## 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 algorithm-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 Algorithm screening from day one
- 5sec RAW time signal recordings, FFT in Export SW
- 26.5 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 vawe form and RPM. (Using PurePULSE)

#### PUMPS | FANS | ELECTRICAL MOTORS | GEARBOXES | CONVEYERS

# pureSignal – a complete system solution 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 soon be added to the pureFAMILY.

Read more and get started at www.puresignal.se



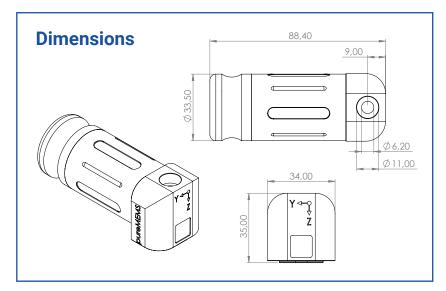
### pureSignal

## **Technical specifications for pureMEMS**

| Mesurements:       | 3 axial vibration and machine surface temperature                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Sampling rate:     | 26.5 kHz                                                                                                                                 |
| RAW Time signals:  | 2 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 button:   | 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.<br>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 messurement every third hour, 1 time signal messurement every day.

| Temperature Measurement |                   |
|-------------------------|-------------------|
| Measurement Range:      | -20 °C to +120 °C |
| Accuracy:               | +-1 °C            |





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