

## Overview

DeepVibe is a cost-effective Wireless Machine Condition Monitoring Device with AI & ML capabilities that enable Predictive Maintenance for Smart Factories. It's an easy to install IIoT device with industrial grade sensors & Long-lasting battery pack that work on any secured Wi-Fi network with our EDGE Gateway. DeepVibe uses High-Tech micro-controller chips with High-Range vibration sensors 2 models LX 6KHz & DX 1.6KHz, Temperature & Acoustic measuring capabilities. Multiple devices can be configured in a Mesh Topology transmitting securely over cost effective EDGE Gateways. Captured time-series data is used for FFT, CEEMDAN analysis enables Smart Factories to Monitor & Manage their global sites seamlessly.

## Features

- Tri-axial vibration & acceleration detection with analysis.
- 1Hz to 1.6KHz / 1Hz to 6KHz readings on all 3 axis.
- Environment temperature reading.
- Multiple Devices in Mesh Network.
- Multiple location monitoring.
- Detailed & easy to use Dashboard.
- Easy mounting & installation features.
- Our Unique Design Long-lasting Battery Pack (works for many years).
- Online battery status of each device for easy and timely maintenance.

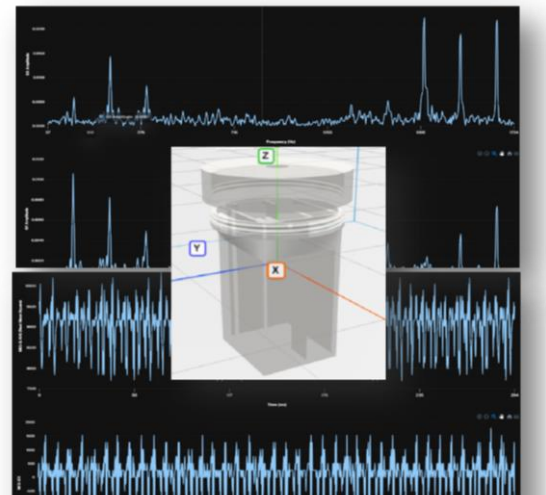


Figure 1. FFT & Acceleration data in real-time

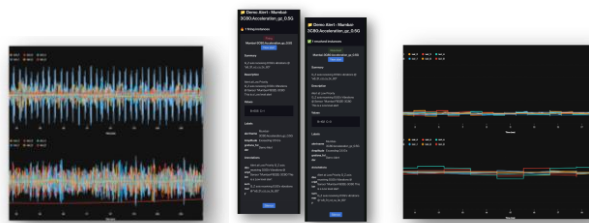


Figure 2. Installation Site, CEEMDAN Analysis & Alerts

## Advantages

- Provides insight into machine health on a continuous basis enabling preemption of faults. Scalable and wide coverage with Wi-Fi Mesh
- Enables timely corrective action extending the life of machines and avoiding costly down-time or any hazardous situations
- Artificial Intelligence & Machine Learning capable design provides adaptable and efficient results with DeepVibe for effective operations of Smart Factories & Industries.
- Timely Alerts - Machines due for servicing produce abnormal vibrations that indicate reduced operational efficiency. These serve as early warnings, allowing for timely maintenance to address potential issues.