Honeywell

Honeywell Versatilis^{TM} Connect App

Release 100.1

User's Guide

34-VT-25-03
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ABOUT THIS GUIDE

This guide provides information to assist you in the configuration and user management of the Honeywell Experion EHM.

Revision history

Revision	Date	Description
A	February 2023	The initial release of the document for R100.
B	May 2023	• Bulk FOTA update feature added. • App supports iOS platform.

Related documents

Document Name	Document Number
Honeywell Versatilis Transmitter Installation and User's Guide	34-VT-25-01
Honeywell Versatilis Signal Scout Installation and User's Guide	34-VT-25-02
Honeywell Versatilis Transmitter Technical Specification	34-VT-03-01
Honeywell Versatilis Signal Scout Technical Specification	34-VT-03-02
Experion EHM Configuration and User's Guide	34-VT-25-04

Terms and abbreviations

Terms	Definitions
BLE	Bluetooth® Low Energy
FFT	Fast Fourier Transform
FOTA	Firmware Over The Air
iOS	iPhone Operating System
IIoT	Industrial Internet of Things
LoRa	"Long Range" Radio Communication Technique
LPWA	"Low Power, Wide Area" networking protocol
UI	User Interface
UOM	Unit of Measure

OVERVIEW

NOTE: The word "device" referred in the UI of Honeywell Versatilis Connect app and thus used in this manual denotes to the Honeywell Versatilis Transmitter or Honeywell Versatilis Signal Scout.

The Honeywell Versatilis Connect app provides the flexibility and scalability to perform the complete device configuration, simplifies maintenance tasks, and thereby saves time.

The Honeywell Versatilis Connect app allows users to:

- Configure and maintain the devices through online mode.
- Configuration of devices through importing offline templates.
- Live data monitoring.
- Upgrade the device to the latest available firmware and supports bulk firmware update.
- Download device or app log for diagnosing issues.
- Tracks the device condition, the LoRa and BLE communication status.

Specifications

The specifications of the Honeywell Versatilis Connect app are as follows:

Table 2-1: Specifications of Honeywell Connect app

Tablet/Smartphone Specifications	Android	Windows	iOS
Operating system	Android 10 or higher versions	Windows 10 or higher versions	iOS 15 or higher versions
Processor and Speed	ARC V7 or V8, 1.6GHz or	64-bit, 1.6GHz or faster	-

Tablet/ Smartphone Specifications	Android	Windows	iOS
	faster		
RAM	Minimum: 4GB Recommended: 8GB	Minimum: 8GB	–
Storage space	Higher than 64GB is recommended	Higher than 64GB is recommended	Higher than 64GB is recommended

> **NOTE:** The Honeywell Versatilis Connect app can also be installed in the tablet provided for Honeywell Versatilis Configurator app, complying with the above mentioned specifications.

GETTING STARTED

For more information on how to install Honeywell Versatilis Connect app on you Smartphone/Tablet supporting Android/Windows/iOS based platforms, see *Honeywell Versatilis Transmitter Installation and User's Guide, 34-VT-25-01* or *Honeywell Versatilis Signal Scout Installation and User's Guide, 34-VT-25-02*.

Prerequisite: Before you open the Honeywell Versatilis Connect app, turn ON the Bluetooth on your Windows/Android/iOS based Smartphone/Tablet.

Turn ON the Bluetooth

Table 3-1: Turning ON the Bluetooth

Windows	Android	iOS
In the Windows tablet: 1. Tap the **Start** button, then select **Settings> Devices> Bluetooth & other devices**. 2. Enable the Bluetooth toggle switch to turn it **ON**.	In the Android tablet: 1. On the **Home** screen, go to **Menu> Settings> Bluetooth**. 2. Enable the **Bluetooth** toggle switch to turn it on. 3. Tap the check box to make it visible to other devices. A list of available devices displays.	In the iOS tablet: 1. Go to **Settings> Bluetooth**. 2. Enable the **Bluetooth** toggle switch to turn it on.

To enable quick Bluetooth Scan for Windows Tablet:

NOTE: Make sure the **Communicate with unpaired devices** is turned **ON** under the **Control Panel** > **Privacy**> **Other devices** screen of your Tablet/Smartphone.
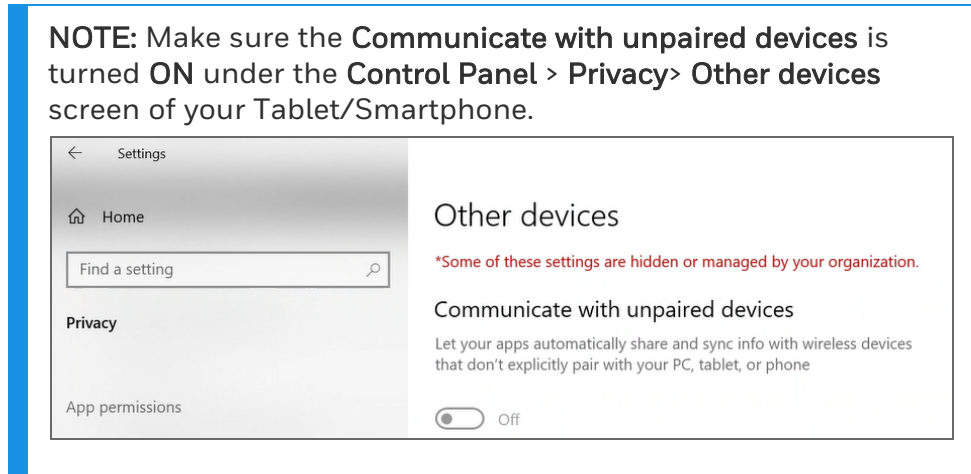
Follow the below procedure to enable the quick scan, if users do not have the privilege to turn it **ON** using toggle button.

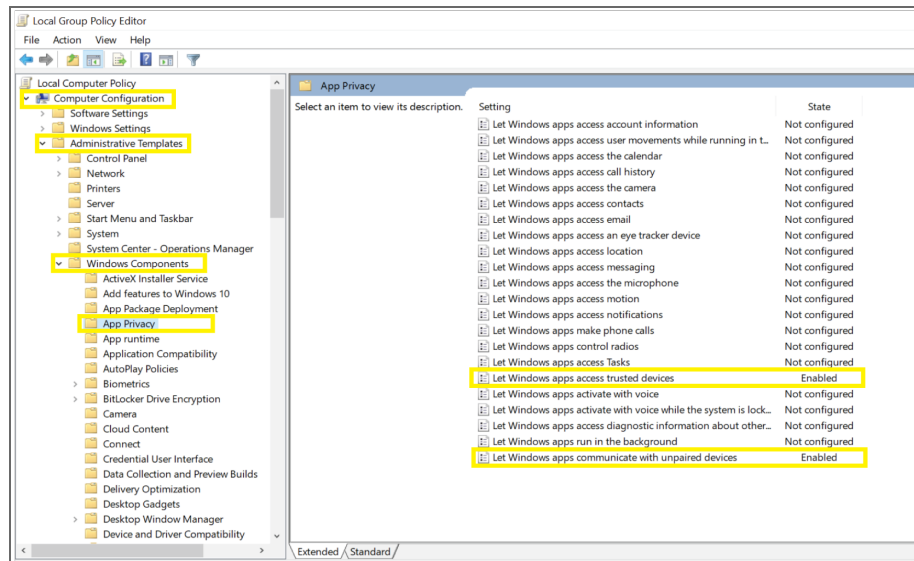1. Go to **Settings** > **Privacy** > **Edit group policy**, the following **Local Group Policy Editor** screen appears.

Figure 3-1: Local Group Policy Editor screen

2. Go to **Computer Configuration > Administrative Templates > Windows Components > App Privacy**.

3. Select the required settings on the App Privacy (as shown in the above screen), and **right-click > Edit > Enable the radio button > Apply**.

Pairing the device

Bluetooth Scan:

Perform the below instructions to pair the device through Bluetooth scan on your Tablet/ Smartphone:

1. Tap the [icon] (Honeywell Versatilis Connect) app.
2. The homepage (dashboard) screen appears, tap **Online Configuration and Diagnostics**.
3. A pop-up appears requesting location access, select **WHILE USING THE APP**.
4. The **Connect to a device** screen appears, tap on the required device (i.e. Honeywell Versatilis Transmitter or Honeywell Versatilis Signal Scout) you want to connect from the **Available Devices** list.
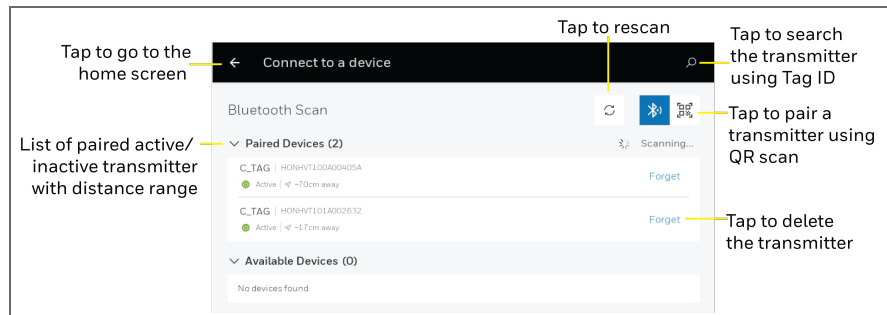

Figure 3-2: Bluetooth scan screen

> **NOTE:** The HVT100 series denotes to Honeywell Versatilis Transmitter (for example: HONHVT100A0005A) and the HVT101 series denotes to Honeywell Versatilis Signal Scout (for example: HONHVT101A002632).

5. A confirmation pop-up appears, tap Yes. The app initiates the pairing process.
6. A page appears requesting to enter passcode. Type-in the preconfigured default six-digit passcode "110420".
   Upon successful connection, the default configuration page, i.e.

Asset Details screen appears. And, the connected device also gets added to the list of paired devices.

> **NOTE:** To change your default passcode, go to the change passcode feature on About Device page.
> In case you forgot your changed passcode for app on Android or Windows platform, you can reset the changed passcode to the default passcode using reed switch provided on the device. For more information on how to reset the passcode, see *Honeywell Versatilis Transmitter Installation and User's Guide, 34-VT-25-01* or *Honeywell Versatilis Signal Scout Installation and User's Guide, 34-VT-25-02*

QR Code Scan:

Perform the below instruction to pair the device through QR Code scan on your Tablet/ Smartphone:

1. Open [icon] (Honeywell Versatilis Connect) app.
2. The homepage (dashboard) screen appears, tap **Online Configuration and Diagnostics**.
3. A pop-up appears requesting you to allow the app to take pictures and record video, select **WHILE USING THE APP**.
4. The **Connect to a device** screen appears, tap the icon [icon] QR Code scan icon.
5. The QR code scan screen appears, scan the QR code printed on the intended device which you want to pair.
6. A success page appears with the serial number of the device after successful validation of the QR code. You can tap **RESCAN** to scan another device; else tap **CONNECT** to proceed further connecting the intended device.
   Upon successful connection, the default configuration page, i.e. Asset Details page appears. And, the connected device also gets added to the list of paired devices.
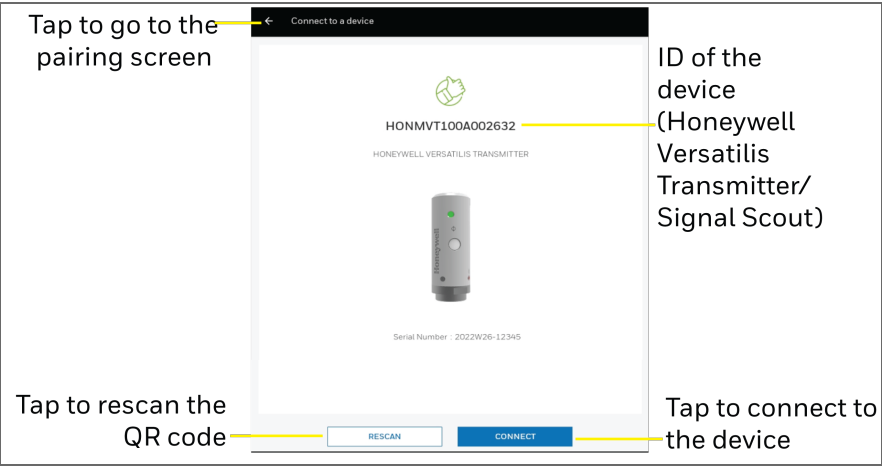
Figure 3–3: Available Honeywell Versatilis Transmitter device using QR code scan

