



Amazon Monitron

Enable predictive maintenance and reduce downtime by using machine learning to monitor equipment condition



Amazon Monitron is an end-to-end system that uses machine learning to detect abnormal conditions in industrial rotating equipment, enabling you to implement a predictive maintenance program and reduce unplanned downtime. It includes sensors to capture vibration and temperature data, a gateway to securely transfer data to AWS, a service that analyzes the data using machine learning (ML), and a companion mobile and desktop app to set up the devices and track the condition of your machinery.

Quick to install, no special skills needed

Install Amazon Monitron Sensors and Gateways using the Amazon Monitron app and start monitoring your equipment in minutes.

Low set-up costs

A cost-effective way to monitor your equipment, with low upfront device investment at a fraction of the cost of using conventional sensors, and pay-as-you-go service.

Automatic ML and ISO data analysis

Automatically detects change in equipment conditions using ML and vibration ISO standards.

End-to-end encryption

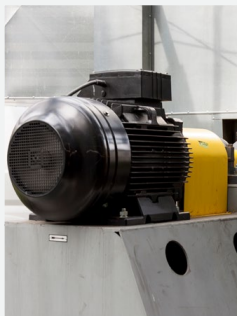
The devices, the service, and the communication are secure. All data is encrypted at rest and in transit.

Continuous improvements

Add feedback on the alerts from the Monitron mobile app and benefit from continuously improving ML model performance. Monitron Sensors and Gateways are remotely updated over the air (OTA).

Supported Use Cases

With Amazon Monitron, reliability managers can monitor and detect potential failures in a broad range of rotating equipment.



Bearings



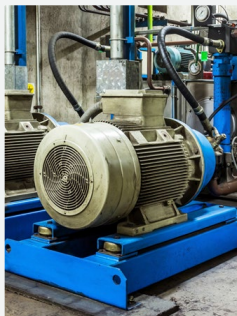
Compressors



Fans



Gearboxes



Motors



Pumps

Learn more at aws.amazon.com/monitron ›

Technical details



Amazon Monitron Sensor

Operating Temperature	-20 +80°C / -4 +176°F
Dimensions	52.8 x 43.0 x 24.9 mm / 2.08 x 1.69 x 0.98 inch
Weight	54 grams / 1.9 ounces
IP / impact rating	IP69 / IK07
Mounting method	Instant adhesive / epoxy
Wireless protocol	Bluetooth Low Energy 5
Range	20-40m (typical)
Vibration sensor	3-axis MEMS accelerometer, range +/-16g, F max 6kHz, sampling frequency 26.7kHz
Temperature resolution	0.1°C / 0.1°F
Power	Lithium metal non-rechargeable batteries
Battery life	5 years (managed)
Default data capture frequency	Once an hour



Monitron Gateway (Ethernet)

Operating temperature	-20 + 60°C / -4 +140°F
Dimensions	139 x 107 x 41 mm / 5.5 x 4.2 x 1.6 inch
Weight	230 gr, 8.2 oz
IP Rating	IP65
Internet connectivity	RJ45 10 / 100Mbps
Power	PoE (IEEE 802.3 Type 1 15.4W)



Monitron Gateway (WiFi)

Operating temperature	0 - 40°C / 32 - 104°F
Dimensions	90 x 78 x 38 mm / 3.6 x 3.1 x 1.5 inch
Weight	95 grams / 3.4 ounces
IP Rating	IP65
Internet connectivity	WiFi, 802.11b/g/n, ISM 2.4GHz only
Power	Power 5.0V - 2.0A DC, AC adapter included for USA, UK and EU countries (indoors only)

Additional information

Warranty and terms	Five years limited warranty . Use the Amazon Monitron Starter Kit is subject to the terms found here .
Safety & Compliance	Safety & compliance information
Certification	US, CA, EU, GB, AU, JP