

INDUEYE VIBRO is a *batteryless* solution for vibration monitoring. Our device uses long-range wireless protocols, and is particularly designed to be used in hard-to-reach and cost prohibitive environments.

A robust, a reliable and easy-to-install *Predictive Maintenance* system allows you to remotely monitor the health of your machinery and predict the most optimal time for maintenance.

# Keep your plant up

Detect proactively performance issues to reduce unplanned downtime.

## Waste Heat powered

Batteryless means forgetting expensive battery maintenance and becoming eco-friendly.

### Easy installation

Plug&Play. Cables are no longer necessary / a problem. Long-range wireless protocols (up to 2km) require very simple infrastructure compared to low-range protocols (WirelessHART, ISA100, commonly used by competitors) that need gateways or repeaters every few meters.

Our products are fully adaptable to any type of surface (flat, circular, etc.).

#### Monitoring dashboard

Use our DAEVIS monitoring dashboard tool or any other cloud-based system: Always choose the best settings to make your decisions.

# Flexible and scalable

It does not matter how many InduEye devices you want to install and where: changing and growing your network is very easy!

It couldn't be easier to change and grow your network!

### **Excellent cost savings**

Compared to competitors' wireless solutions (battery-powered), our products reduce the cost of devices, infrastructure, and other recurrent expenses up to 70%. Thanks to the edge-computing capabilities, additional cloud computing cost reductions can be up to 87%.

### Unbeatable environmental savings

More than 98% of reduction in GHG, energy, heat and water during the lifetime compared to current wireless battery-powered sensors from competitors.

### Improve your maintenance tasks

Automated routine operations keep maintenance professionals performing high-value tasks.



# **INDUEYE VIBRO**



# Wireless and Batteryless IoT Vibration Monitoring

### Description

INDUEYE VIBRO is a system consisting of four main components:

- 1. The industrial vibration sensor.
- 2. The wireless IoT device with edge computing and long-range network capabilities.
- 3. A thermoelectric generator, capable of powering the entire system using heat.
- 4. 3<sup>rd</sup> Party LoRaWAN gateway.

INDUEYE is economical, flexible, scalable and easy to maintain and install, which means that our product is the most competitive solution on the market.

#### Use cases

Wireless monitoring system for early detection of faults. It permits to diagnose rotating equipment, check the operation of bearing - gears and test electric motors in the following machines:

- Pumps, motors, fans, compressors, and turbines.
- Centrifugal separators, blowers, agitators, expenders, and heat exchangers.
- Gearboxes, chillers, belt conveyors.
- Rolling bearings.
- Fluid hammer.

## AEInnova's main system components



## Real use case in a steel facility of Tubacex SA







### LoRaWAN network scenario