DEVICE CONFIGURATION

Tap the [icon] Honeywell Versatilis Connect app icon on your Tablet/ Smartphone. The app loads, and then the following homepage appears:
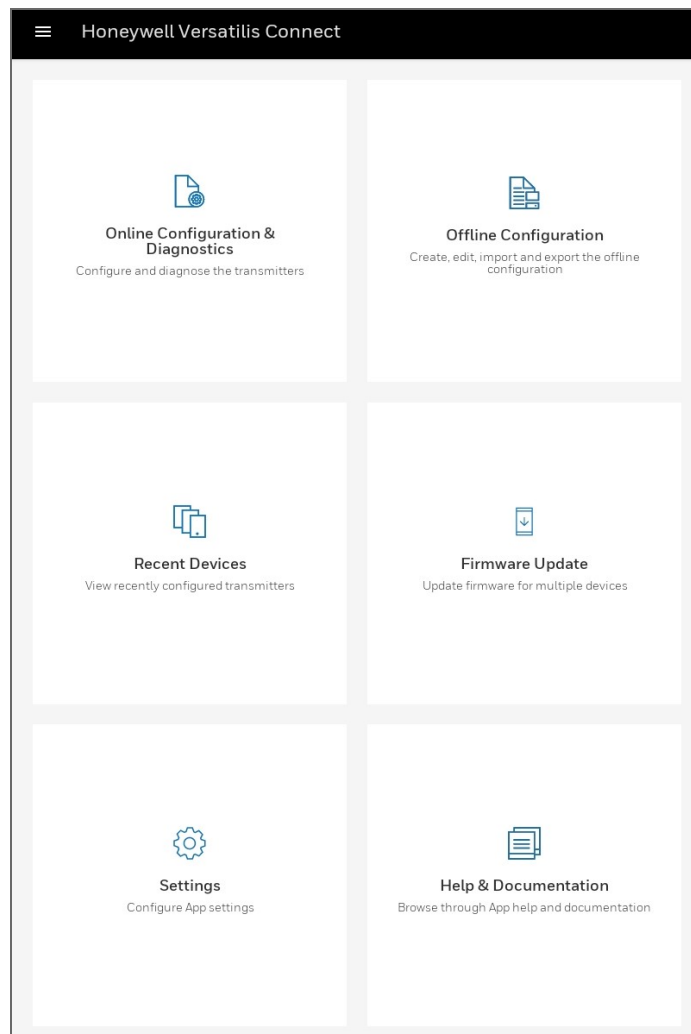

☰   Honeywell Versatilis Connect

Online Configuration & Diagnostics
Configure and diagnose the transmitters

Offline Configuration
Create, edit, import and export the offline configuration

Recent Devices
View recently configured transmitters

Firmware Update
Update firmware for multiple devices

Settings
Configure App settings

Help & Documentation
Browse through App help and documentation

Figure 4-1: Homepage

Honeywell Versatilis Transmitter

Honeywell Versatilis Transmitter is a multi-variant sensing platform based on the latest LoRaWAN® protocol communication technology. It's inherently low power compact design coupled with quick and easy installation and commissioning help customers to deploy them at scale with the lowest CAPEX and negligible OPEX.

Online configuration

The Online configuration lets users to configure the device, so the device can track the health of the target equipment/machine when installed/fitted in the process industries.

> **NOTE:** Make sure the Bluetooth is turned ON. See Turn on the Bluetooth.

By default, after successful connection to the device, the Asset details screen appears. For more information on how to pair a device, see "Getting started".

Asset Details

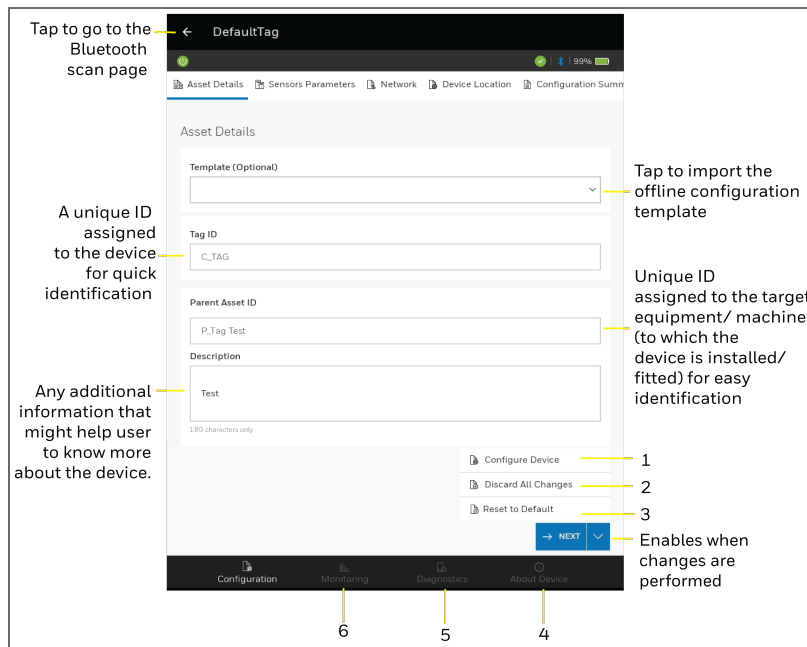The page provides key information of the asset to which the device is installed/fitted.

Figure 4-2: Asset details screen

Table 4–1: Asset details screen callout description

Items	Description
1	**Configure Device**: Displays the device configuration summary.
2	**Discard All Changes**: a. A dialog appears, tap **Continue** to discard the current configurations that are being updated, or b. Tap **Cancel** to retain the currently configured changes.
3	**Reset to Default**: To revert the existing configurations to the default values. The users must sync the device configuration through **Configure Device** action.
4	**About Device**. For more information, see About device.
5	**Diagnostics**. For more information, see Diagnostics and Troubleshooting.
6	**Monitoring**. For more information, see Monitoring.

Click [→ NEXT] to go to the **Sensors Parameters** tab.

Sensor Parameters

The Honeywell Versatilis Transmitter measures six parameters on the target machine. The parameters are:

- Surface Temperature
- Ambient Humidity
- Ambient Temperature
- Ambient Pressure
- Vibration
- Acoustics

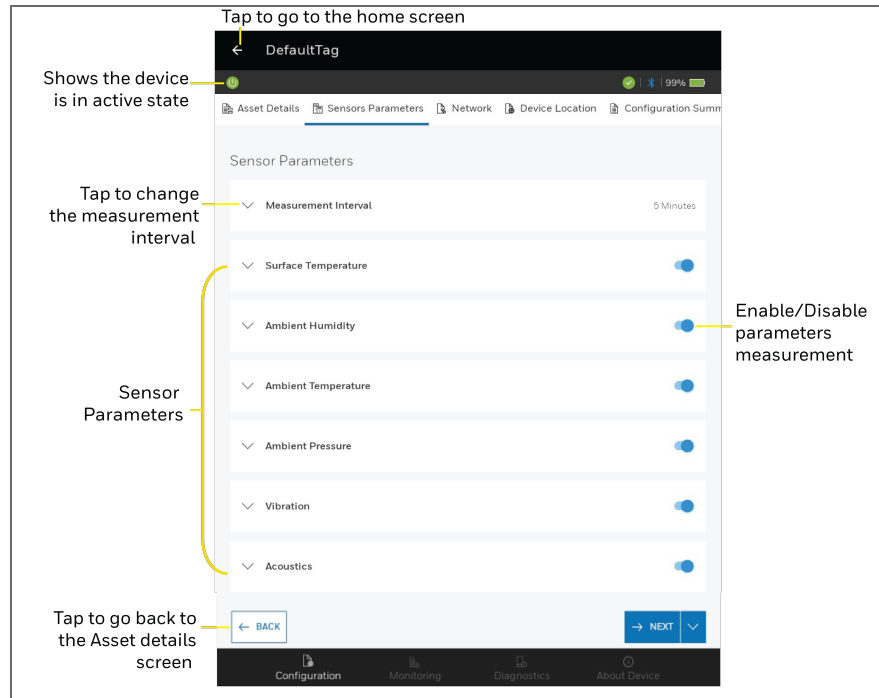On the device configuration page, tap Sensor Parameters tab. The following screen appears:

Figure 4-3: Sensor Parameters screen_Honeywell Versatilis Transmitter

Tap the dropdown arrow against the required parameter to edit its value.

> **NOTE:** You must need to enable the toggle switch at each sensor parameter you want to edit.

> **NOTE:** While using the offline template, the sensor parameters are pre-configured and automatically filled in. It is not necessary for you to specify the sensor parameters.

Surface Temperature, Ambient Humidity, Ambient Temperature, and Ambient Pressure

The following figure illustrates the corresponding fields of Surface Temperature parameter as an example:
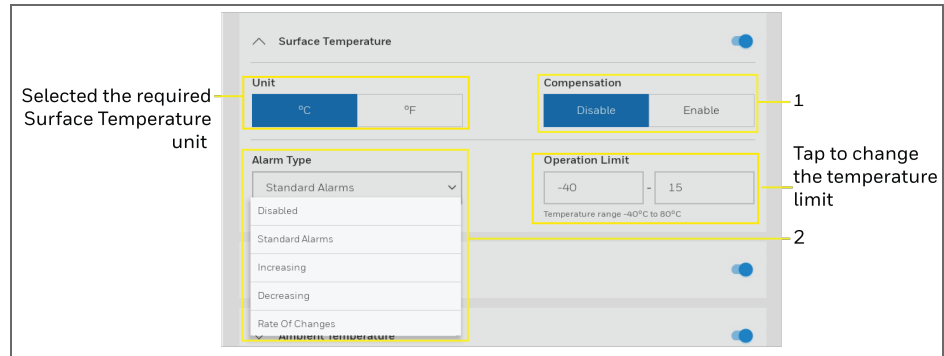
Figure 4-4: Surface Temperature parameter screen_Honeywell
Versatilis Transmitter

Table 4-2: Call out descriptions of Sensor Parameters fields

Fields	Description
1 (Measurement Interval)	Specify the duration for which you want to record the sensor parameters data of your device. NOTE: Recommended measuring unit is in "minutes". The minimum time interval is 10 minutes and should be in multiples of 5 seconds.
2 (Unit)	The units associated with the various parameters are as follows, select the unit as required. Surface Temperature: °C (default) / °F Ambient Humidity: %RH (default) Ambient Temperature: °C (default) / °F Ambient Pressure: hPa (default) / atm.
3 (Compensation)	To maintain the same level of accuracy for measurement over different mounting options, the app, allows you to enable the compensation.

Fields	Description
	If the compensation is enabled, Adapter Configuration field appears. Select the actual configuration carried out, while installation i.e., either magnetic mount, adhesive or threaded (screw mount).
4 (Alarm Type*)	The option "Alarm Type" allows you to configure required alarm type for your device. It alerts you to take proactive measures to investigate the issue, once the current measurement exceeds the configured limit. Based on the alarm type you choose; the corresponding configuration field appears or changes. The following are the available alarm types: - Disabled: In this state, the alarm won't trigger. - Standard Alarms: Specify the operational temperature range for the parameter within the predefine temperature range, beyond which the alarm triggers, and the same can be seen in Live Data. - Increasing: Specify the required "limit value" within the defined measurable range. For example, If the limit value is set to "5" degrees, the respective alarm triggers up whenever the current measurement value drops down below "5" degrees, and the same can be seen in Live Data. - Decreasing: Specify the required "limit value" within the predefined measurable range. For example, If the limit value set to "5" degrees, then the respective alarm triggers up whenever the current measurement

Fields	Description
	value increases above "5" degrees, the same can be seen in <u>Live Data</u>.
	• Rate of Changes: Specify the required "Rate of Change" value within the defined measurable range. For example, if the rate of change value is set to "5" degrees, the respective alarm triggers up whenever the current measurement value changes beyond "5" degrees in sensor interval time period.
*"Alarm Type" configuration field is applicable for the parameters such as Surface Temperature, Ambient Humidity, Ambient Temperature, and Ambient Pressure.	

