

# IoT

# AI

# KPIs

Acceleration Peak

Acceleration RMS

Crest Factor

Deviation of  
Acceleration

Velocity RMS

Displacement RMS

Frequency Peak

ISO 10816

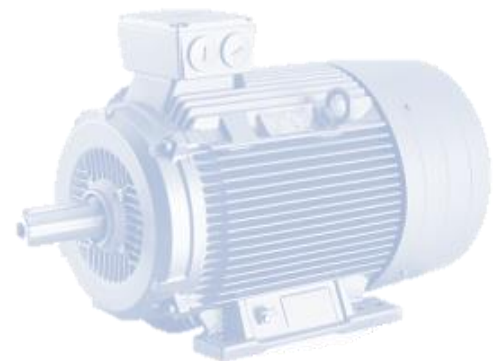
## An innovative technology for Predictive Maintenance *PdM*



- Edge computing with AI IoT device
- AI result set to apply to ISO 10816 metric
- Digitize the infrastructures
- Improve safety and availability
- Enhance asset duration

**Petit PENSE** is an AI IoT designed to monitor motors in real-time, as motor efficiency will impact industrial operation when any system shutdown or accident can lead to people being harmed and assets being damaged

Using **Petit PENSE** for PdM can increase labour utilization, increase production capacity, increase equipment life span and reduce maintenance cost



# Specification

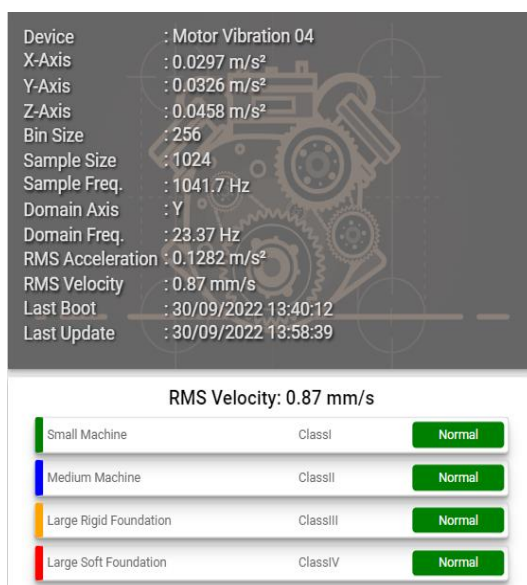
## Main Control Unit MCU

Parts :	PM1
Communication :	LoRa ,WiFi 2.4GHz
Technology :	Edge AI IoT
Operation Temperature :	-10 to 55 °C
Operation Humidity :	<85% RH
Power Input :	DC 5V
Power Consumption :	20W max / AC220V
Antenna Type :	Internal
Security :	AES 128 bit
Dimension :	98mm x 98 mm x 38 mm
Weight :	160g without cables

## Vibration Sensor

Parts :	PV1
Technology :	3 ways acceleration
Communication :	Wired (0.6m long to MCU)
Operation Temperature :	-10 to 55 °C
Operation Humidity :	<85% RH
Dimension :	Diameter 30mm,H 70mm
Weight :	150g without cable

## Visualize Dashboard



## Optional Sensor

### Temperature Sensor

Parts :	PT1
Technology :	Resistance temperature detect (PT100/PT1000)
Communication :	Wired 1.5M long from MCU
Measure Temperature :	-30 to 600°C
Operation Temperature :	-10 to 55°C
Operation Humidity :	< 95% RH