Applications

Parameters

Bearing





Shafts

✓ Vibration

☑ Acceleration

☑ Temperature

☑ Frequency

☑ Speed

☑ Velocity

☑ Displacement ☑ Alignment

Gear Mesh



Gear Profile



Motors



Pumps

Few Customers































































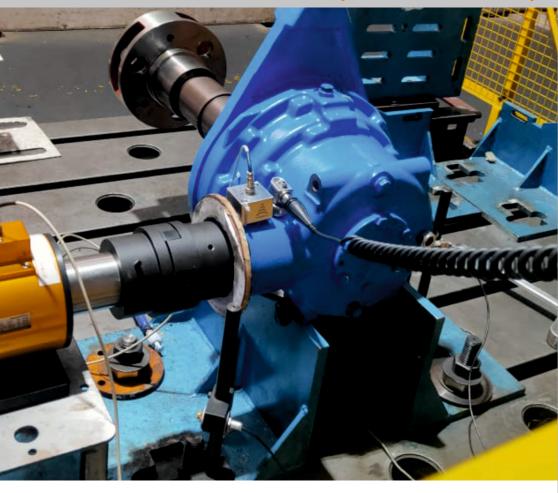














SeethaRam **Mechatronics Pvt Ltd**

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Bridging Gaps in Technology

















Fortunately, most types of failures on Rotating machines can be predicted by measuring, observing and comparing the pattern of vibrations experienced on the machines on continuous basis. The signature analysis of the typical distorted vibrations as against regular pattern convey the type of emerging fault scenario. (bearing failure, shaft misalignment, loose mounting etc) This helps in Predictive maintenance which is more efficient and cost effective in comparison to the typical periodic maintenance.

Which is the Monitoring Scenario that applies to your type of Machineries?

Unique Monitoring Scenarios

Breach of Vibration Thresholds

(† ¥)

Periodic Vibration Monitoring



Continuous Vibration Monitoring



Vibration Sensor

Breach of Vibration Thresholds with Process Data correlation



Continuous Vibration Monitoring with process data v.i.z. RPM, Temperature correlation

Vibration Analysis



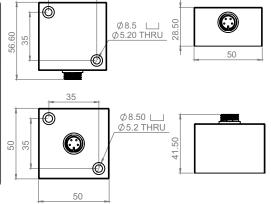
Periodic Vibration Data Collection with waveform or transient data





Continuous Vibration Monitoring with both process data correlation, waveform and transient data







Reciprocating Compressor



Motors



Pumps



Centrifuges

Features

- Durable, reliable & Life cycle cost solutions
- Same hardware platform for multiple assets
- Condition monitoring & diagnostic platform for all your critical assets
- Measurements of vibration on shaft, natural structure-borne vibrations
- Time waveform, frequency and order analysis of vibrations.

Specification

| Vibration Sensor | |
|------------------------|--------------------------------|
| Accelerometer | The triple-axis MEMS sensor |
| Frequency response | 10 to 4000 Hz |
| Measurement range | ±10g, ±20g, ±40g |
| Cross-Axis Sensitivity | ±1% |
| Sensitivity | Typically 51200 LSB/g for ±10g |
| Non-linearity | ±0.1% at ±10g; ±1.3% at ±40g |
| Tolerance | ±3% |

| Physical | |
|-----------------------------|--------------------------------|
| Mounting | Magnetic clamp / Stud mounting |
| Shock Resistance | ±40g continuos vibration |
| Operating Temperature Range | -40°C to 105°C |

| Vibes | |
|--------------------|--|
| Power Supply | USB-C (Power Adaptor in your scope) |
| Battery (Optional) | Stand-by in-built rechargeable battery |
| Processor | 32-bit 144 MHZ ARM Cortex M4F processor |
| Antenna | Integrated antenna with 2.5 DBI max gain |

Unique Use Cases



Rotating Machinery



Reciprocating Compressors, Engines, and Pumps



Bearings and Gears



Structural - Bridges, Pipes & Buildings



Turbines



Structural Health Monitoring



Heat Exchanger & Large fans



Inspection Services