Vibration

The device measures the vibration oscillations of the target asset. The following figures illustrates the corresponding fields of the Vibration parameters such as Acceleration and Velocity.
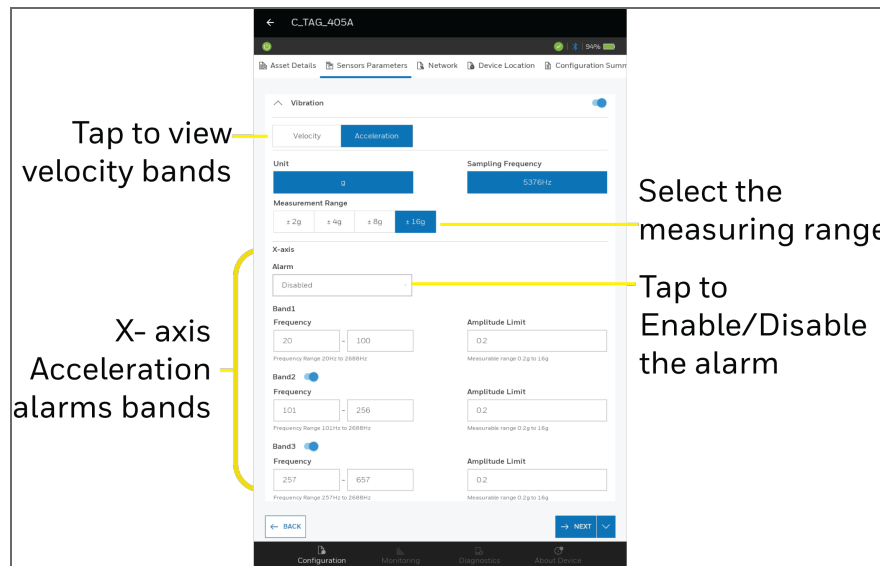
Figure 4-5: Vibration parameter - Acceleration
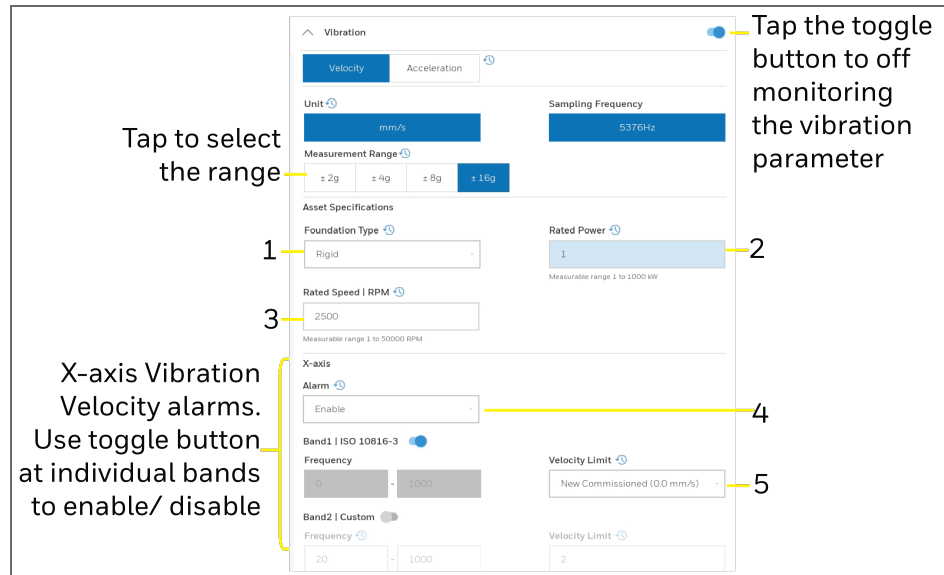
Figure 4-6: Vibration parameter – Velocity: Frequency Trigger alarm type (X-Axis) field description

Table 4-3: Vibration – Velocity: Frequency Trigger alarm type X-Axisscreen description

Fields	Description
1	**Foundation type**: Rigid (fixed to the ground), Flexible (movable to other places).
2	**Rated Power**: Assets rated power (measurable range is up to 1000kW).
3	**Rated Speed**: Assets RPM (measurable range is up to 50,000 RPM).
4	**Alarm Type**: You can either select, **Disable** or **Enable**, alarm type. • **Enable**: If you select this alarm, the corresponding configuration fields appear i.e., the "Frequency Bands", and its "Amplitude Limits". Specify or update the frequency bands and its amplitude limits as required.
5	**Velocity Limit**: Device vibration per second.

Similarly, update the same fields for Y and Z axis also, if required.

Acoustics

The device measures the sound waves generated by the asset. The following figure illustrates the corresponding fields of the Acoustics parameter:
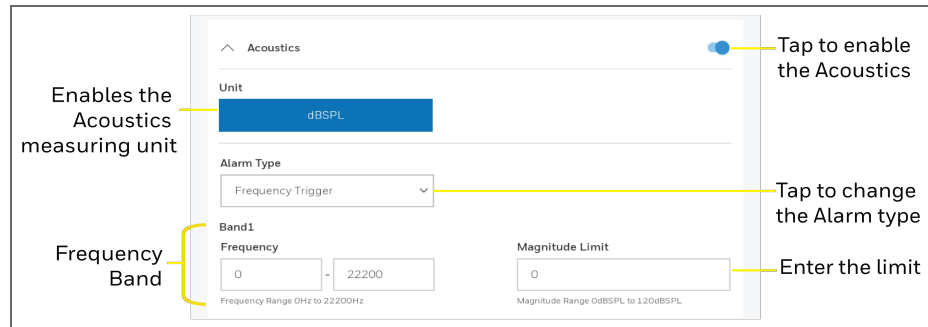
Figure 4-7: Acoustics - Frequency Trigger

Table 4-4: Acoustics- Frequency Trigger field description

Fields	Description
Alarm type	You can either select, **Disable** or **Frequency Trigger**, alarm type. • **Frequency Trigger**: If you select this alarm, the corresponding configuration fields appear i.e., the "Frequency Bands", and its "Magnitude Limits". Specify or update the frequency bands and its magnitude limits as required.

Tap **→ NEXT** to go to **Network** tab.

Network

The following figure illustrates the corresponding fields related to LoRa Network configuration.
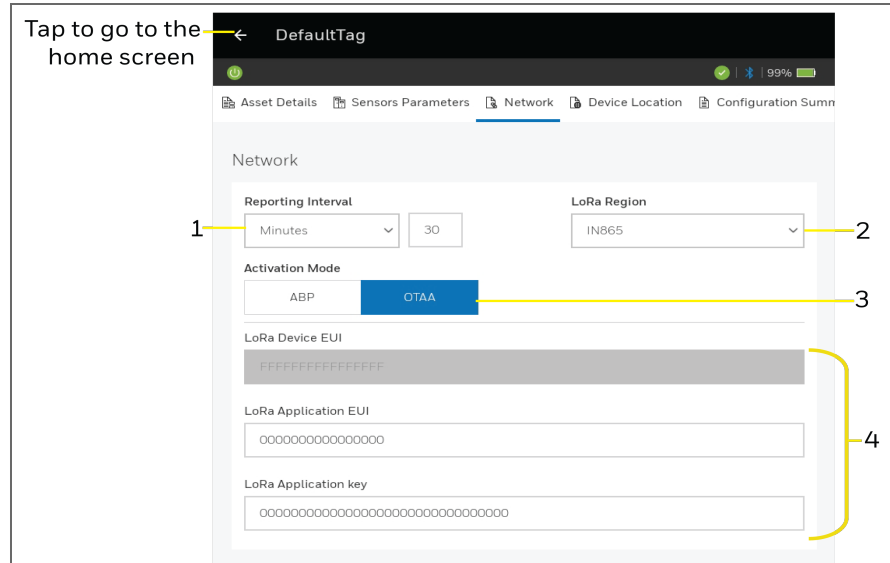
Figure 4-8: Network configuration screen - OTAA Mode
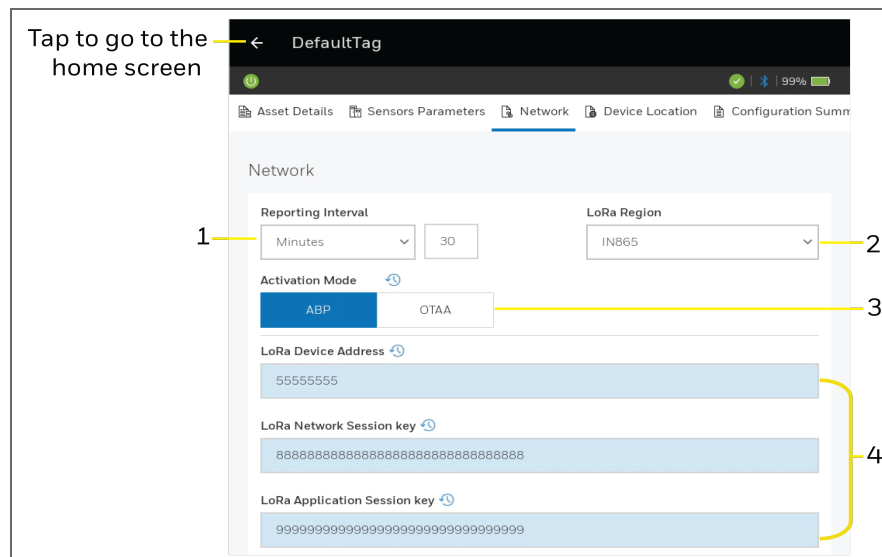
Figure 4-9: Network configuration screen - ABP Mode

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Table 4-5: Network configuration screen callout descriptions for OTAA and ABP modes

Items	Description
1 (Reporting Interval)	Select the reporting interval to the LORA Network server as required. The interval should be multiple of **Measurement Interval** as defined in the Sensor Parameters.
2 (LoRa region)	The frequency and channel plan varies for countries and regions. For more details, see *Honeywell Versatilis Transmitter Technical Specifications document.*
3 (Activation Mode)	User can select any of the two following modes to configure LoRaWAN: ■ OTAA (Over The Air Activation): The transmitters configured over OTAA mode are provisioned with root keys which performs a join procedure with the LoRaWAN network, and root keys are utilized to derive session keys **NOTE:** The OTAA mode is recommended for more secure connections. ■ ABP (Activation by Personalization): The encryption keys are configured manually on the device and can start sending frames to the Gateway without needing a 'handshake' procedure to exchange the keys (such as the one performed during an OTAA join procedure).
4 (LoRa network session keys)	The Following are the corresponding fields for OTAA configuration: 1. LoRa Device EUI: The unique ID as printed on the enclosure of the device, and can also be seen on the About Device screen of the Honeywell Versatilis Connect app. 2. LoRa Application EUI: The unique number to identify the Join server during activation. This

Items	Description
	value can be manually specified or auto-generated from the Network service provider's application.
	3. LoRa Application Key: An application encryption key. This value can be manually specified or auto-generated from the Network service provider's application.
	The Following are the corresponding fields for ABP configuration:
	1. LoRa Device Address: The Device Address is a 32-bit number assigned by the network server. The Device Address along with Network Session Key used to identify the device in the current network. This value can be manually specified or auto-generated from the Network service provider's application.
	2. LoRa Network Session Key: The network server and the device both use this key to verify the integrity of all data frames. This value can be manually specified or auto-generated from the Network service provider's application.
	3. LoRa Application Session Key: The application server and the device use this key to encrypt and decrypt the Frame Payload field of application-specific data frames. This value can be manually specified or auto-generated from the Network service provider's application.
	NOTE: Ensure that the same configurations are specified in both Honeywell Versatilis Connect app and LoRaWAN service provider's application to establish successful LoRa based communication.
	For more information on how to configure ABP or OTAA method in the LoRa Network service provider's application, see *Honeywell Versatilis Transmitter Installation and User's Guide, 34-*

Items	Description
	VT-25-01 or *Honeywell Versatilis Signal Scout Installation and User's Guide, 34-VT-25-02.*

Click [→ NEXT] to go to the **Device Location** tab.

