

A÷OMAT÷ION

Atomate It!

Configuring Atoms

User Guide 1.4: Atomate It! app for Android

A grayscale background image of an industrial robotic arm, likely a CNC machine, with a yellow warning triangle on its side. The arm is positioned over a worktable.

Configuring Atoms

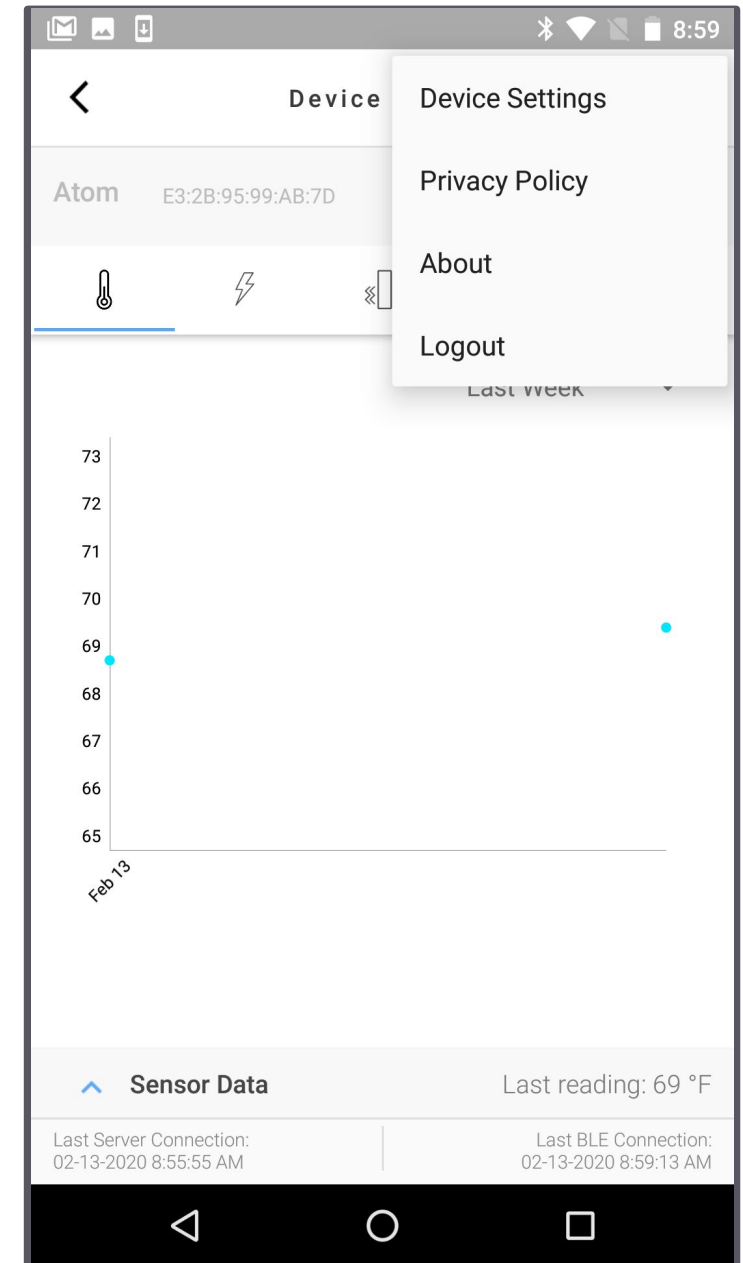
Access Device Settings

Select the Atom you wish to configure on the My Devices screen.

Tap the **three dots** on the top right of the screen to access Device Settings.

Select **Device Settings** from the menu.

Atom must be in range to access Device Settings.



Device Settings

Name

Name Your Atom specific to the equipment the Atom will be monitoring

Sensor Configuration

Turn sensors on/off, set thresholds and configure sample times.

Timers

Control how often Atoms record samples and number of samples taken after an event.

Location

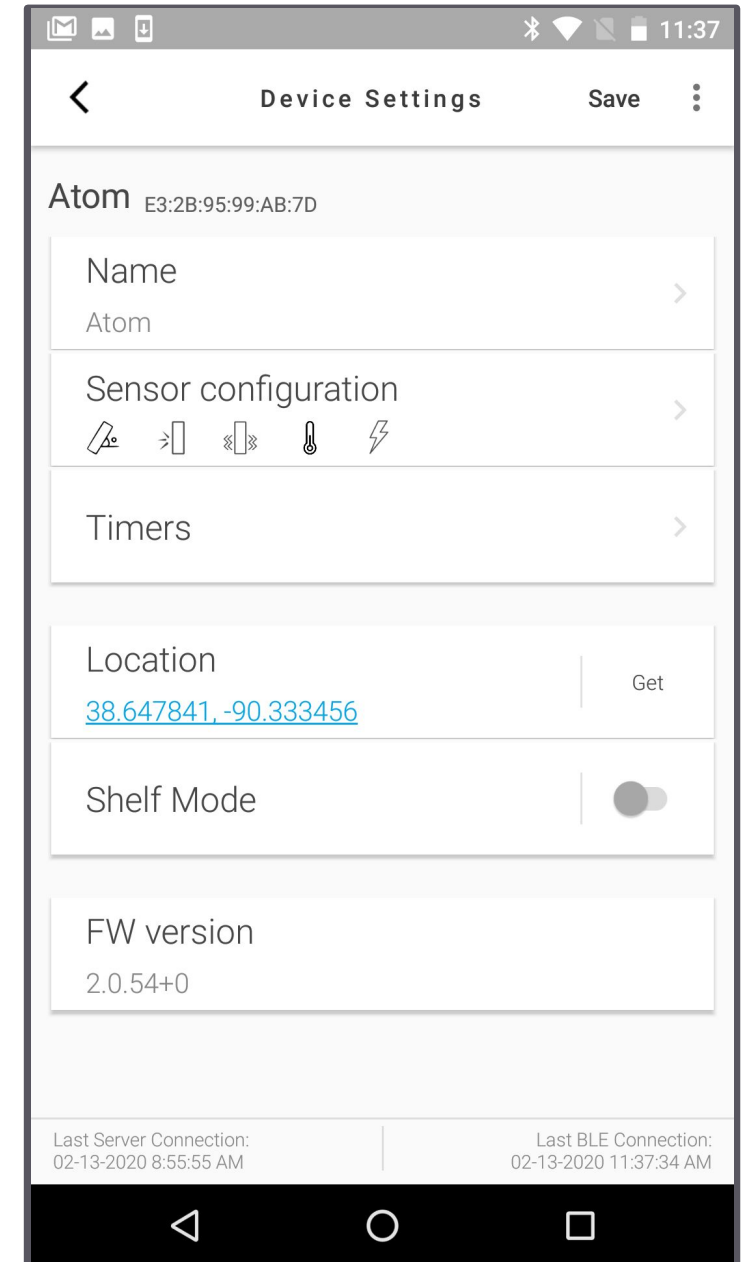
Tap Get to set location of Atoms using the mobile phones GPS. If location is not set using the app, the Atom location will be set as the Gateway location.

