

ABB MOTION SERVICES

# ABB Ability™ Digital Powertrain condition monitoring for rotating equipment

## What's new? PI32

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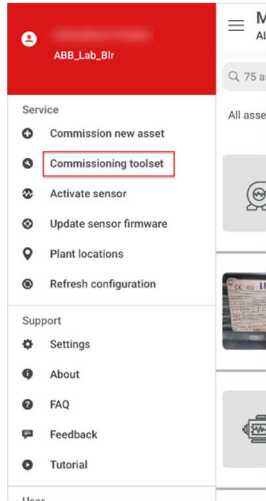
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## New features

### Enhanced sensor and gateway commissioning

Smart Sensor mobile app supports a commissioning toolset that helps the field engineer install sensor and gateway on the field and make sure that the platform can collect the sensor or gateway information.

1. In Smart Sensor mobile app, tap Commissioning toolset.



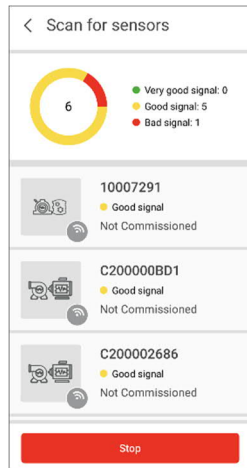
2. In the Commissioning toolset screen, tap the required function:

- Scan for sensors
- Sensor information
- Gateway information
- Commission gateway

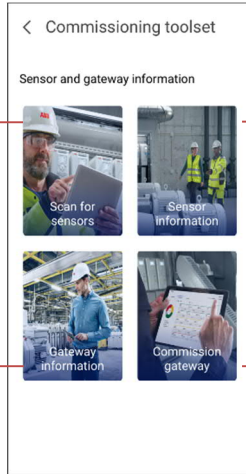
See example screens below:

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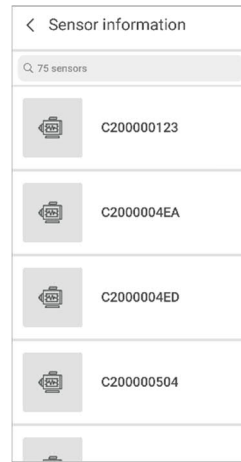
# Condition Monitoring with Smart Sensors



With Bluetooth® on, the app scans for available sensors. It also shows the signal quality and commissioning status.



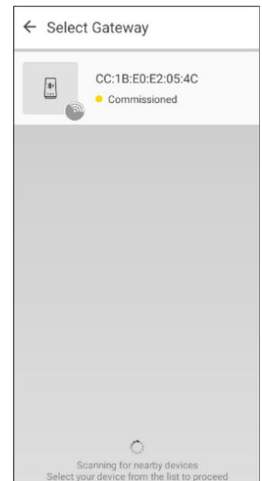
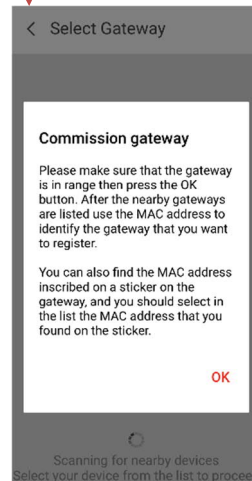
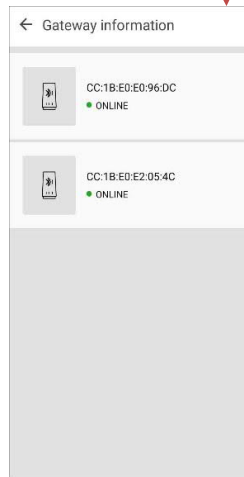
List the available gateways. It also shows the online/offline status.



Lists available sensors. Tap a sensor to view the sensor details.