Device Location

The **Device Location** tab assists you to capture the location details of the device using Honeywell Versatilis Connect app. The following figure illustrates the corresponding fields of the Device Location screen:
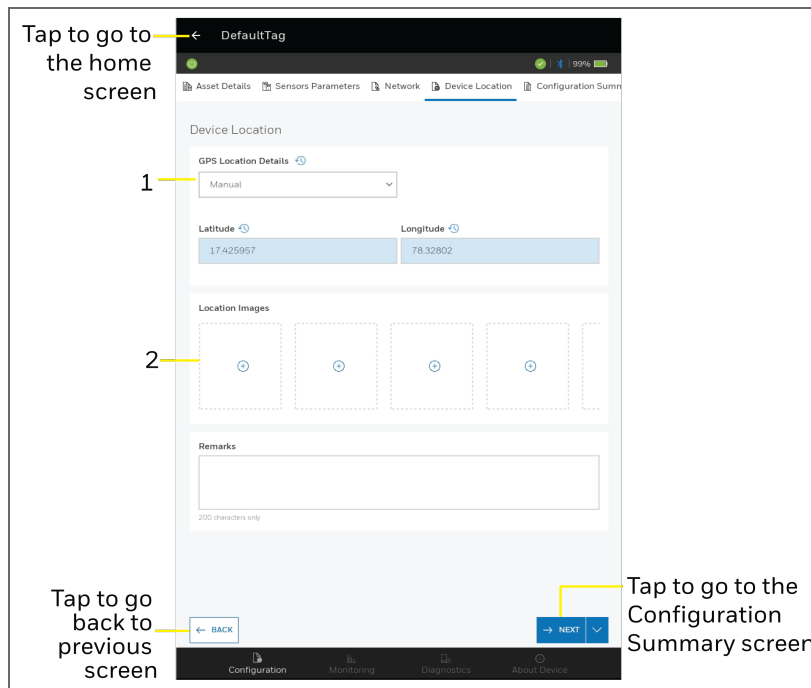

Figure 4-10: Device Location screen

Table 4-6: Call out descriptions of Device location screen

Items	Description
1	Capturing methods: a. **Manual**: Allows users to specify the actual latitude and longitude geographical values of the device in the respective fields to locate the device position. b. **Device Pin Location**: If you are not aware of the device location, then tap the **Capture Location** button to capture the current location of the Honeywell Versatilis Transmitter and accordingly, the Latitude and Longitude values are auto-populated in the respective fields. NOTE: The live location captured for the Honeywell Versatilis Transmitter is the live location of your Tablet/ Smartphone instead, from where you are capturing. So, take your hand-held Tablet/ Smartphone close to the installed device location for accurate details. c. **Calculate Location**: If you are not aware of the actual latitude and longitude geographical values of the device but aware of the reference location details of the target equipment/machine to which device is installed/fitted. Then, manually specify the reference values for Latitude, and Longitude, and tap **Calculate Location** button to calculate other parameters like Distance (m) and Bearing N (deg) for the device.
2	Location images: Tap ⊕ **Add image** icon to add images of the installation scenarios of the device with the target equipment/machine. a. Add image from local drive: Tap 🗎 icon, and select the image from your local drive. Add a suitable label for the image being uploaded, and then tap **Done**. After selecting an image, you can tap ⟳ icon to rotate

Items	Description
	the uploaded image, or ↩ icon to reselect or re-upload the image. b. Capture image using tablet camera: Tap 📷 icon, and adjust the tablet camera to capture the device installation scenario. c. The captured image can be edited, deleted, or downloaded to your local drive.

Click → NEXT to go to the **Configuration Summary** tab.

Configuration Summary

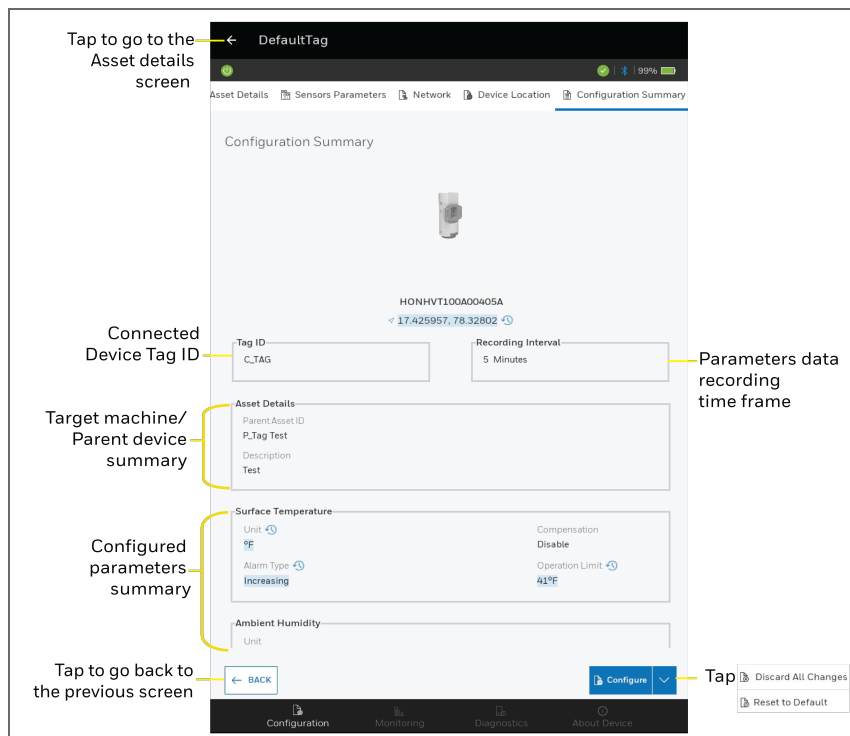The following figure illustrates the corresponding fields of the Configuration Summary screen:

Figure 4-11: Configuration summary screen

Offline Configuration

The Offline Configuration lets you to perform bulk configurations of the devices that are having the same configuration requirements, through an offline template. The offline template allows you to copy, duplicate, share, or modify, and then use for other devices as well.

Tap the [icon] Honeywell Versatilis Connect app on your Tablet/Smartphone. The app loads, and then the homepage appears.

On the homepage, tap **Offline Configuration**. The following screen appears:
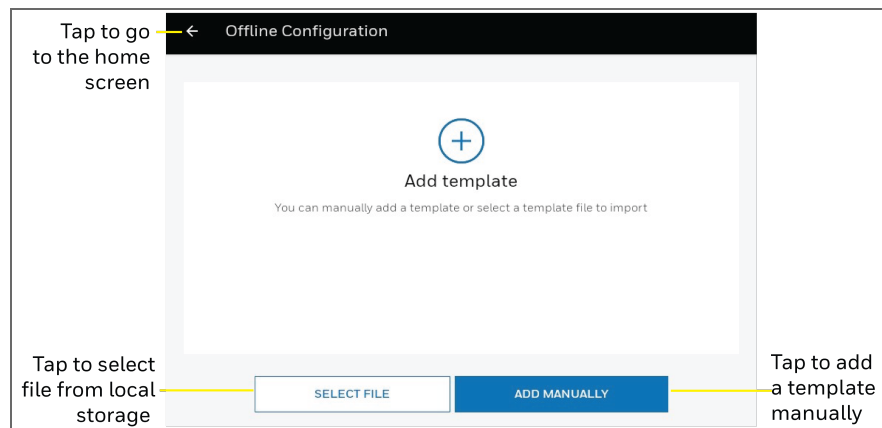
Figure 4-12: Offline Configuration screen

Creating a Template

To create an offline template manually:

1. On the Offline Configuration screen, tap **ADD MANUALLY.** The following screen appears:
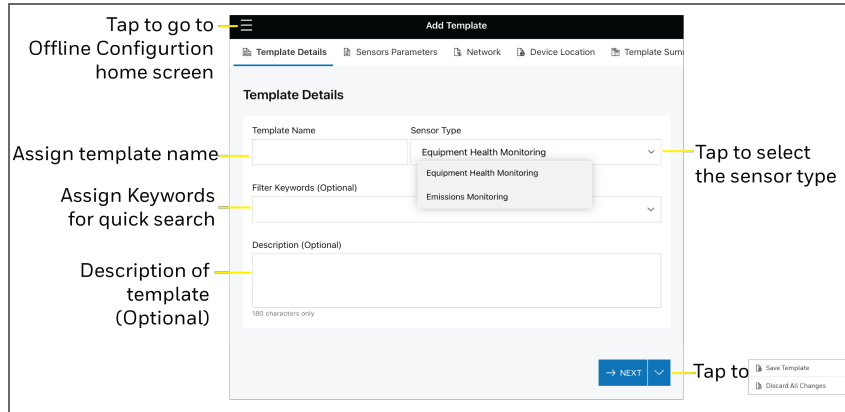
Figure 4-13: Create an offline template

2. Tap [→ NEXT], the following sensor parameter screen appears. Configure the sensors parameters details as required.
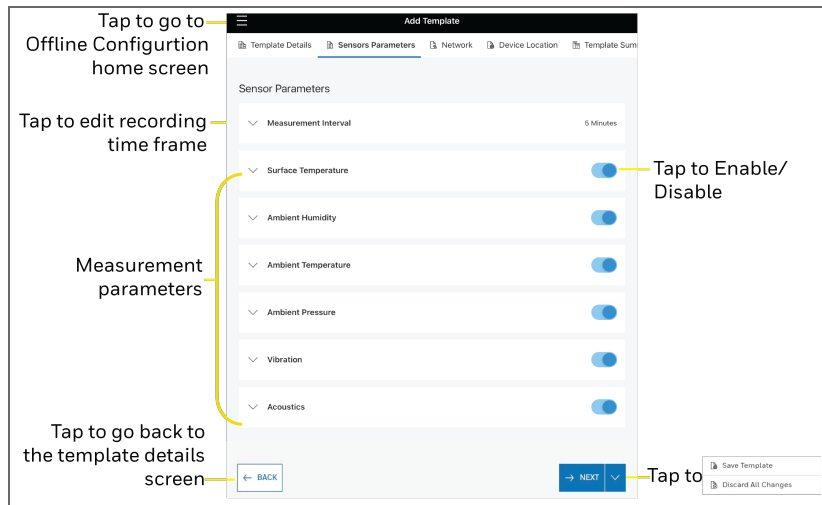
Figure 4-14: Sensor parameter details in offline template
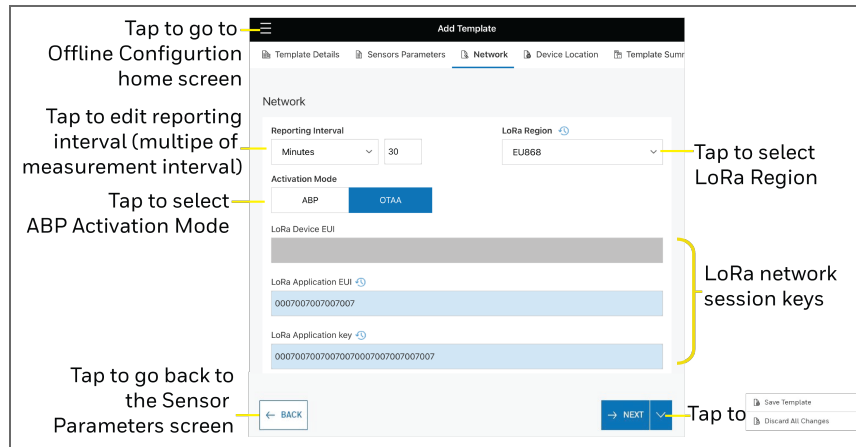
3. Tap 	→ NEXT	, the Network screen appears.

Tap to go to Offline Configurtion home screen

Tap to edit reporting interval (multipe of measurement interval)

Tap to select ABP Activation Mode

Tap to go back to the Sensor Parameters screen

Tap to select LoRa Region

LoRa network session keys

Tap to

Figure 4-15: Network details in offline template

For more information, see Network.

