




## EAGLE: Smart Wireless Solution

Condition monitoring installation has never been so easy!!





**EAGLE** is ONEPROD's easy-to-deploy continuous monitoring system for condition-based maintenance.

**EAGLE** eliminates wiring, meaning that you can easily instrument more of your critical machines. **EAGLE** offers outstanding performance, ensuring optimal process reliability with minimal maintenance costs.

This new smart wireless solution enables early fault detection through analysis of dynamic vibration signals.



## EASILY ENHANCE THE RELIABILITY OF YOUR FACILITIES



### UNIQUE MEASUREMENT CAPABILITIES

**EAGLE** automatically acquires raw signals (time waveform, FFT) on one or three vibration axes, together with temperature data.

Signals of up to 16 K-samples are transmitted wirelessly, for accurate and targeted diagnosis of all kinds of faults on all types of rotating machinery.

### DESIGNED FOR HARSH ENVIRONMENTS

Right from the design phase, the materials used were selected to meet detailed and demanding specifications.

With ATEX Zone 0 certification, **EAGLE** offers appropriate solutions in places where wiring is costly or too complex.

A true alternative to manual data collection, **EAGLE** enables automatic measurements to be taken safely in extreme conditions!



# UNRIVALLED EASE OF DEPLOYMENT

## WIRELESS ANYWHERE

**EAGLE** is a self-powered wireless sensor. No cables are needed.

- **Autonomous:** the sensor acquires data with no external intervention
- **Up to five years of unattended operation**
- **Wireless transmission:** data is transferred wirelessly to the ONEPROD XPR condition-based maintenance software



## ATTACH AND GO!

**Attach** the sensor to the machine.

**Position** your gateway at an appropriate distance depending on your environment (up to 100 m).

**Start** acquisition from your ONEPROD software interface.

**Your data is there, ready for processing!**

## MOVE AND MONITOR!

It is not always feasible to monitor all critical production facilities continuously.

The solution: temporary monitoring

**EAGLE's** ease of deployment means that it is particularly suitable for such cases. Doubts about a machine that isn't monitored? Nothing could be easier: simply move sensors and start monitoring it!

That should give you some new ideas for improving the reliability of your facilities!



## ISA100.11a, A RECOGNIZED STANDARD

**ONEPROD** offers a proven smart solution for wireless communication capable of operating alongside other networks used in industry, such as WiFi, Bluetooth and Wireless Hart. Communication frequencies automatically adapt using smart algorithms to avoid interference with systems in the unit's environment!

**EAGLE** uses the ISA 100.11a communication standard which guarantees safe conditions for people, facilities, and security of data.

# → BENEFIT FROM ALL THAT ONEPROD HAS TO OFFER

## A CENTRALIZED SYSTEM

**EAGLE** is totally integrated with the ONEPROD system.

Process data from **EAGLE** using the powerful range of analysis and post-processing tools available in ONEPROD XPR: advanced vibration indicators, calculations covering all historical data, concatenated spectra, 3D spectra, Shock Finder filter, and more.

Regardless of how many machines you have, your entire installed base equipped with **EAGLE** sensors can be supervised remotely from any Internet browser using SUPERVISION.



*"Doubts about a machine that isn't monitored? Nothing could be easier: simply move sensors and start monitoring it!"*

## TAILORED SUPPORT

**EAGLE** eliminates implementation constraints and enables you to benefit from targeted support on a particular machine from ONEPROD experts.

Avoid a production shut-down that could have disastrous financial consequences!

For more information, see [www.acoemgroup.com](http://www.acoemgroup.com)

## MONITORING OF COMPLEX MACHINES

Monitor machines with varying operating conditions using **EAGLE**.

ONEPROD's expertise is embodied in this new wireless solution for monitoring even the most complex machines!

Information about the operation of your equipment is used to direct the monitoring system. The repeatability of measurements ensures that diagnosis are even more pertinent and analyses are even more effective.



# → A HIGH-PERFORMANCE INDUSTRIAL SOLUTION

## EASY INSTALLATION

- No wiring
- Up to 50 sensors per gateway
- Range from 30 to 100 m in an industrial environment

## MEASUREMENT WITHOUT COMPROMISE

- 1 or 3 vibration axes + temperature
- 16 K-sample dynamic signals
- Time waveform up to 128 s
- FFT up to 20 kHz

## AUTONOMOUS SYSTEM

- Automatic acquisition, with a minimum periodicity of 10min
- Local acquisition of over 1000 dynamic measurements
- Up to 5 years of unattended operation in an industrial environment

