

# SKF Plug and Play

Entry Level Asset Health – Technical information

With SKF Plug and Play, predicting rotating equipment issues is easy. This entry level package allows you to quickly assess key data using simple tools, preventing asset downtime.

Get expert advice without having to invest in complex technology or upskilling. Benefit from industry-leading insight at your fingertips, scalable to your needs.

## Machine monitoring made easy.

- Easy-to-use, portable sensor and a mobile app
- Easy start-up with no prior training or experience needed
- Quickly monitors machine health and helps identify machinery issues before production is impacted
- Instant feedback from vibration and temperature measurement
- Expert analysis, advice and diagnostic reports from SKF
- Cost-effective and scalable entry-point for reliable rotation



Part #: [CMDT39x-K-SL](#)

### Sensor features (CMDT39x-K-SL):

- Velocity, acceleration and temperature measurements
- Bluetooth communication with iOS and Android devices
- Rugged, industrial design: drop test at 1.8 m (6 ft), water- and dust-resistant (IP65)
- Rechargeable lithium battery (8 hours with normal usage)
- One year warranty covering manufacturing defects
- Two year calibration certificate

### Sensor controls and indicators:

- 1 Power button –**  
Powers the sensor on and off
- 2 Battery LED (green, red) –**  
Indicates status of battery charge
- 3 Communication LED (green, red) –**  
Indicates sensor connection status to app and when firmware updates are in progress
- 4 All-purpose check LED –**  
For future use



For more information, contact your SKF Representative

# Technical specifications for CMDT 39x-K-SL

## Regulatory specifications

IP rating	IP 65, dust and water ingress protection testing standard
Radio approvals	Europe (CE), USA (FCC), Canada (IC)
CE mark	CE approved

## Measurement range

### Overalls

Velocity 10 Hz to 1 kHz up to 55 mm/s (2.17 in/s)

Recommended speed range: 600 to 3 600 r/min

Bearing condition SKF patented envelope acceleration up to 20 gE

### FFT

Maximum frequency Velocity 1 kHz, enveloped acceleration 2 kHz

Lines of resolution Velocity 400, enveloped acceleration 800

Detection type Velocity RMS, enveloped acceleration true peak to peak

Temperature Standard operating temperature range is  $-20$  to  $+60$  °C ( $-5$  to  $+140$  °F). Sensor is capable of measuring beyond the standard SKF Pulse operating temperature range up to  $100$  °C ( $212$  °F) for short periods.

## Power

Main power Rechargeable lithium battery, 3.7 V DC, 0.14 A

Battery lifetime Eight hours with normal usage  
Manual power off: Press and hold power button for 3+ seconds  
Auto power off: After 15 minutes of no activity

MAINS supply voltage, charger Varies up to  $\pm 10\%$  of the nominal voltage, TRANSIENT OVERVOLTAGE CATEGORY II; POLLUTION DEGREE 2

Charger Input 5 V DC  $\pm 10\%$ , 1 A  
AC adapter Input 100 to 240 V AC, 0.4 A, 47 to 63 Hz Output 5 V DC, 1.6 A

## Environmental

Storage temperature  $-20$  to  $+45$  °C ( $-5$  to  $+115$  °F) for less than one month

$-20$  to  $+35$  °C ( $-5$  to  $+95$  °F) for less than six months

Operating temperature, built in infrared (IR) sensor  $-20$  to  $+60$  °C ( $-5$  to  $+140$  °F)

Operating temperature, battery 0 to  $+40$  °C ( $32$  to  $+105$  °F) for charging  
 $-20$  to  $+60$  °C ( $-5$  to  $+140$  °F) for discharging

Operating temperature, charger 0 to  $+40$  °C ( $32$  to  $+105$  °F)

Altitude Up to 2 000 m (6 560 ft)

Humidity 95% non-condensing

## Physical

Case Water and dust resistant (IP65)

Drop test 1.8 m (6 ft) in accordance with MIL-STD-810G

Dimensions 45 x 45 x 135 mm (1.8 x 1.8 x 5.3 in)

Weight 200 g (7 oz)

## SKF QuickCollect includes

SKF QuickCollect sensor CMDT-39x-K-SL (includes charger, magnet and rubber boot)  
2-year calibration certificate

## SKF Pulse app

### SKF Pulse app is available for iOS and Android

For iOS, the app is currently compatible with iPhone 5s and later, all iPad Air and iPad Pro models, iPad 5th generation, iPad 6th generation, iPad mini 2 and later and iPod touch 6th generation models running iOS 12 and above. For Android, the app is currently compatible with Samsung Galaxy J4 phone (Android 8.0 Oreo™ OS), Samsung Galaxy S8 phone/curved edge (Android 9.0 Pie™ OS), and Samsung Galaxy Tab S5E (Android 9.0 Pie™ OS).

SKF Pulse app can be found on the Apple Store and Google Play.



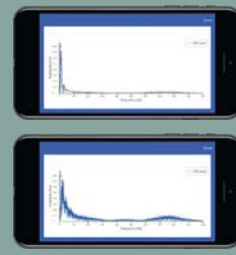
Measure vibration and temperature



Monitor asset health



On-the-spot access to SKF experts



Data collection graphs

# Frequently asked questions

## What is included in my Plug and Play entry level package?

- QuickCollect sensor (CMDT 39x-K-SL) – expert wireless vibration and temperature sensor
- SKF Pulse app (available on the Apple store and Google Play)
- Access to SKF expertise and remote analysis from the REP (Rotating Equipment Performance) center directly from the Pulse app
- Access to bearing application specialists
- Access to SKF e-learning

## How do I get started with my Plug and Play entry level package?

- Download the SKF Pulse app
- Switch on the sensor and connect to the Pulse app
- Start collecting data and check your asset health immediately!

Need further assistance? Contact SKF directly from the app or get in touch with your local contact.

## Is there a limit to the number of assets I can enter in the app or measure with one sensor?

There is a recommended limit with an easy upgrade path to move up to the next level.

## Can asset setup fields be left blank if data is unknown?

Required fields are indicated by an asterisk in the app and must be entered for proper analysis. Fields without an asterisk may be left blank. However, the more information provided, the more accurate the analysis will be.

## How are thresholds set?

Based on asset data entered in the SKF Pulse app, default thresholds for velocity alarms are set to ISO standards. User can customize velocity alarm thresholds if desired. Get in contact with SKF for further assistance.

## How do I know where to take measurements on my asset?

The app has an intuitive visual interface that guides users through the data collection process.

## How do I request an SKF Pulse Check?

Go to “My Assets” from within the app, select the specific asset and then select “Request Pulse Check”. Tap the button to send the request. Data must be collected on an asset to submit an SKF Pulse Check.





## How is data analysed?

Data is sent directly from the app to an SKF REP center where it is analysed by a team of SKF experts. An SKF Pulse Check report will be sent by the analyst advising any corrective actions, if required.

## Does the Plug and Play entry level package require a subscription?

A subscription package can be tailored to meet your needs.

For more information, contact your SKF representative.

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## How do I reach technical support?

Submit your support request through Pulse app or get in touch with your local SKF contact. Once your support request is submitted, a technician will contact you ASAP to begin working on your issue.

## What is the warranty for the QuickCollect sensor?

The Quick collect sensor comes with a one-year warranty covering manufacturing defects.