4. Tap 	→ NEXT	, the Device Location screen appears.

Tap to go to Offline Configurtion home screen

Tap to select

Tap to go back to the Network screen

Tap to
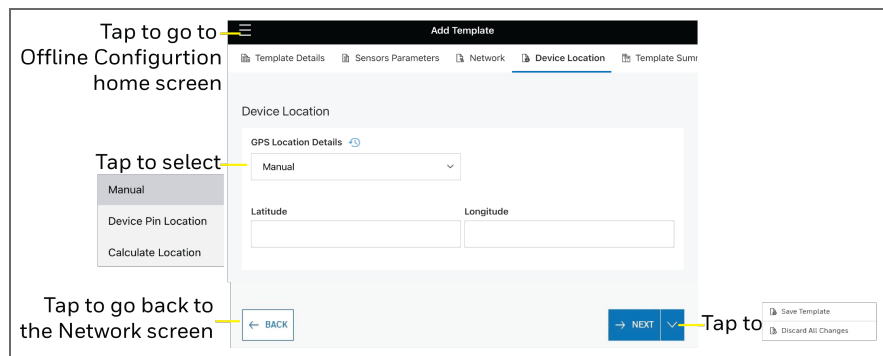
Figure 4-16: Device Location in offline template

For more information, see Device Location.

5. Tap → NEXT , the Template Summary screen appears.
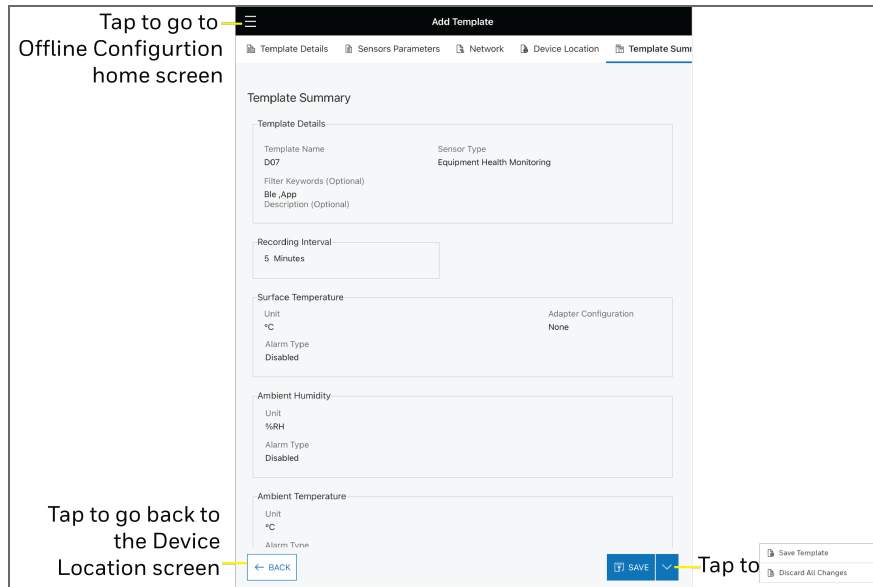
Figure 4-17: Template Summary

6. Preview the summary page, and then tap [SAVE] to save the offline template for future use. A success dialog appears, tap **OKAY**.

The Honeywell Versatilis Connect app displays the list of offline configuration templates that has been created as shown in the following screen:
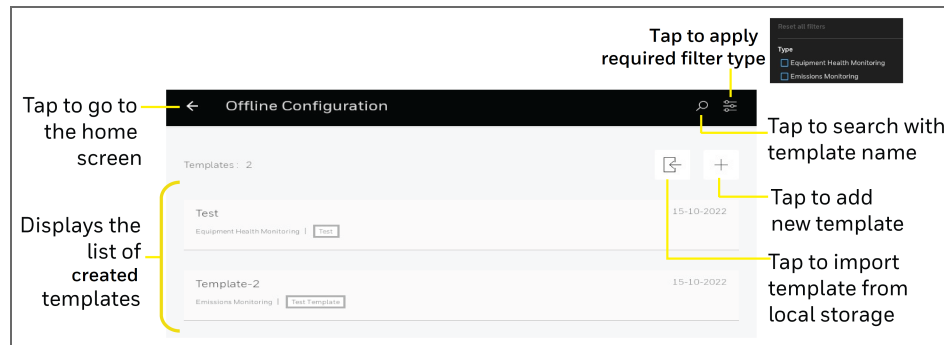

Figure 4-18: Offline Configuration available templates list

Edit the template

Choose the required offline template from the Offline Configuration list, the following template summary screen appears, tap **Edit**.
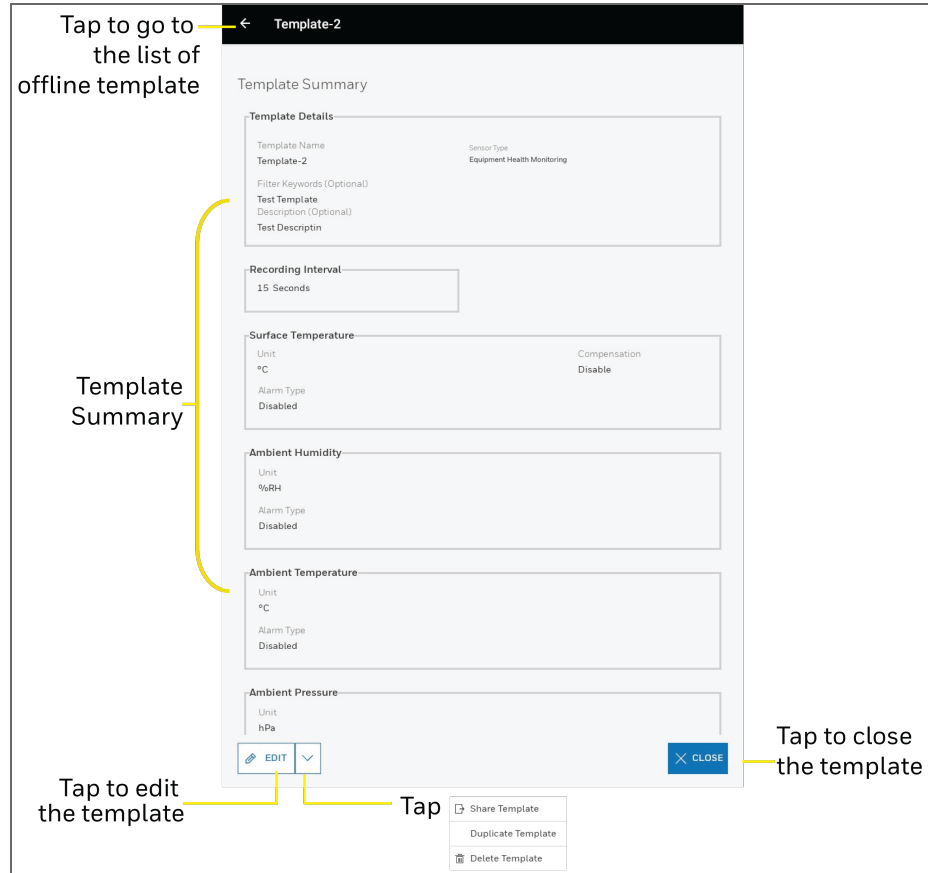
Figure 4-19: Edit template screen

Share, Duplicate, and Delete the template

The Honeywell Versatilis Connect app provides flexibility to its users to edit an offline configuration template and re-use it as per our requirements.

From the list of offline configuration templates, tap the required template to perform the following actions.

Figure 4-20: Offline Configuration - Template options

To export the template

Choose the offline template from the list:

1. Tap ![SHARE] .
2. Specify the file name, and browse the required destination path, and tap **Save**.
3. A success message appears, tap **OK**.

To duplicate the template

Choose the offline template from the list:

Tap ![DUPLICATE] to duplicate the existing template.

A duplicated copy of the selected template is created and is listed on the Offline Configuration Template list.

To delete the template

Choose the offline template from the list:

1. Tap [DELETE icon] .
2. In the confirmation dialog, tap **Proceed**.

The selected template gets deleted from the Offline Configuration list.

Import a Template

Users can import the predefined offline template from the local drive.

To import a template:

1. Tap [icon] on the Offline Configuration list.
2. Browse the required template and tap **Open**.
3. The Configuration Changes Summary dialog appears confirming successful import of the template, tap **OK**. The imported template is now added to the Offline Configuration list.

Monitoring

The Honeywell Versatilis Connect app allows you to monitor the sensor parameters by viewing its live data. The sensors parameters configured to the device through online/offline configuration mode are tracked here.

To access the Monitoring data, go to the **Homepage > Online Configuration & Diagnostics > Monitoring**.

View Live Data

The Live Data page includes dashboards that provide quick glance at the recently configured sensor parameters. To access Live Data:

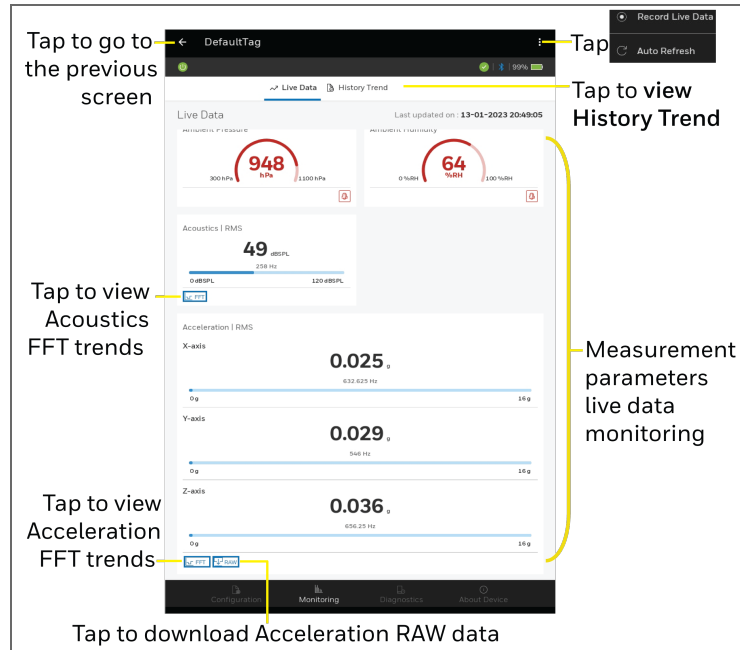On the monitoring screen, tap **Live Data**. The following screen appears:

Tap to go to the previous screen

Tap

Tap to **view History Trend**

Tap to view Acoustics FFT trends

Measurement parameters live data monitoring

Tap to view Acceleration FFT trends

Tap to download Acceleration RAW data

Figure 4–21: Live Data screen showing Acceleration

Tap to go to the previous screen

Tap

Tap to **view History Trend**

Measurement parameters live data monitoring

Tap to view Velocity FFT trends
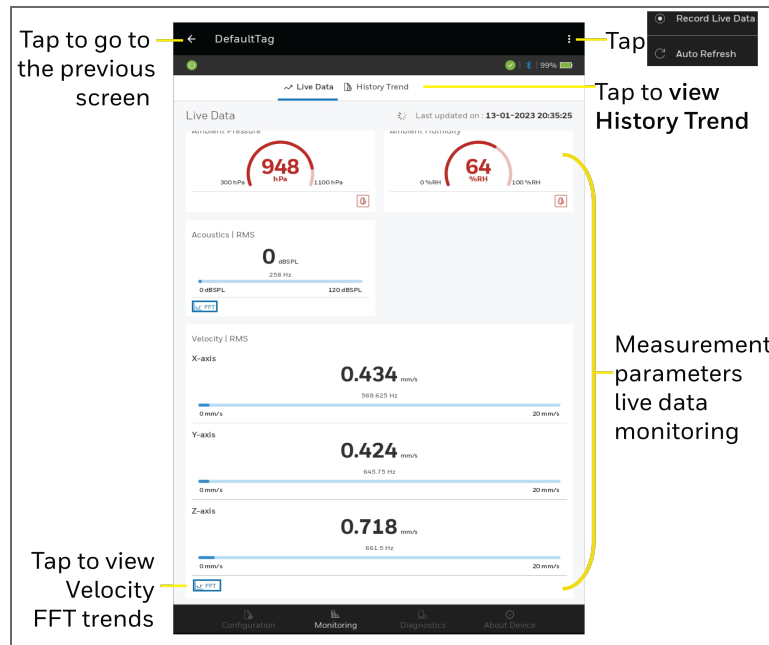
Figure 4–22: Live Data screen showing Velocity

Figure 4-22: Live Data screen showing Velocity

Alarms

Based on the alarm type and the measuring limit you choose; the alarm is triggered, and a bell icon appears at the respective parameter which is impacted. The following screen shows a triggered alarm:
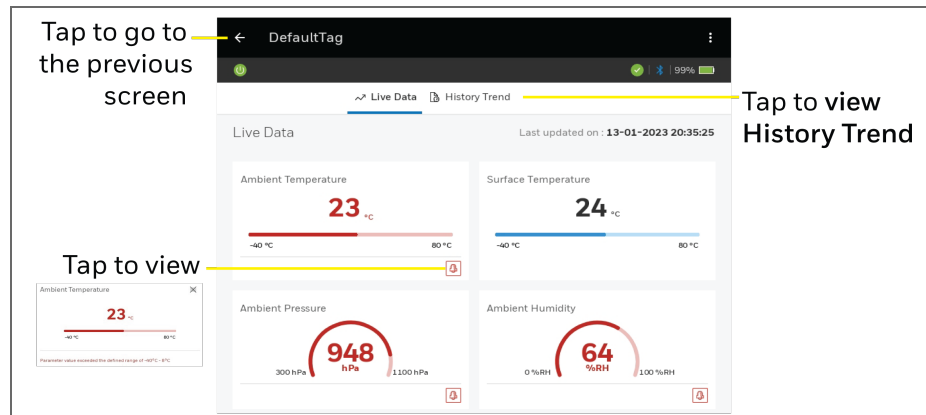

Figure 4-23: Live data screen with Alarms

Record Live Data:

1. On the **Live Data** screen, tap ⋮ > **Record Live Data**.
2. A timer is shown on the top of the screen, tap ◉ to end the recording.
3. Give a suitable file name, and tap **Save** to store the data file in the local drive.
4. **Recording Saved** dialog appears, tap **OK**.