Shelf Mode

Turning on Shelf Mode deactivates Atoms to conserve battery life. Only turn on shelf mode for Atoms not in use. While in shelf mode, no samples will be taken and sensors will not monitor for events.

FW Version

Firmware version on Atom. If an issue arises, reference the FW Version when requesting support.



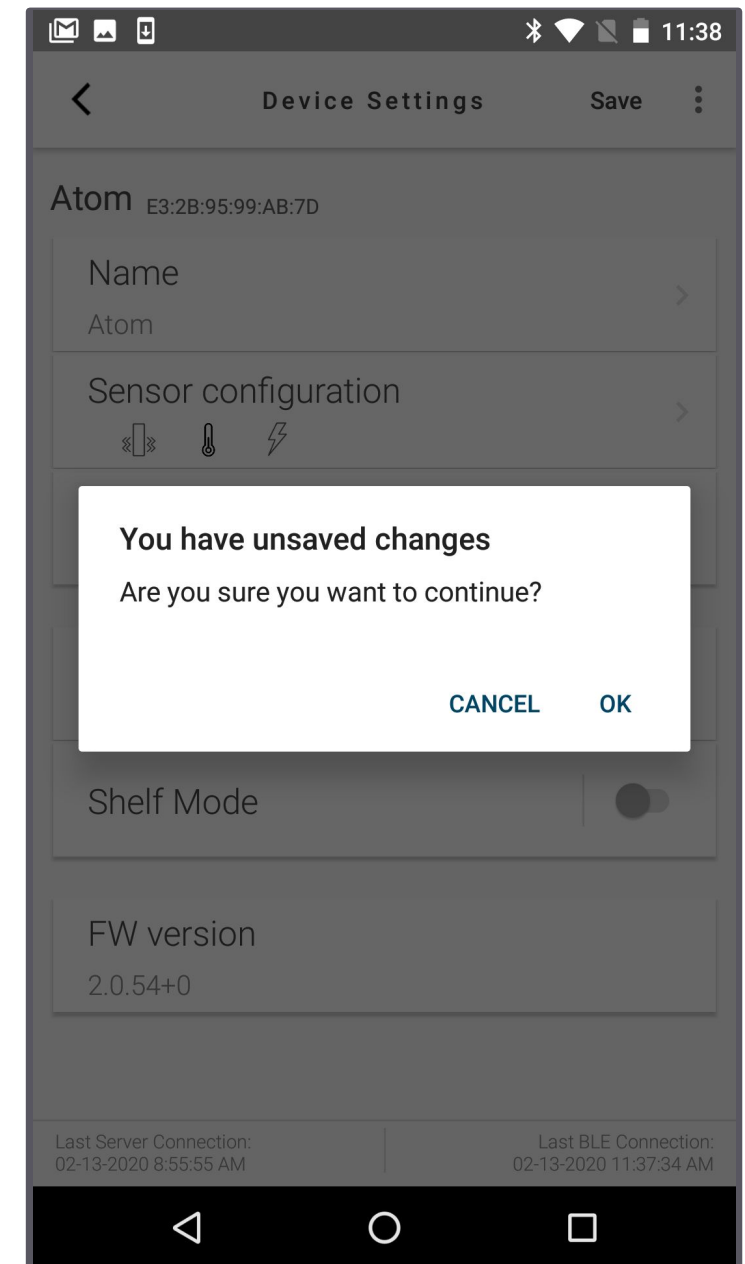
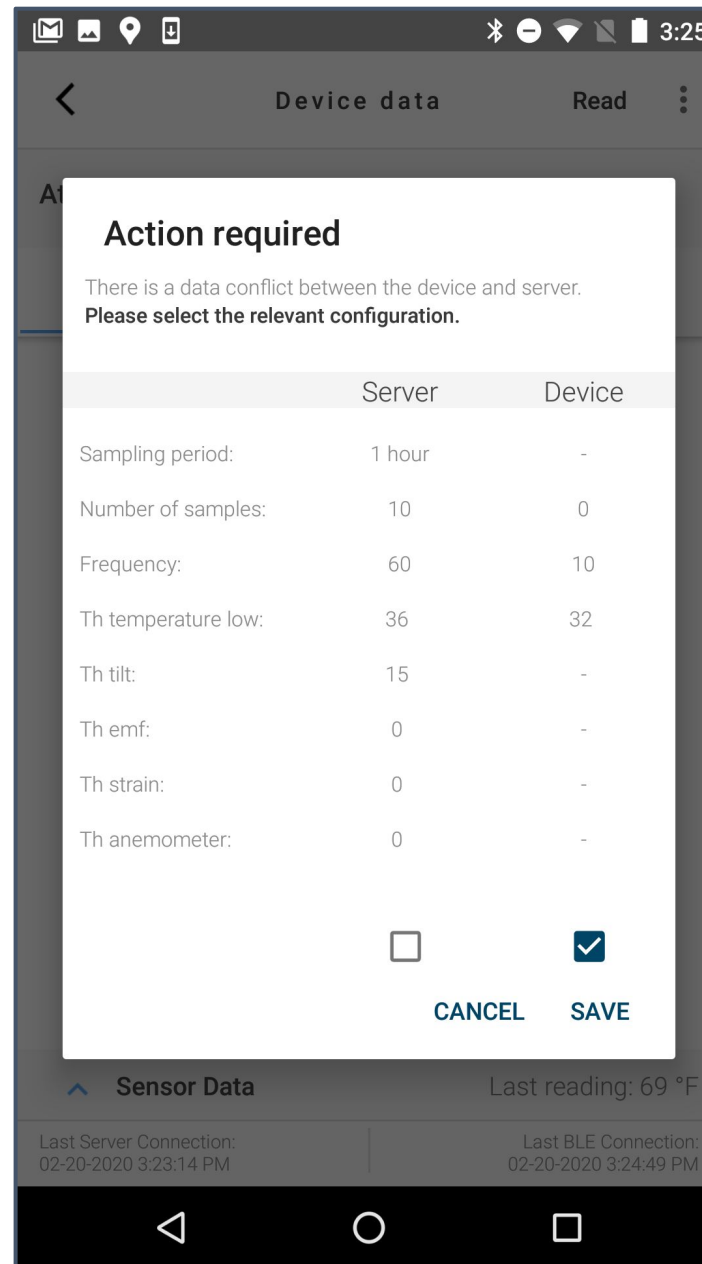
Action Required