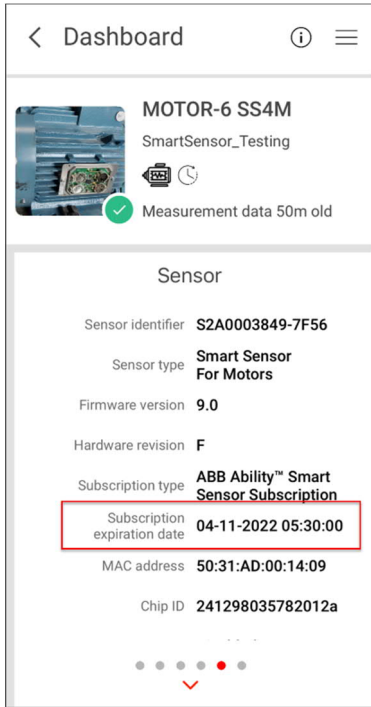
Provides option to commission the gateway. Shows the commissioned status.



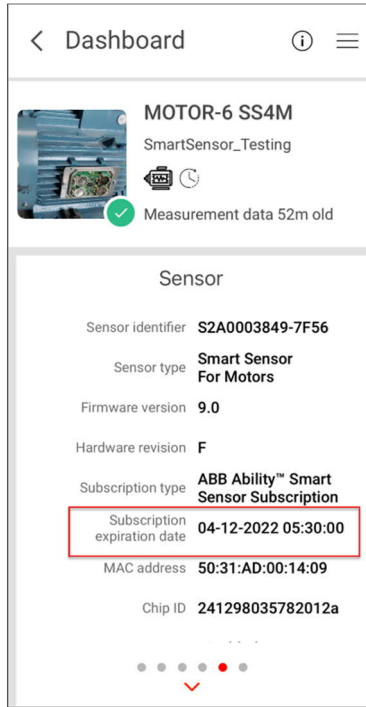
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## Cumulative subscription for sensor

It is now possible to activate a new subscription while the existing subscription is still valid. The new subscription extends the existing subscription according to the duration of the new subscription.



*Existing subscription*

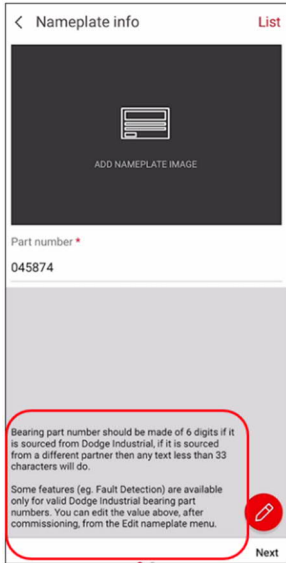


*Extended subscription*

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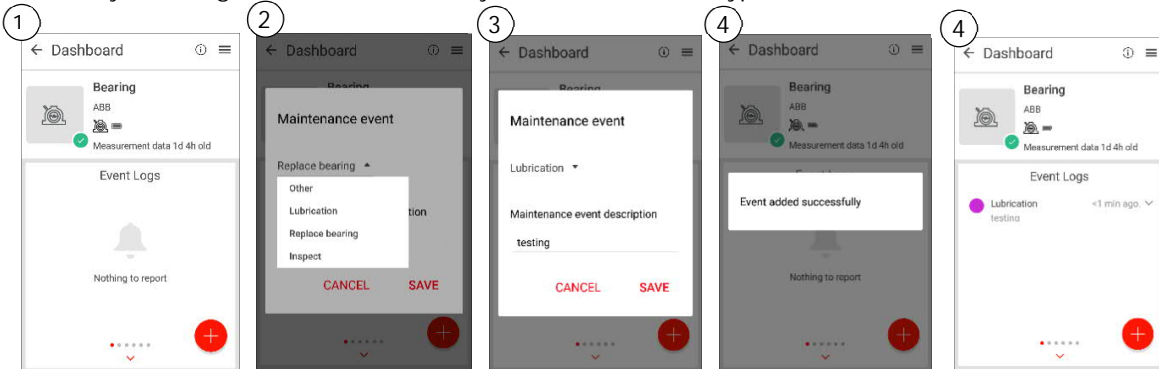
## Updated nameplate information for bearing asset


The nameplate information for bearing asset informs you that certain features, like fault detection are only available if correct 6-digit Dodge Industrial part numbers are added or edited under the part number.