View FFT Graphs:

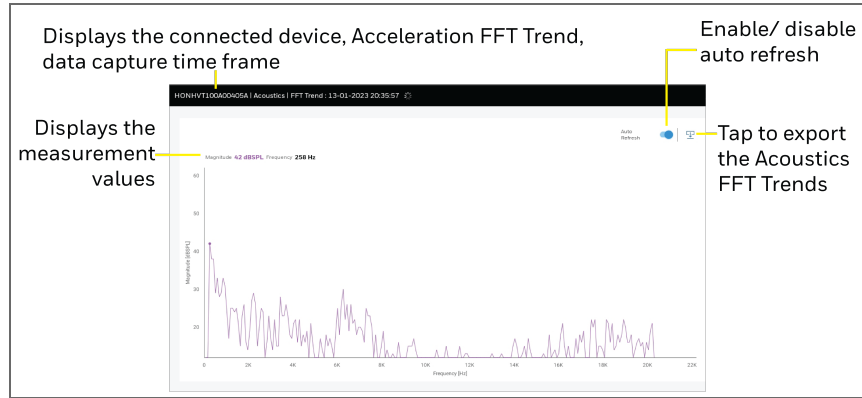1. On the **Live Data** screen, tap [FFT] icon. The following FFT Trends screen appears:

Displays the connected device, Acceleration FFT Trend, data capture time frame

Enable/ disable auto refresh

Displays the measurement values

Tap to export the Acoustics FFT Trends

Figure 4-24: Acoustics FFT Trend screen

Displays the connected device, Velocity FFT Trend, data capture time frame

Enable/ disable auto refresh

Tap to select the Velocity axis

Tap to export the Velocity FFT Trends
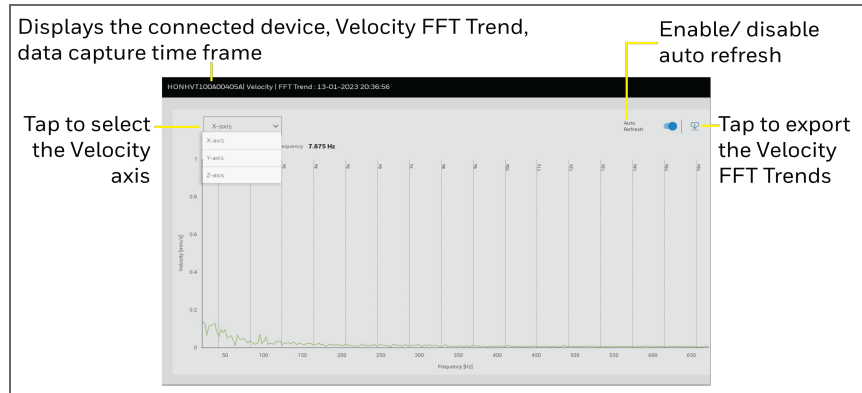
Figure 4-25: Velocity FFT Trend screen

Displays the connected device, Acceleration FFT Trend, data capture time frame

Enable/ disable auto refresh

Tap to select the Acceleration axis
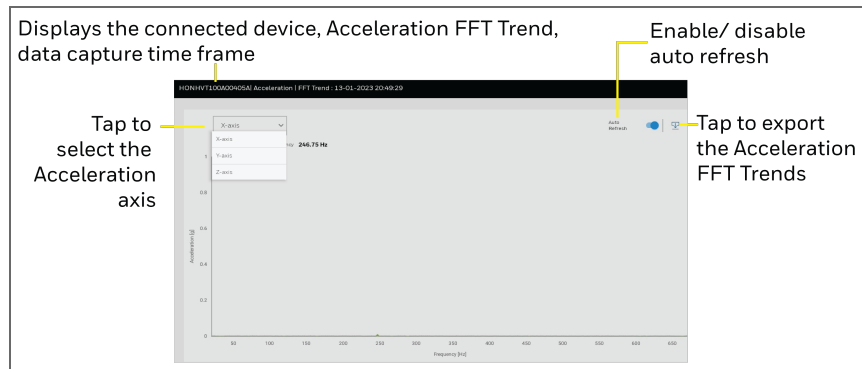
Tap to export the Acceleration FFT Trends

Figure 4-26: Acceleration FFT Trend screen

> **NOTE:** The FFT sampling frequency is 5376 Hz and FFT size is 512.

Export FFT Trends:

1. On the **Acoustics/Acceleration/Vibration FFT Trend** screen, tap ⎗ icon.
2. Give a suitable file name, select the path, and then tap **Export**.
3. A dialog appears, tap **Export**.

The selected parameter FFT Trend is now save to your local drive.

View History Trends:

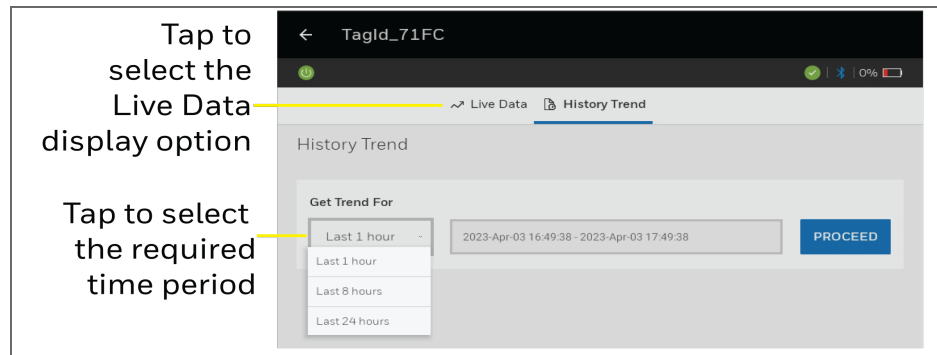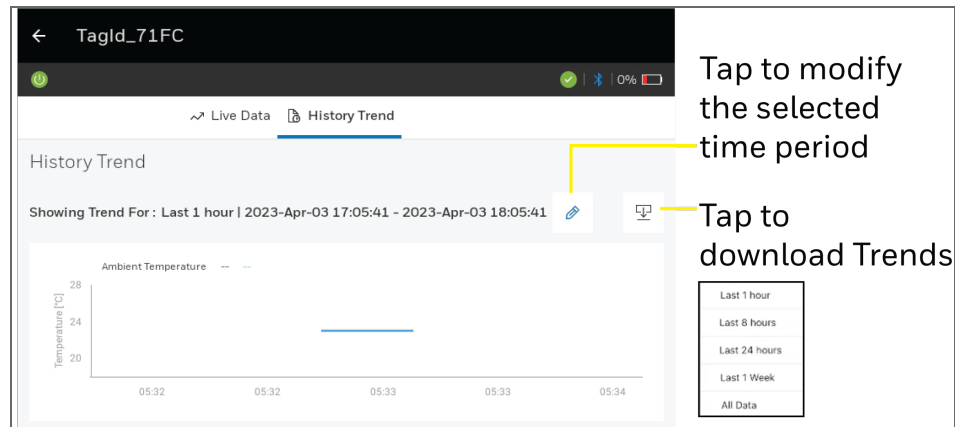On the **Monitoring** screen, tap **History Trend** the following screen appears:

Figure 4-27: History Trends landing page

> **NOTE:** Number of records will vary based on defined Measurement interval in configuration.

After selecting the period of history time, the sensor parameters trends appear as shown in the following screens:

Tap to modify the selected time period

Tap to download Trends

NOTE: By selecting the 'All Data' in download trends a maximum of 30 days of data can be downloaded from the device's last configuration.

Tap to select the Trend display option
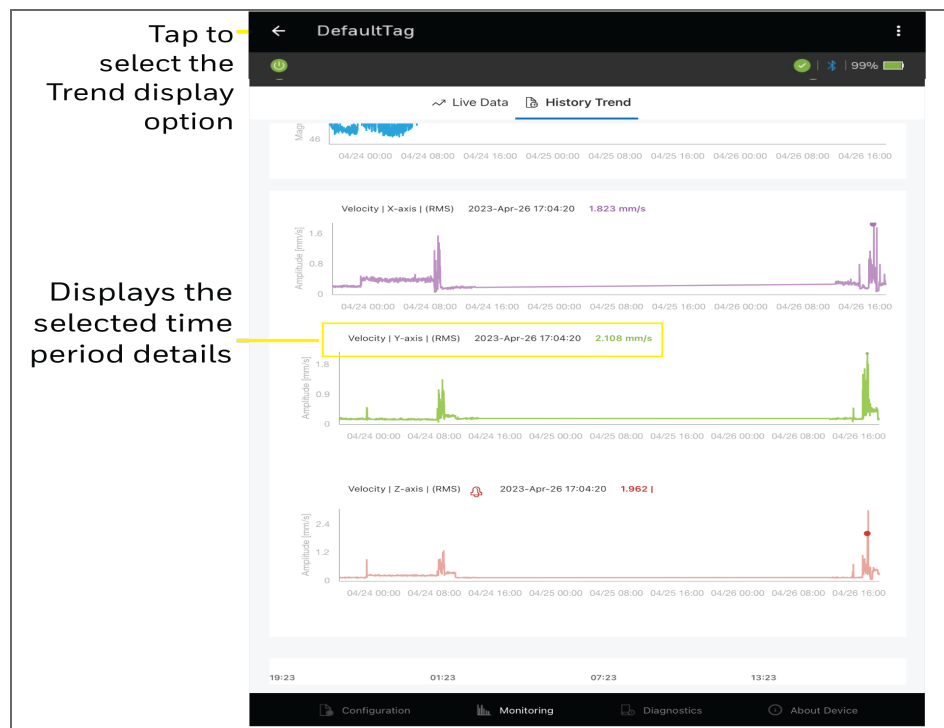
Displays the selected time period details

Figure 4-28: History Trends screen

Export/ Download History Trends:

1. On the **Monitoring** screen,
   - Select the required trend option.
   - Select the time interval from the dropdown menu.
   - Tap ⤓
2. Give a suitable file name, select the path, and then tap **Export**.
3. A dialog appears, tap **Save**.

The history trends for selected time interval are now saved to your local drive.

Recent Devices

The Honeywell Versatilis Connect app stores the data of the recently configured devices. You can remotely access the data of the recently configured devices in offline mode. Tap the required device from the list to preview its summary of the configuration details.