Atoms can be configured using online dashboards as well as the Atomate It! app. If a user changes a setting online, then goes to device settings, you will see a message stating action required.

This allows users to choose if they want the configuration done from the online server or from the app directly to the device. Select Server or Device and click Save.

Save Your Changes

If a message appears saying You have unsaved changes click cancel then save your changes and exit. If you click OK, you will return to the Device Data screen without saving your changes.



A grayscale background image of an industrial robotic arm, likely a CNC machine, with various mechanical components and a warning triangle symbol visible. The image is semi-transparent, allowing the title text to stand out.

Sensor Configuration

Sensor Configuration



Temperature

Monitors equipment and environmental temperature.



Vibration SD

Monitors vibration and machine usage using Standard deviation of 3 Axis (XYZ) Accelerometer.



High G

Monitors the intensity of an impact or acceleration using G force.



Tilt

Monitors for change in position/angle from the calibrated position.



EMF

Determines presence/absence of an Electromagnetic Field.



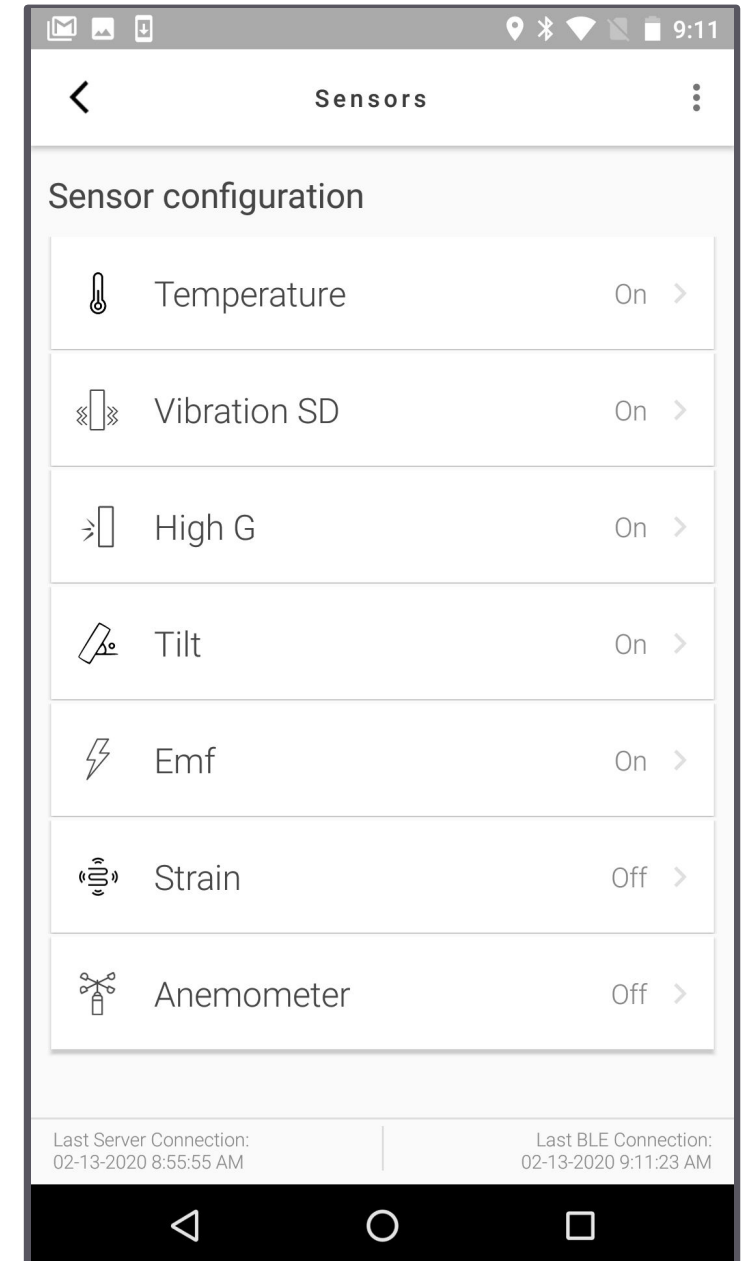
Strain

External connection required.



Anemometer

External connection required.



Different Atoms have different sensors. Sensors that are not on your Atom can not be activated by the app.

**Atom
AT-C1.0**



AT-C 1.0 Sensors

- Temperature
- Vibration SD
- High G
- Tilt

**Atom
AT-R1.0**



AT-R1.0 Sensors

- Temperature
- Vibration SD
- High G
- Tilt
- EMF

External Connection to
Sensor Required

- Strain
- Anemometer

Helpful Hint

Only have sensors relevant to the equipment you are monitoring turned on. Turning off extra sensors will help maximize the Atoms battery life.

Temperature

Monitors equipment and environmental temperature.

