and digital formats.
• Through the digital data output the sensors can easily be integrated or connected to WAN/LAN modules such as LoRa, wifi, 4G and process data to the network by using OPC-UA protocol.

4G LTE
sigfox
WiFi
IIoT
OPC UA
LoRa
NB-IoT

▷ SENSOR INTERNAL DATA PROCESSING (FFT)

▷ STAY IN TOUCH WITH YOUR MACHINES

- Increase efficiency and cost-effectiveness of your machines with the use of our smart sensors.

- Realize damage prevention, predictive maintenance, comprehensive vibration analysis and specific methods for root-cause analysis.

- Benefit from our custom developments in cloud solutions for remote monitoring.

- Our experts will be pleased to advise you in all aspects of data-analysis and implementation of your IIoT projects.

GEPA

PROZESSAUTOMATION
SEIT 1970

GEPA GmbH Company for process automation and data processing

TRADITION & INNOVATION

GEPA GmbH is focusing on innovative solutions for Industry 4.0, IIoT and M2M.
Since 1970, we are service provider in development, consultation and integration of measurement technologies for industrial partners.

GEPA's developments range from Smart Sensors to Software and Database for the integration of a complete scalable Monitoring Solution.

In addition to our products and developments, we offer our service in data analysis and accompany you during your project to make it completely successful.

WE COUNT ON:

• Reliability, flexibility and high user-friendliness
• Complete service for our customers, personally and comprehensive

OUR DEVELOPMENTS ARE CHARACTERIZED BY:

• Customized solutions for the next generation
• Development and production in Germany
• Short development periods

• Maximum user-friendliness
• Flexible, robust system architecture
• Integration of the digital process chain

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS

GEPA mbH

Postbox 40 07 07
80707 München - Germany
Telefon +49(0)89 63 85 98 70
e-mail   info@gepa-mbh.de
www.gepa-mbh.de

REFRENCES