On the homepage (dashboard), tap **Recent Devices**. The Recent Devices page including the list of recently configured devices along with the options to search, filter, or delete appears, as shown the following screen:
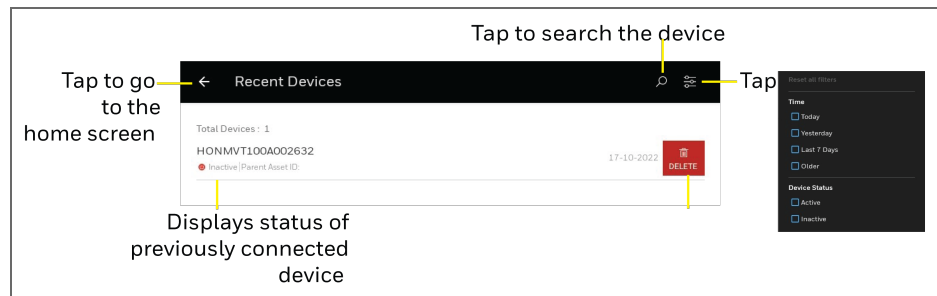

Figure 4-29: Recent Devices screen

After selecting the required device, users have access to view information of last configured devices, monitoring live data and about the device.

Diagnostics

On the homepage, tap **Diagnostics**. The following screen appears, showing the overall health of the device, condition of each configured parameter of the device, and the connectivity status of the communication modes.
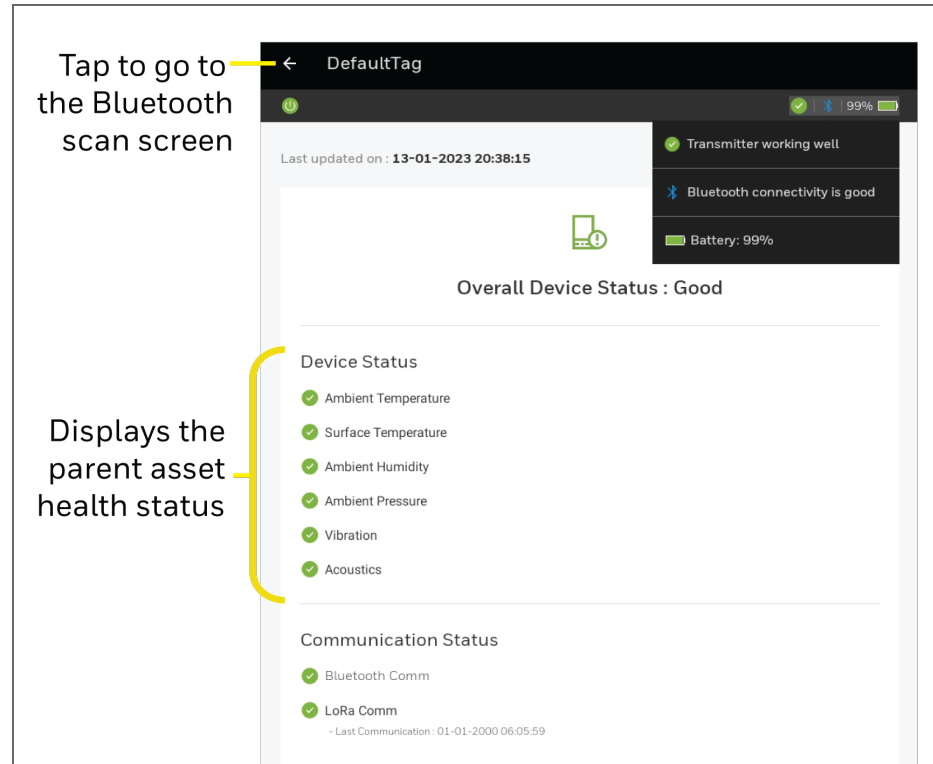

Figure 4-30: Diagnostics screen_Honeywell Versatilis Transmitter

The status are indicated as follows:

Green tick: Indicates good working condition of the sensor(s) or the healthy connection status for communication mode(s).

Red cross: Indicates some error or malfunction with sensor(s), or some connectivity issues with communication mode(s). You can investigate the cause by verifying the respective parameters configuration under the Sensor Parameters tab.

Settings

The Honeywell Versatilis Connect app provides flexibility in configuring the app related settings to suit your requirements.

To configure the Honeywell Versatilis Connect app settings:

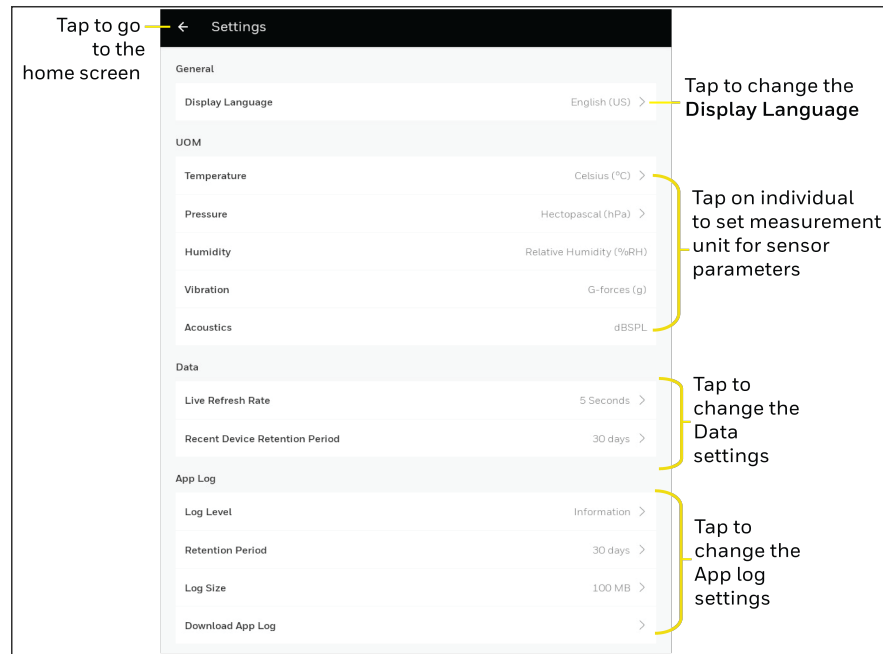On the homepage, tap **Settings**. The following **Settings** screen appears:

Figure 4-31: Settings screen

> **NOTE:** The Honeywell Versatilis Connect app must be restarted (i.e., to close, and re-open the app) to implement the updated settings.

General:

The app provides options to switch the display language to Chinese/ Spanish/ French/ German as required.

English is the default display language of the app.

Tap ← icon to move to the **Settings** page.

UOM

The UOM section shows the units of measurement associated with the respective parameters. The app allows you to change the unit of measurement for the sensor parameters as shown in the following table:

Parameters	Value
Temperature	Celsius (°C) or Fahrenheit (°F). The default unit is "Celsius (°C)".
Pressure	Hectopascal (hPa) or Atmospheric (atm). The default unit is "Hectopascal (hPa)".

Data

The **Data** section allows you to change the following:

- **Live Refresh Rate**: The rate at which the app refreshes/ reloads. You can set it within the range of 5 to 30 seconds. The default value is 5 seconds.
- **Recent Device Retention Period**: The period for which the recent devices data will be stored in the app. You can set it within the range of 30 to 90 days. The default value is 30 days.

App Log

The App Log section allows you to specify the following details to download the app logs in the required manner.

- **Log Level**: Select the Log Level from the available list such as :

  - **Information**: Captures some important information about application flow. This is the default and recommended log level.

  - **Debug**: Captures detailed information about the field device communication.

  - **Error**: Captures the failed instances of exceptions and errors.

  - **Warning**: Captures warnings messages.

  Once the log level is modified to reflect the changes, restart the Honeywell Versatilis Connect app.

- **Retention period**: Select the period with in the range of 30 to 90 days for which the log data will be stored in the app. The default value is "30 days".
- **Log size**: Select the maximum size with in the range of 100 MB to 400 MB for the log data storage. The default value is "100 MB".
- **Download App Log:** Displays the list of available log files. Select the required file and save. A success dialog appears, tap **OK**.

Tap ← icon to move to the **Settings** screen.

Honeywell Versatilis Signal Scout

Honeywell Versatilis Signal Scout (HVSS) is a smart methane gas leak detector that uses Molecular Property Spectrometer (MPS) technology and a patented design to deliver rapid and accurate methane gas leak detection across a variety of industries from the oil and gas supply chain to safety applications.

Online Configuration

The online configuration lets users to configure sensor parameters that are used to detect the gas leak and track ambient conditions in the plant or process industries, where they are mounted.

> NOTE: Make sure the Bluetooth is turned on. See Turn on the Bluetooth.

By default, the Asset Details page appears, after successful connection of the device. For more information on how to pair a device, see Getting Started.

Asset Details

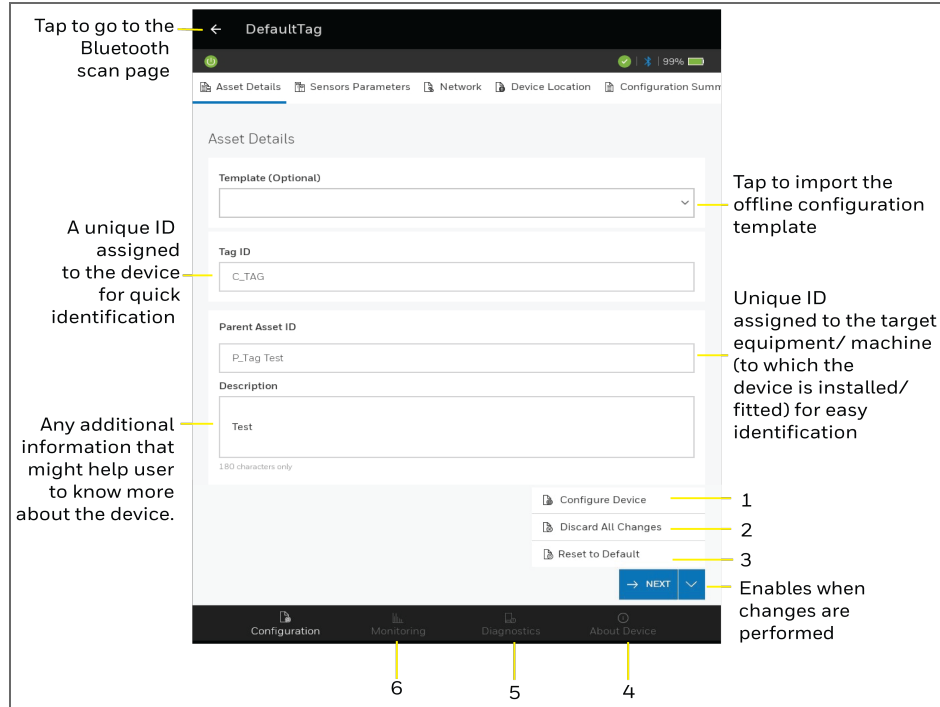The page provides key information of the asset on which the device is mounted.

Figure 4–32: Asset Details Page

Table 4–7: Asset details screen callout description

Items	Description
1	Configure Device: Displays the device configuration summary.
2	Discard All Changes: a. A dialog appears, tap **Continue** to discard the current configurations that are being updated, or b. Tap **Cancel** to retain the currently configured changes.
3	Reset to Default: To revert the existing configurations to default values. The users must sync the device configuration through **Configure Device** action.

Items	Description
4	About Device: For more information, see About device.
5	Diagnostics: For more information, see Diagnostics.
6	Monitoring: For more information, see Monitoring.

Click [→ NEXT] to go to the **Sensors Parameters** tab.

Sensors Parameters

The Honeywell Versatilis Signal Scout measures four parameters as follows:

- Ambient Humidity
- Ambient Temperature
- Ambient Pressure
- Gas Sensor

On the device configuration page, tap **Sensor Parameters** tab. The following screen appears:
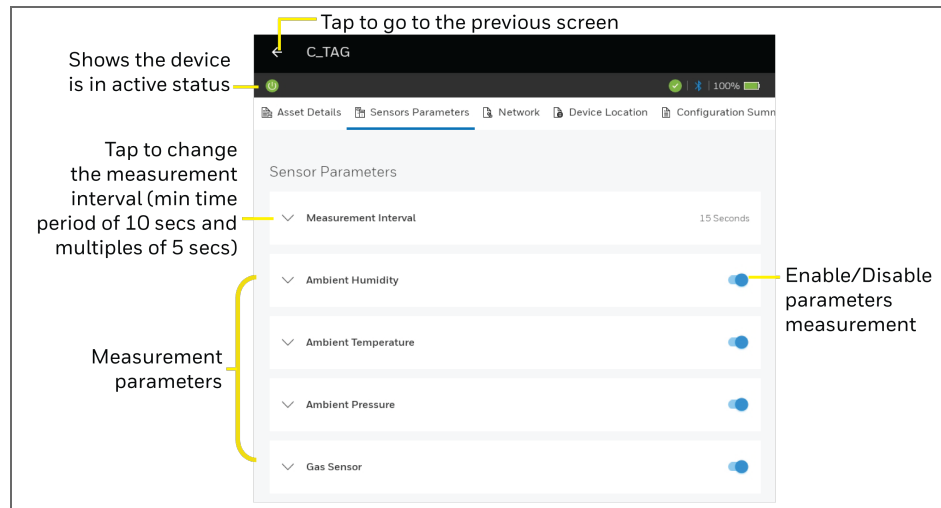
Figure 4–33: Sensor Parameters screen_Honeywell Versatilis Signal Scout

Tap the dropdown arrow to edit individual parameters. After you configure the required sensor parameters, tap [→ NEXT] to proceed further with next tab.