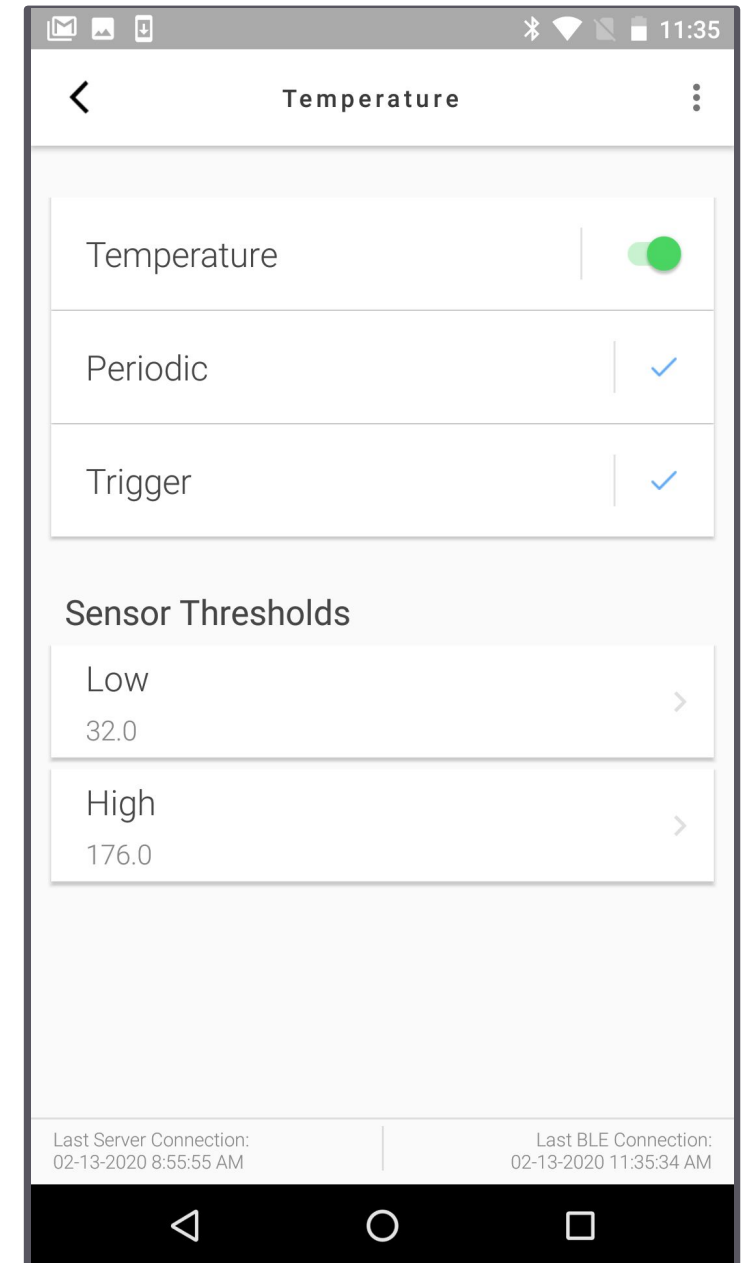
User can turn sensors on and off.

Turn on Periodic readings to take temperature reading based on specified time increments. This can be used to replace manual temperature logging.

Turn on Trigger readings to allow Atoms to sense in the background and record samples when a threshold is met.

The low temperature threshold triggers the Atom to take a reading when an Atom reaches a low temperature.

The high temperature threshold triggers the Atom to take a reading when Atom reaches a high temperature.



Helpful Hint

Use the Get Button to take a reading and automatically input the current sensor readings as the desired threshold.

Example: When working with machinery, turn the machine on to its idle state then tap Get next to Idle. Then start running your machine on its active state and tap Get next to Active.

The screenshot shows a mobile application titled "Vibration SD - Thresholds". At the top, there is a status bar with various icons and the time 10:42. Below the title bar, there are two input fields for thresholds. The first field is labeled "Idle" and contains the value "0.4", with a "Get" button to its right. The second field is labeled "Active" and contains the value "1.0", also with a "Get" button to its right. Below these fields is a numeric keypad with digits 1-9, 0, a decimal point, and a blue button with a right arrow. The keypad also includes symbols for minus, equals, and backspace.

Vibration SD

Monitors vibration and machine usage using Standard deviation of 3 Axis (XYZ) Accelerometer.

User can turn sensors on and off.

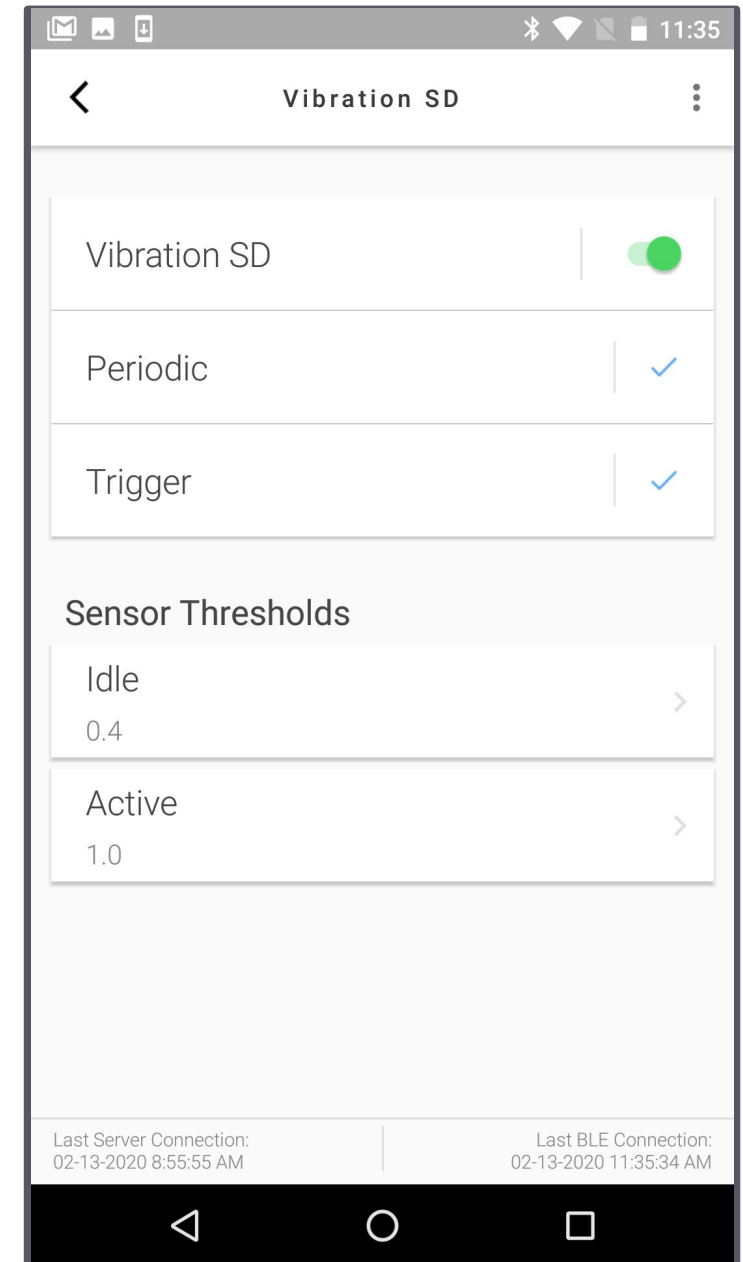
Turn on Periodic readings to take vibration reading based on specified time increments.