## ONEPROD METHODOLOGY

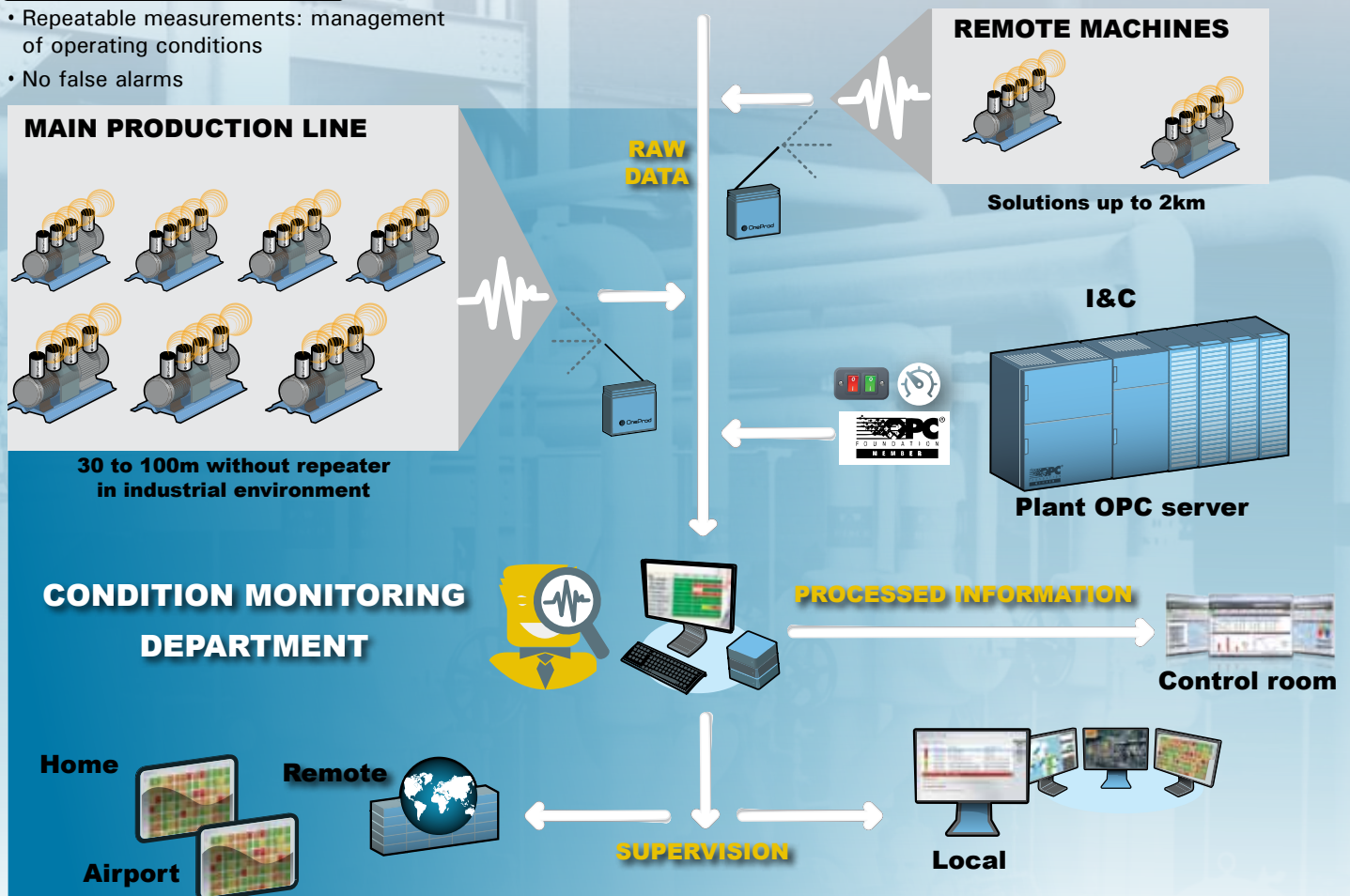
- Repeatable measurements: management of operating conditions
- No false alarms

## SMART WIRELESS COMMUNICATION

- ISA 100.11.a international communication standard
- Immunity to interference with other wireless networks (WiFi, Bluetooth, Wireless HART, proprietary protocols)
- Secure data (128-bit EAS encryption)
- Very low power transmissions to ensure safe conditions for people and facilities

## SUITABLE FOR HARSH INDUSTRIAL CONDITIONS

- Up to 120°C: mechanical and electronic parts designed for high temperatures
- Withstands corrosive environments
- IP67
- ATEX Zone 0 certification
- Mounted with M8 tapped hole



## ACOEM

Smart monitoring, diagnosis & solutions

ACOEM offers comprehensive products and services comprising smart monitoring, diagnosis and solutions, drawing upon its unique expertise in the field of vibrations and acoustics.

ACOEM contributes to the improvement of:

- quality of life and risk prevention in urban and industrial environments
- productivity and the reliability of industrial processes
- the design of robust and high-performance products with low noise levels
- protection of sites, vehicles and people in hostile environments

With its 01dB, METRAVIB and ONEPROD brands, ACOEM works with decision-makers in industry, defence and the environment throughout the world.

For more information, visit our website at [www.acoemgroup.com](http://www.acoemgroup.com)



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