## Maintenance event category for gearing and bearing assets

You can configure a maintenance event, such as, oil change, replace gearbox, etc. for gearing or bearing asset, by selecting a maintenance activity based on the asset type.

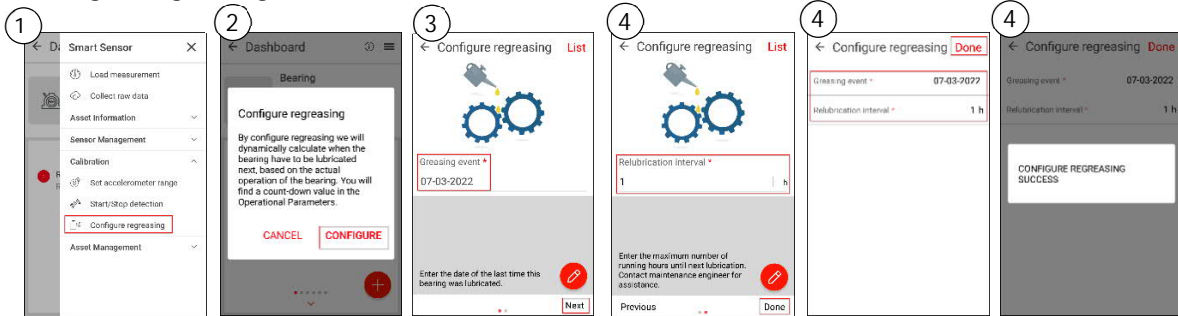


1. In the Smart Sensor mobile app, under the asset dashboard screen, go to Event Logs. Click the  plus button.
2. In the Maintenance event screen, from the Replace bearing drop-down list, select a maintenance activity, for example, Lubrication.
3. Enter a maintenance event description and click SAVE.
4. The event added successfully message appears and event appears in the logs list.

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## Regreasing and oil change functionalities

You can configure the regreasing and oil change events for bearing and gearing asset types, in the Configure regreasing menu.



1. In Smart Sensor mobile app, go to asset menu and under Calibration tap Configure regreasing.
2. You are prompted to confirm that this functionality dynamically calculates the next lubrication date. Tap CONFIGURE.
3. You are prompted to enter the last lubrication/ oil change event followed by the number of hours until the next lubrication/ oil change event. In the Greasing event field select the last lubrication date. Tap Next.
4. In the Relubrication interval field, select the maximum number of running hours until the next lubrication. Tap Done. The Regreasing event successful message appears.

## Vibration data of Smart Sensor for mechanical products collected with 3-axis variant

The Smart Sensor portal and mobile app that is commissioned to a gateway can collect the vibration data of Smart Sensor for mechanical products using 3-axis variant.

Note:

- This feature is applicable for bearing and gearing assets.
- This feature is applicable for the new firmware version 4.0.2, available in the app version 8.5.
- The 3-axis vibration raw data configuration is disabled by default.

Important: Make sure that the three black arrows of the sensor are aligned parallel to the axis of your equipment's shaft.