Vibration thresholds are used to understand usage based on how long machines are working in idle, active or off. Usage reports are available on online dashboards.

Turn on Trigger readings to allow Atoms to sense in the background and record samples when a threshold is met.

Set the idle threshold to the vibration level your machine reaches when idling. This triggers the Atom to take a reading when your machine is idling.

The active vibration threshold sets the Atom to take a reading when your equipment is actively working.



Impact

Monitors the intensity of an impact or acceleration using G force.

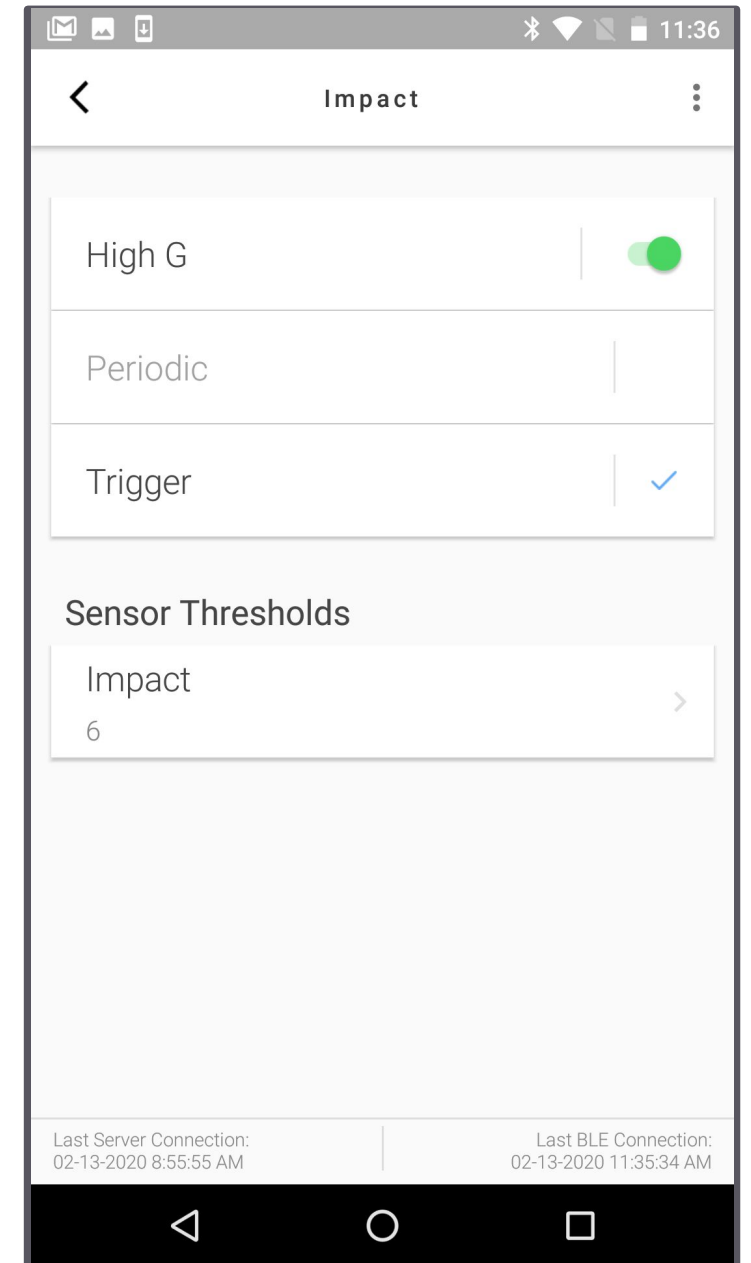
User can turn sensors on and off.

Periodic readings are not available for the impact sensor.

Turn on Trigger readings to allow Atoms to sense in the background and record samples when an impact occurs.

Set the Impact threshold to determine the intensity of an impact you wish to trigger the Atom to record.

Setting impact thresholds too low can result in too many trigger readings.



Tilt

Monitors for change in position/angle from the calibrated position.

User can turn sensors on and off.

Periodic readings check the Atom angle based on specified time increments.

