pureMEMS

Pioneering Wireless Monitoring



PureMEMS is an easy to install long range wireless vibration sensor made to predict machinery issues long before damage and failure occurs.

Safeguard your machines in a revolutionary beneficial way with this vibration sensor that combines long range wireless radio technology with high quality vibration data and surface machine temperature.

Furthermore, additional services as Ai-based software solutions, onlinedata access with automated email-reports and safe cloud storage with open API can be added for maximum uptime.



Features - go from reactive to proactive

- Up to 2 km distance wireless monitoring using LoRa X2 Radio
- Smart Ai-screening from day one, with Multiviz.
- 5 sec RAW time signal recordings.
- 25,6 kHz sampling rate, linear to 6 kHz
- 3 years battery lifetime replaceable by user
- 3-Axial vibration and machine surface temperature
- Synchronized mesurements on same machine, time wave form and RPM. (Using PurePULSE)

PUMPS | FANS | ELECTRICAL MOTORS | GEARBOXES | CONVEYERS

pureSignal – a complete systemsolution for your machine monitoring

pureSignal offers a complete range of products for easy monitioring of your machines, Including gateways, Cloud-Services and Apps as well as and wireless RPM-sensor. Stay tuned – more sensors will be added to the pureFAMILY.

Read more and get started at www.puresignal.se



Technical specifications for pureMEMS

Measurement:	3 axial vibration and machine surface temperature
Sampling rate:	25.6 kHz
RAW Time signals:	1 Hz - 6 kHz up to 5 seconds
Battery:	Replaceable by user 1 (3.6V, 2100 mAh)
Battery lifetime:	3 years* replaceable batteries (SAFT LS 17330)
Environmental:	IP69K Temperature range -40 °C to +85 °C
Led indicator:	Multicolor led for battery and status indication
Magnetic trigger:	Battery status, trigger single or synchronous measurements
Firmware updates:	OTA – over the air
Synchronous:	Data sampling for all sensors on one machine simultaneous within same second. Velocity RMS, Acceleration (Peak &RMS), Raw time signal
Configuration:	Secure via app
Data security:	AES 128 Encryption
Mounting Method:	Adhesive mounting pad or stud
Radiotransmission:	X2 LoRa – 868 Mhz

^{*} With standard settings, 1 measurement every third hour, 1 time signal measurement every day.

Temperature MeasurementMeasurement Range:-20 °C to +120 °CAccuracy:+-1 °C