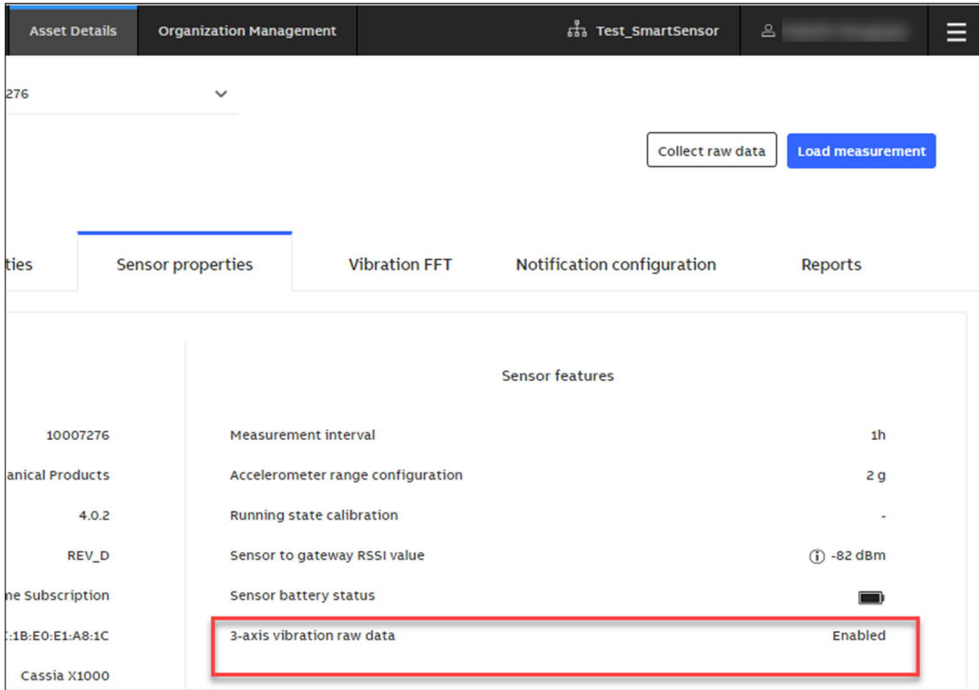


The three black arrows indicate the direction of the axial vibration reading.

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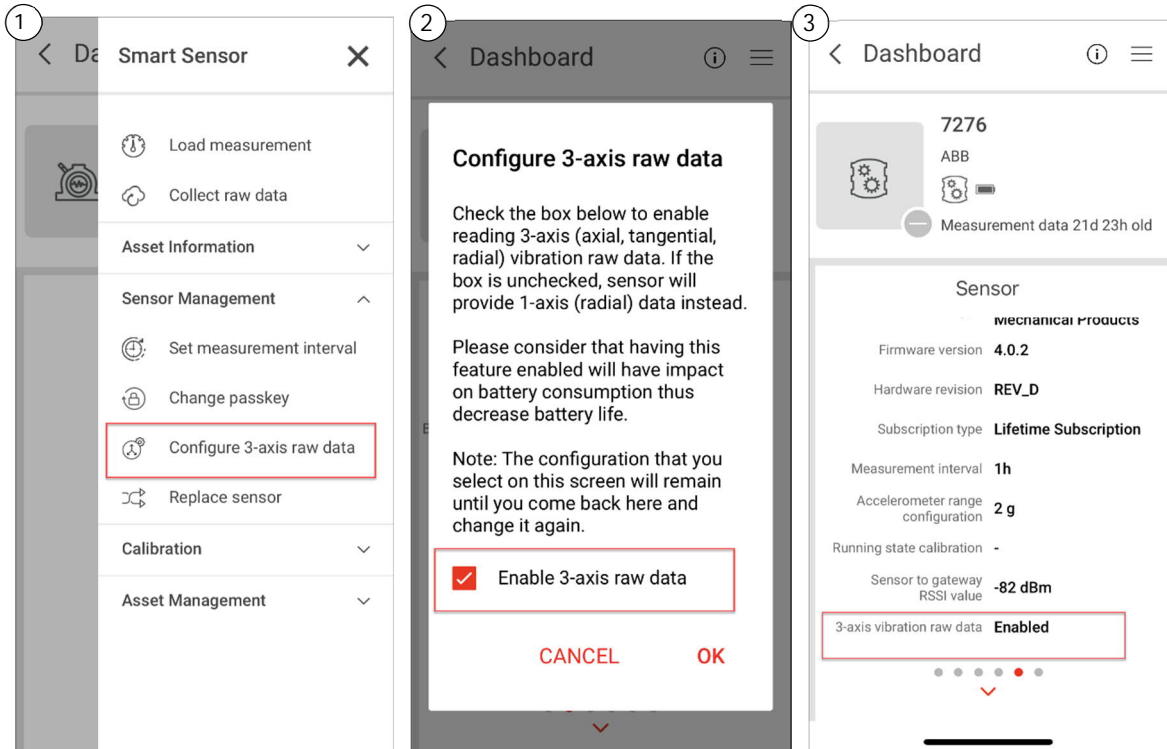
Portal:

1. In Smart Sensor portal, go to Asset Details → Sensor properties → Sensor features → 3-axis vibration raw data.



Mobile app:



1. In Smart Sensor mobile app, under Sensor Management, tap Configure 3-axis raw data.
2. In the pop-up message, tap to select the Enable 3-axis raw data and tap OK.
3. In sensor details, check that option 3-axis vibration raw data is *Enabled*.
4. See the example screens below.



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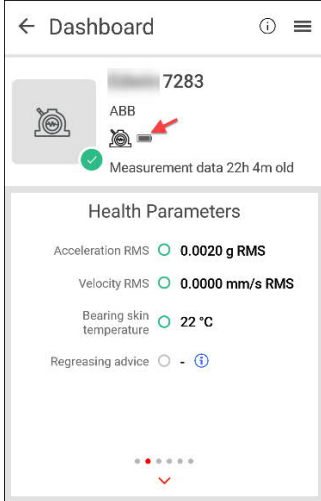
### Battery indicator of sensor

The new battery icon in the Asset Details menu indicates the battery status of sensor. The status displays only two states: when the battery is full  and when the battery is getting depleted . Note that when battery icon appears red, the sensor must be replaced.

Note: This feature is applicable for the new firmware version 4.0.2, available in the new app version 8.5.

#### Mobile app

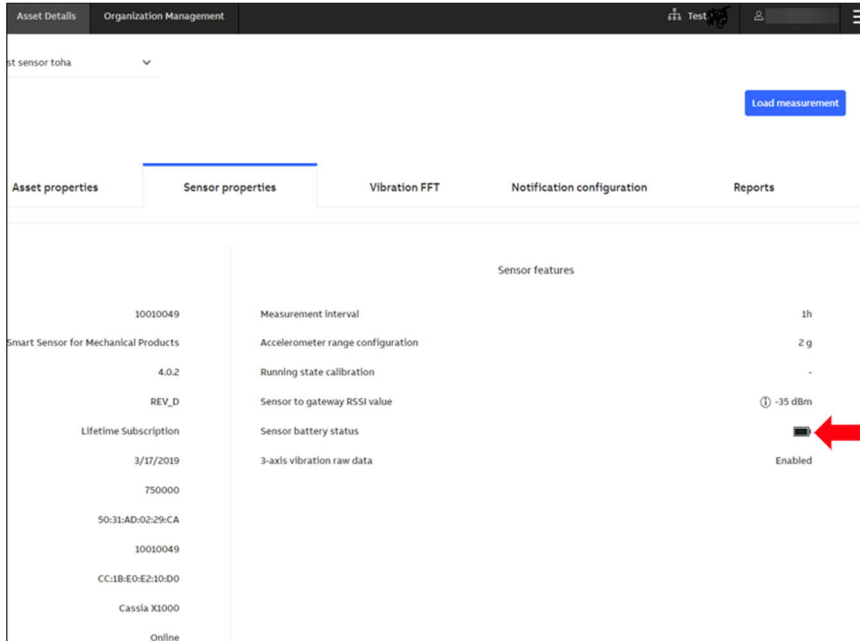
In Smart Sensor mobile app, go to asset dashboard and see the battery icon.



Note: The battery icon does not display immediately after the firmware update. It can take up to 7 days for the battery icon to display.

#### Portal

In Smart Sensor portal, go to Asset Details → Sensor properties → Sensor features → Sensor battery status.



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