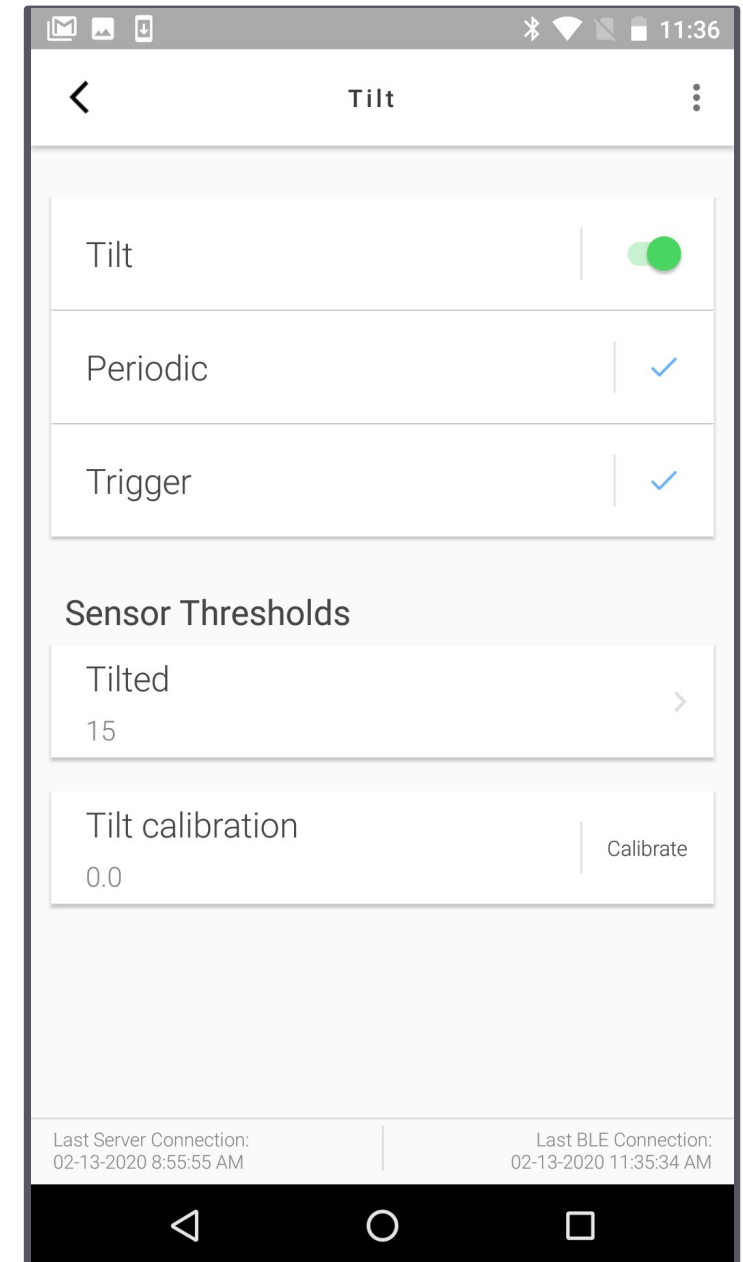
Turn on Trigger readings to allow Atoms to sense in the background and record samples when the angle changes.

Set the Tilt threshold to trigger the Atom to record a sample when the position changes. Enter the degree value that you want the Atom to record.

Calibrate

Tap the **Calibrate** button to set the initial Atom position.

Readings are shown as degree change from the calibrated angle. If angle is not calibrated, readings are shown as change from 0°.



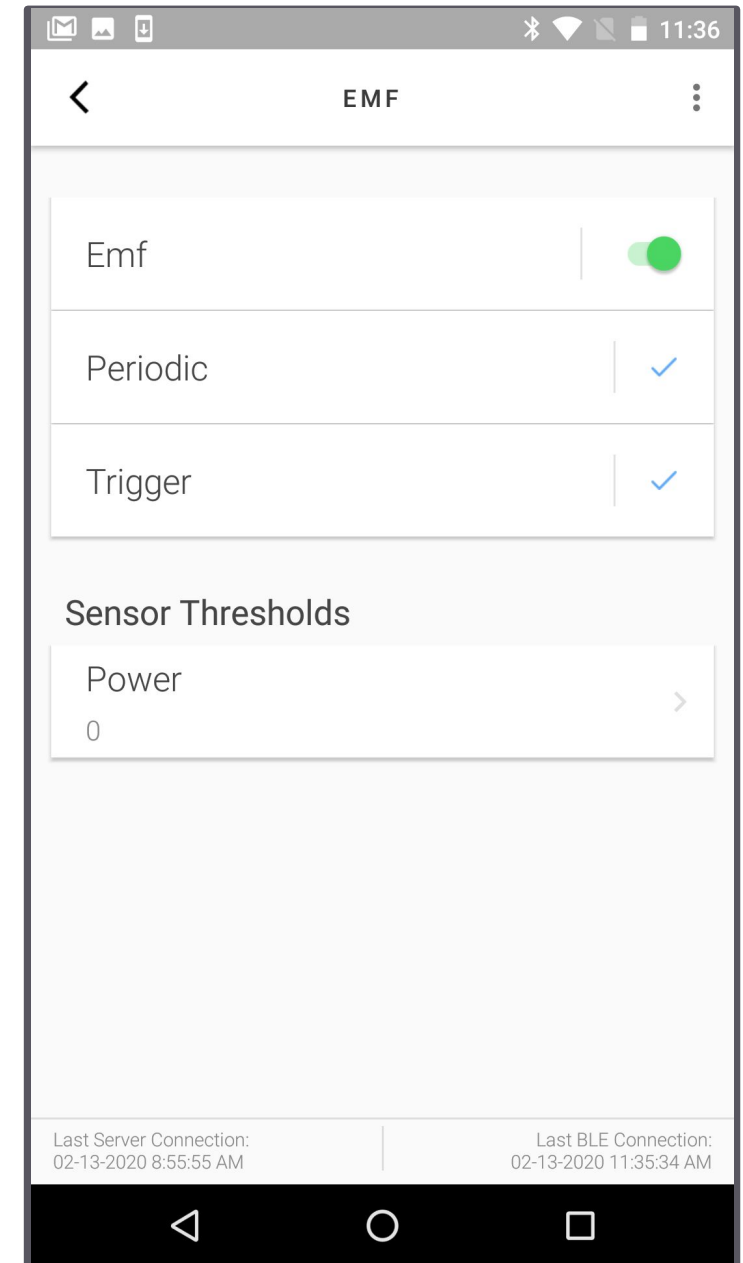
EMF

Determines presence/absence of Electromagnetic Field.

User can turn sensors on and off.

Turn on Periodic readings to take EMF reading based on specified time increments.

The Power threshold triggers the Atom to take a reading when the EMF is no longer detected.

