

# SKF Axios

Always on. Always with you. Always one step ahead.



Simple, wireless,  
and scalable end-to-end  
predictive maintenance



powered by 

# Discover SKF Axios

The first line of defense for your machinery. SKF Axios is a simple, scalable and cloud-based predictive maintenance solution from SKF and Amazon Web Services (AWS).

SKF Axios is ideal for virtually any industry.\* From food processing to pulp and paper to pharmaceutical to utilities to universities and hospitals, and so much more.



## Always on

Automated equipment monitoring trends your machine data, detects anomalies around the clock, and sends alerts when you need to take action.

## Always with you

Whether on your phone, tablet, or PC, condition monitoring data and alerts are at your fingertips.

## Always one step ahead

Make more informed decisions and avoid issues before they occur. The more data collected, the smarter the machine learning becomes. SKF Axios constantly evolves to safeguard your equipment.

## Peace of mind for maintenance and reliability teams

- Fully automated wireless technology for 3-axis vibration and temperature data collection
- Works out of the box and easy to install
- No technical expertise or vibration experience required
- Uses machine learning to detect anomalies and notify users
- Cost-effective and scalable



## Wireless and scalable end-to-end solution

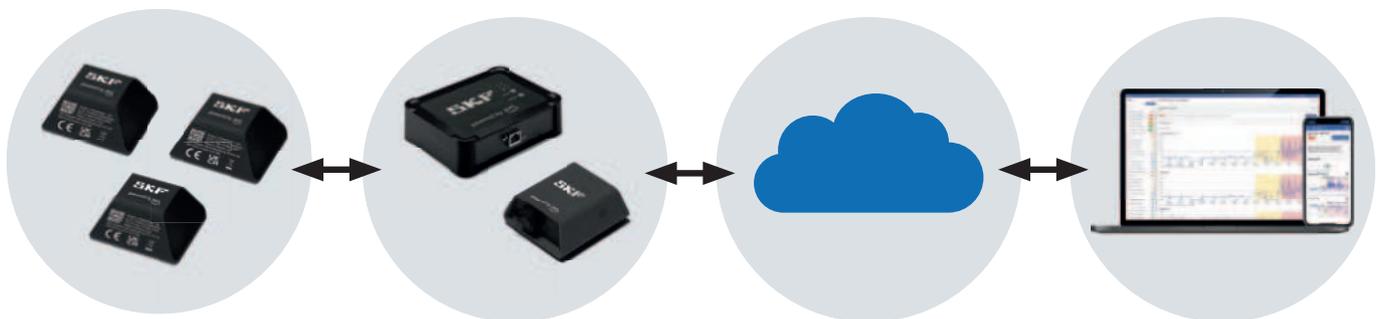
SKF Axios collects and analyzes vibration and temperature data to detect equipment anomalies and provide notifications on the health of your machinery.

Start small and scale up as needed with this cost-effective, end-to-end predictive maintenance system from SKF and AWS. SKF Axios is simple to use right out of the box. Many sensors can be added, even at different points in time, and automatically connect to the closest gateway. Unlimited gateways can be added to the network.



## How SKF Axios works

When SKF Axios detects abnormal machine conditions, users are alerted so they can respond with proper maintenance. Historical trend data is the basis for machine learning. The more data collected, the smarter and more accurate the machine anomaly detection becomes.



### Wireless sensors

Collect data from a wide range of machinery.

### Gateways

Transfer data to the cloud via WiFi or Ethernet connection.

### AWS cloud services

Uses machine learning to analyze data and improve performance.

### Apps

Enable users instant access to data and receive notifications on anomalies.

# Technical specifications for SKF Axios

## Wireless Sensor

### Measurements

3-axis MEMS accelerometer	
Velocity:	Frequency response up to 6 kHz, sampling frequency 26.7 kHz
Maximum range:	up to 16 g
Temperature:	-20 to 80 °C (-4 to 176 °F)
Data collection frequency:	Once an hour

### Environmental

Operating temperature range:	-20 to 80 °C (-4 to 176 °F)
IP rating:	IP69

### Physical

Dimensions:	52.8 x 43.0 x 24.9 mm (2.08 x 1.69 x 0.98 in)
Weight:	54 grams (1.9 oz)
Mounting method:	Instant adhesive / Epoxy

### Wireless communication

Wireless protocol:	Bluetooth Low Energy 5
App – Sensor interface:	NFC (Near Field Communication)
Gateway to sensor range:	20 to 30 m (65 to 98 feet) typical, depending on plant topology

### Power source

Power:	Lithium Metal Non-Rechargeable Batteries
Battery life:	Estimated 5 years

## Wi-Fi gateway

### Environmental

Operating temperature:	0 to 40 °C (32 to 104 °F)
IP Rating:	IP65

### Physical

Dimensions:	9 x 7.8 x 3.8 cm (3.6 x 3.1 x 1.5 in)
Weight:	95 grams (3.3 oz)

### Network communication

Internet connectivity:	Wi-Fi, 802.11b/g/n, ISM 2.4 GHz only
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### Power source

Power:	Power 5.0 V – 2.0 A DC AC adapter included for USA, UK and EU countries (indoors only)
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## Ethernet gateway

### Environmental

Operating temperature:	-20 to 60 °C (-4 to 140 °F)
IP Rating:	IP65

### Physical

Dimensions:	13.9 x 10.7 x 4.1 cm (5.5 x 4.2 x 1.6 in)
Weight:	230 grams (8.2 oz)

### Network communication

Internet connectivity:	RJ45 10/100Mbps
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### Power source

Power:	Power over Ethernet (PoE) 15.4 Watt class
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\*The solution is designed for rotating equipment in safe operating conditions. It is not intended for use in consumer appliances and hazardous area applications such as (but not limited to) power generation and off-shore oil and gas stations.

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