ABB MOTION SERVICES

ABB Ability™ Digital Powertrain condition monitoring for rotating equipment

What’s new? PI31

See topics

New features

Revised KPI ranges
External reference ID for assets
Display battery modes for Gen 2 Smart Sensors
Remove user from an organization
Download user list of an organization
Gateway commissioning using mobile app
**New features**

**Revised KPI ranges**

The KPI ranges of health parameters and operational parameters are increased, so the trend charts can display wider measurement points and it also eliminates data gaps in the graph.

The table below shows the revised KPI ranges Vs previous ranges:

<table>
<thead>
<tr>
<th>KPI name</th>
<th>New ranges</th>
<th>Previous ranges</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>-50…130</td>
<td>-40…85</td>
<td>deg C</td>
</tr>
<tr>
<td>Overall vibration</td>
<td>0…200</td>
<td>0…20</td>
<td>mm/ s</td>
</tr>
<tr>
<td>Vibration (Radial, Tangential, Axial)</td>
<td>0…200</td>
<td>0…20</td>
<td>mm/ s</td>
</tr>
</tbody>
</table>

Note: The changes are not applied retrospectively and does not impact the historical trends.

**Portal:**
To view an example value, in Smart Sensor portal, go to **Asset Details → Operational parameters**. See values in **Health parameters** and **Operational parameters**.
External reference ID for assets

Optional asset properties are extra information of the asset that are used while commissioning. In the Smart Sensor portal and mobile app, these asset properties are identified as “External asset reference ID”.

**Portal:**
In Smart Sensor portal, go to Asset Details → Asset properties → Asset Details → External asset reference ID.

**Mobile app:**
The screen shows a sample asset card with an External asset reference ID.
### Display battery modes for Gen 2 Smart Sensors

The Smart Sensor portal and mobile app shows the following battery modes for the Generation 2 Smart Sensors:

<table>
<thead>
<tr>
<th>Battery mode</th>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal battery level</td>
<td><img src="image" alt="Icon" /></td>
<td>Indicates that sensor is in normal operating condition and healthy battery.</td>
</tr>
<tr>
<td>Battery saver mode</td>
<td><img src="image" alt="Icon" /></td>
<td>Limited operations due to low battery level. Indicates that • battery capacity has reduced over time or • device is operating in extremely low temperature for prolonged duration. The sensor may restrict some operations that require high battery usage (for example, Repeated raw data request). The sensor can move back to Normal mode when the temperature conditions are favorable.</td>
</tr>
<tr>
<td>Low battery mode</td>
<td><img src="image" alt="Icon" /></td>
<td>No operation is possible. Replace the sensor to continue monitoring. Indicates that • battery capacity has reduced over time or • device is operating in extremely low temperature for prolonged duration In this mode • Bluetooth advertisement and connections are supported. • All condition monitoring activities are disabled. • All requests are rejected with a “Low Battery” message. • Customers are notified via emails, if enabled, to replace the sensor and continue monitoring the asset.</td>
</tr>
<tr>
<td>Empty battery mode</td>
<td><img src="image" alt="Icon" /></td>
<td>No operation is possible. Replace the sensor to continue monitoring. Sensor is shutting down. Indicates that the Sensor battery has reached end-of-life and it will gracefully shut down itself in few hours. The operational behavior is same as “Low Battery Mode” until the device shuts down. Also, customers are notified via emails about the status.</td>
</tr>
</tbody>
</table>

See the below sample screens of portal and mobile app.
**Portal**

*Image of a sensor feature screen showing battery mode and normal battery level.*

**Mobile app**

*Image of a dashboard showing smart sensor subscription details and battery mode for different sensors.*

---

**DOCUMENT ID** 9AKK108466A4184  
**REV.** A  
**SECURITY LEVEL** External  
**DATE** 17th January 2022  
**LANG.** EN  
**PAGE** 5/8  
© Copyright 2022 ABB. All rights reserved.
Remove user from an organization
In the Smart Sensor portal, if you are an organization admin you can remove a user from the users list.

**Note:**
- You can remove a user from only the active organization you currently logged in.
- You cannot remove the current user (yourself) from the user list.

1. In Smart Sensor portal, go to **Organization Management → Users**.
2. Select the organization (for example, **Test_SmartSensor**).
3. In the users list, navigate to the username or in the search box, enter the username you want to remove. Click  (Delete).
4. In the popup confirmation message, click **Remove** to remove the user from all user groups and completely remove from the organization.

The user is removed and does not appear in the users list.
**Download user list of an organization**

In the Smart Sensor portal, if you are an organization admin you can download the users list of the organization.

1. In Smart Sensor portal, go to **Organization Management → Users**.
2. Select the organization (for example. *Test_SmartSensor*).
3. Click **Download user list**.

A worksheet containing details of all users in the organization downloads to your PC.
Gateway commissioning using mobile app

With Smart Sensor mobile app, you can commission an organization's gateway and apply it to all the sensors in the organization. Make sure that the mobile app is near to the gateway you want to commission. The app detects all the nearby gateways in the range, so you can manually identify the gateway with its MAC address and commission it to the required plant name.

Note:
- The commissioning applies to only Cassia gateways.
- In this release the gateways of customer's Smart Sensor organizations are not maintained and configured, because it requires strict control based on user authentication and user role in the organization. Wait for updates on this implementation in the upcoming releases.

1. In Smart Sensor mobile app, under Service menu, tap **Commission gateway**.
2. Read the popup message, and make sure the gateway is in the required range. Tap OK, to confirm.
3. In the list of detected gateways, select the gateway you want to commission.
4. In the popup message tap **OK** to confirm that correct gateway is selected.
5. Select a plant where you want to commission the gateway.
6. The selected gateway is commissioned.