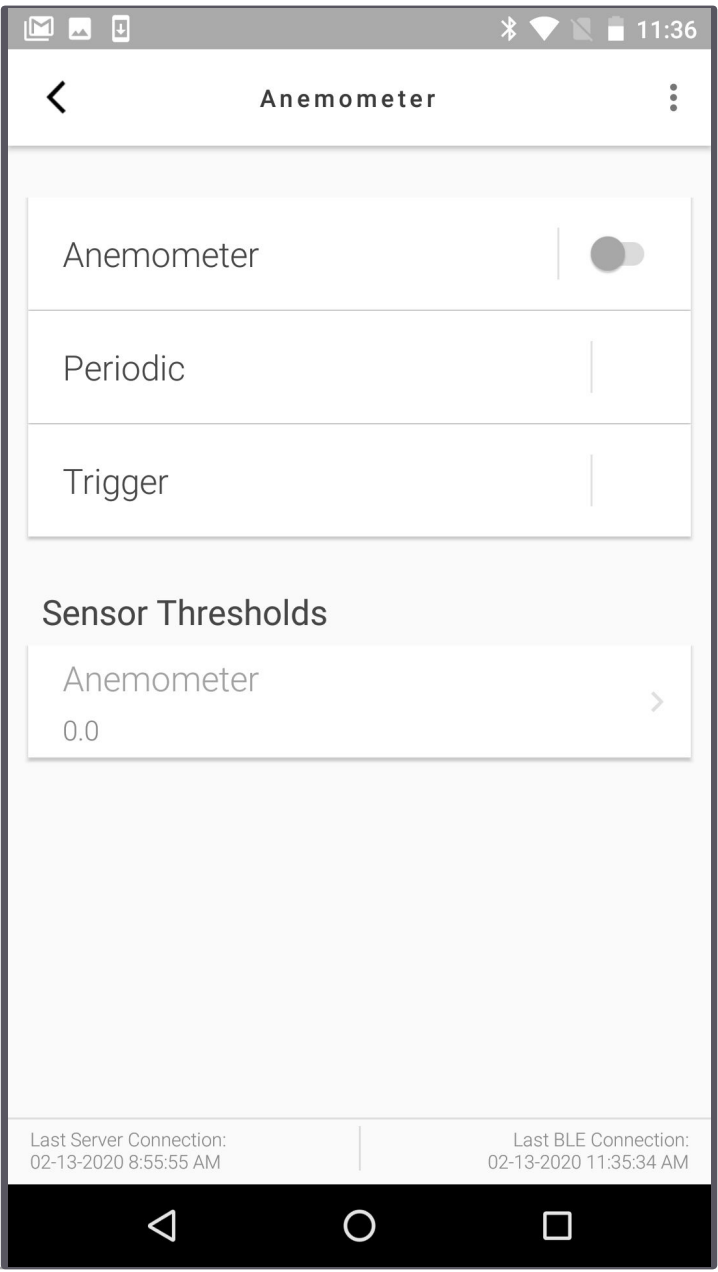
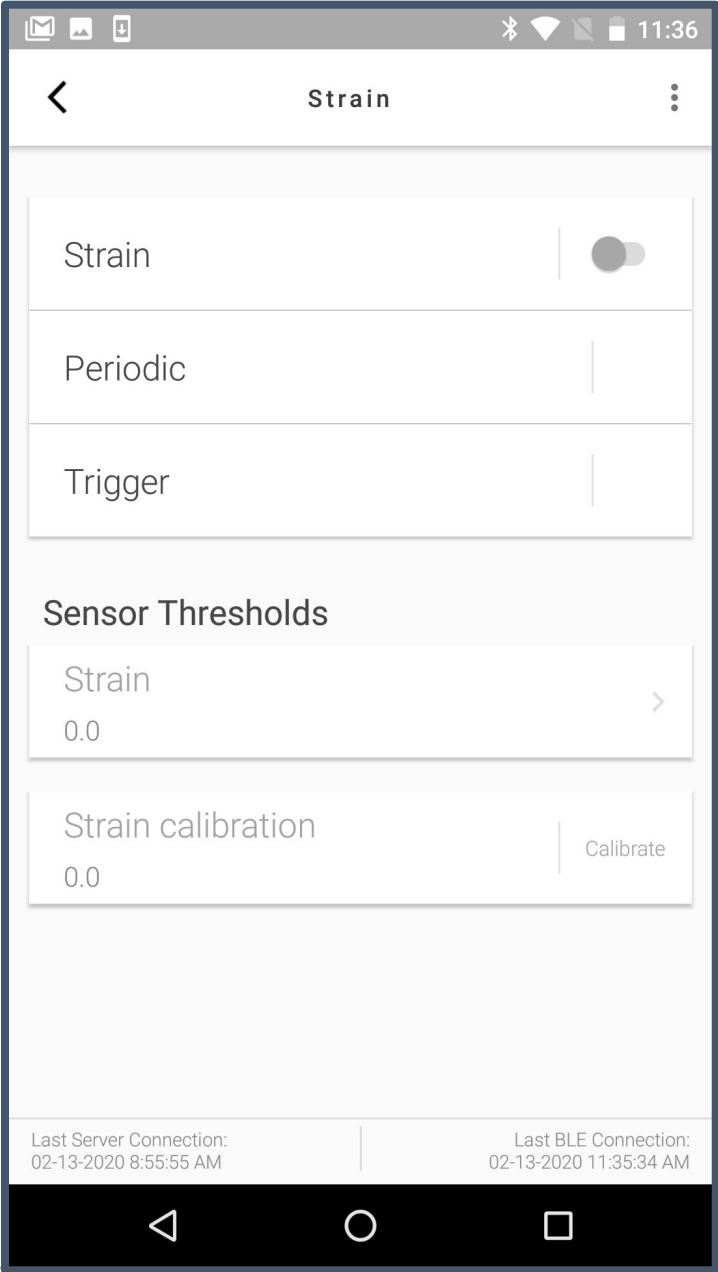


Strain and Anemometer

External connection required.

Sensors cannot be activated by users without the external connection and specific FW Version on the Atom.

Contact your representative for information on additional external sensors.



A grayscale photograph of an industrial robotic arm, likely a CNC machine, with a yellow triangular warning symbol on its side. The background is dark and slightly blurred.

Timers

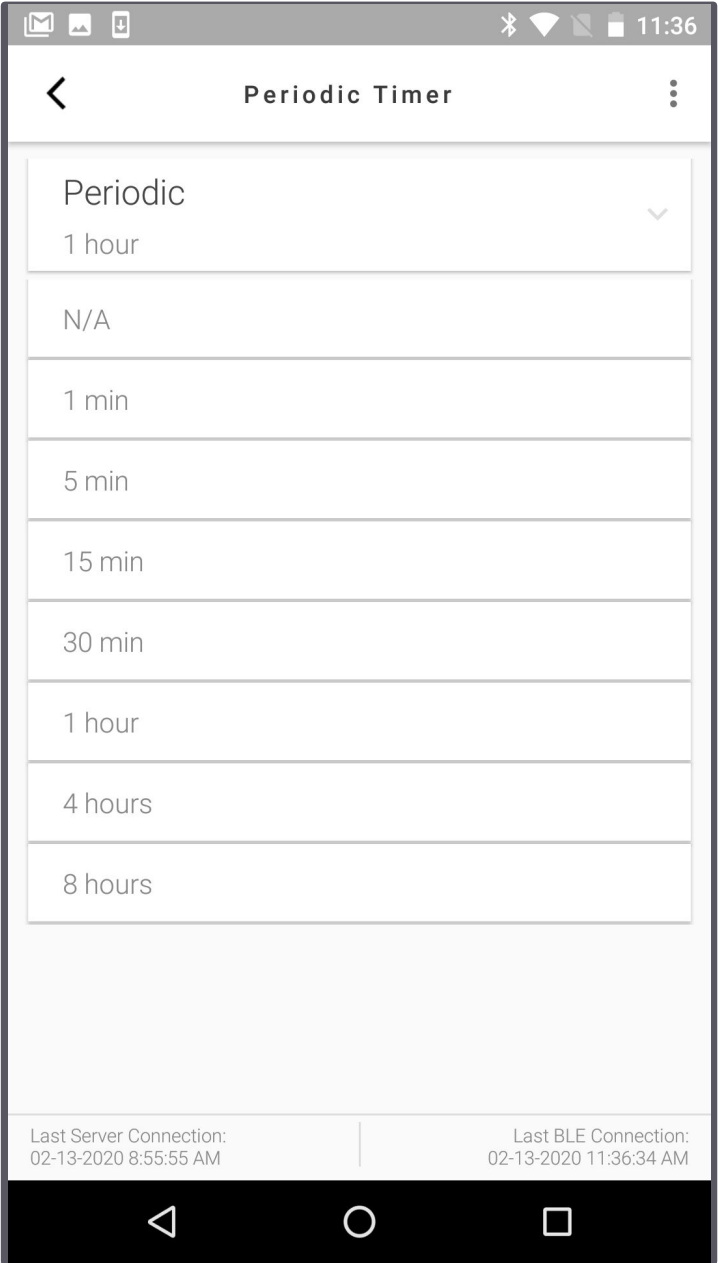
Periodic Timer

The periodic timer allows users to set Atoms to record samples based on specific time intervals.

Depending on the equipment you are monitoring, periodic samples should be turned off or set to a specific time.

Setting the periodic timer to N/A turns periodic readings off for all sensors and Atoms will only record triggered samples.

Increasing number of samples directly impacts battery life. Atoms may not meet suggested battery expectancy if the periodic sample time is set to less than 1 hour



Event Timer

Event Check Frequency

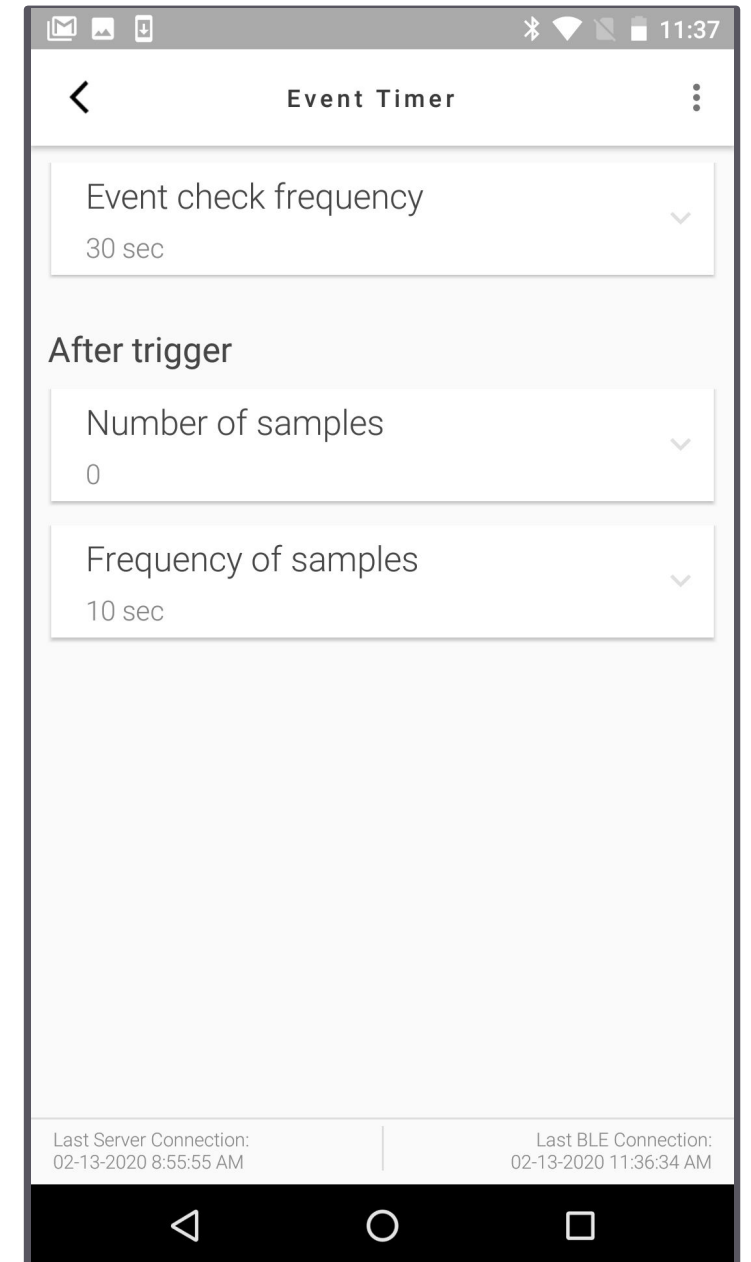
Event check frequency tells the Atom only to trigger when the event exceeds the set duration.

After Trigger

Number of samples triggers Atoms to record a specific number of samples after an event occurs. Atoms can record up to 20 samples after a trigger event

Frequency of samples determines how quickly you would like the Atom to record the set number of samples after a trigger event.

Example: If your machine temperature reaches the high threshold, the Atom will record a sample every (10 seconds) up to (20) samples.



A grayscale photograph of an industrial robotic arm, likely a CNC machine, with a yellow triangular warning symbol on its side. The background is dark and out of focus.

Thank You