> **NOTE:** You must need to enable the toggle switch at each sensor parameter you want to edit.

Ambient Humidity, Ambient Temperature and Ambient Pressure

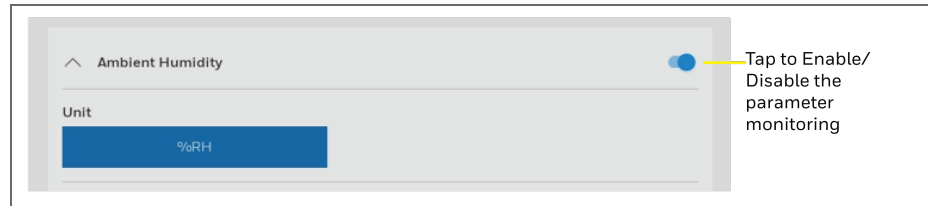The following figure illustrates the corresponding fields of Ambient humidity parameter as an example:

Figure 4-34: Ambient Humidity Parameter Fields

> **NOTE:** The **Alarm Type** feature for Ambient Humidity, Ambient Temperature and Ambient Pressure is not supported in the current release.

Gas Sensor

The following figure illustrates the corresponding fields of Gas Sensor based on the sensor type selected:
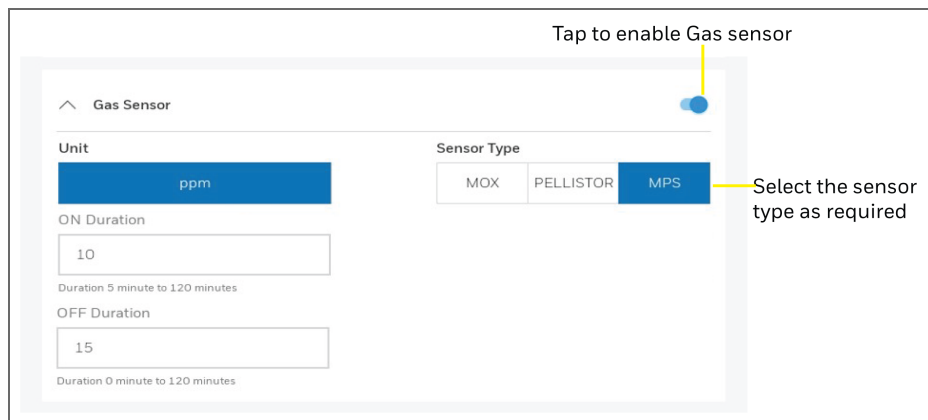
Figure 4-35: Gas Sensor Parameter screen_Honeywell Versatilis Signal Scout

Based on the sensor type you choose, the corresponding configuration field appears, or changes as described in the following table:

Table 4-8: Gas Sensor – Fields descriptions

Sensor Type	Description
MOX/PELLISTOR/MPS	- Unit: By default, the unit "ppm" is preselected and in non-editable field. - ON Duration[2]: Specify the range in between 5 to 120 minutes for the sensor to be ON. - OFF Duration[2]: Specify the range in between 0 to 120 minutes for the sensor to be OFF.
[1]The "PPM Low Limit" field is currently not supported for this release. [2]The "ON Duration" and "OFF Duration" fields are only applicable for the sensor type "MPS".	

Click [→ NEXT] to go to the **Network** tab.

Network

On the device configuration page, tap **Network** tab, or tap [→ NEXT] on the previous tab (Sensors Parameters). The following network related configuration fields appear:
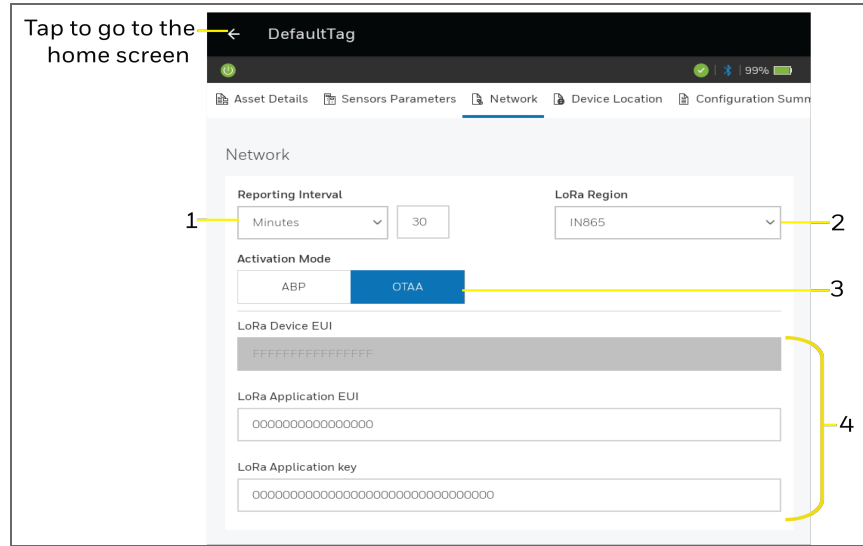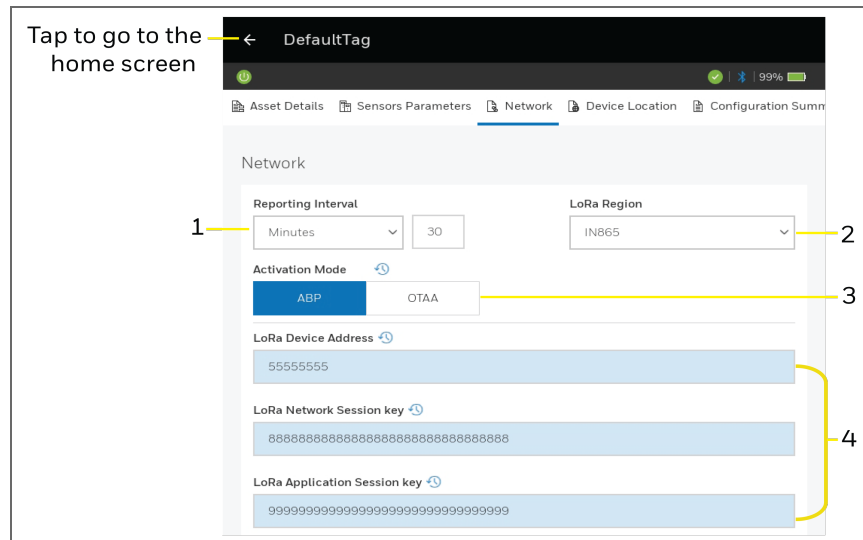

Figure 4-36: Network Configuration Fields

Figure 4-37: Network configuration screen - ABP Mode

Table 4-9: Network configuration screen callout descriptions for OTAA and ABP modes

Items	Description
1 (Reporting Interval)	Auto calculated based on the measurement interval defined in the sensor parameters.
2 (LoRa Region)	The frequency and channel plan varies for countries and regions. For more details, see *Honeywell Versatilis Signal ScoutTechnical Specifications*.
3 (Activation Mode)	User can select any of the two following modes to configure LoRaWAN: ■ OTAA (Over The Air Activation): The devices configured over OTAA mode are provisioned with root keys which performs a join procedure with the LoRaWAN network, and root keys are utilized to derive session keys. NOTE: The OTAA mode is recommended for more secure connections. ■ ABP (Activation by Personalization): The encryption keys are configured manually on the device and can start sending frames to the Gateway without needing a 'handshake' procedure to exchange the keys (such as the one performed during an OTAA join procedure).
4 (LoRa network session keys)	Following are the corresponding fields for OTAA configuration: • LoRa Device EUI • LoRa Application EUI • LoRa Application Key Following are the corresponding fields for ABP configuration: • LoRa Device Address • LoRa Network Session Key

Items	Description
	• LoRa Application Session Key **NOTE:** Ensure that the same configurations are specified in both Honeywell Versatilis Connect and LoRaWAN service provider's application to establish successful LoRa based communication.

Tap [→ NEXT] to go to the **Device Location** tab.

Device Location

The **Device Location** tab assists you to capture the location details of Honeywell Versatilis Signal Scout using Honeywell Versatilis Connect.

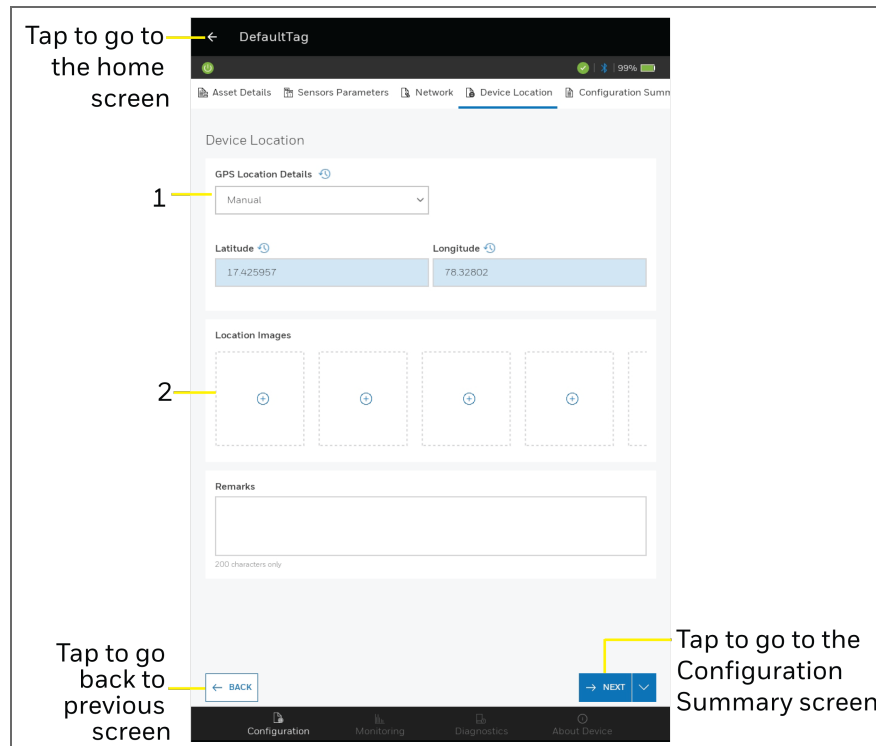The following figure illustrates the corresponding fields of the Device Location screen:

Figure 4-38: Device Location Fields

Table 4-10: Descriptions of Device Location Fields

Items	Description
1	Capturing methods: a. **Manual** : Allows users to specify the actual geographical latitude and longitude values in the respective fields to locate the device. b. **Device Pin Location**: If you are not aware of the device location details, then tap the **Capture Location** button to capture the current location of the Honeywell Versatilis Signal Scout and accordingly, the Latitude and Longitude values are auto-populated in the respective fields. > **NOTE:** The live location captured for the Honeywell Versatilis Signal Scout is the live location of your Tablet/ Smartphone instead, from where you are capturing. So, take your hand held Tablet/ Smartphone close to the installed Honeywell Versatilis Signal Scout's location for more accurate details. c. **Calculate Location**: If you are not aware of the actual values but aware of reference location details of the target structure on which the Honeywell Versatilis Signal Scout is installed. Then, manually specify the reference values for Latitude, and Longitude of the Honeywell Versatilis Signal Scout's location, and tap **Calculate Location** button, to calculate other parameters like Distance (m) and Bearing N (deg) of the Honeywell Versatilis Signal Scout.
2	Location Images: Tap **Add Image icon** to add images of the installation scenarios of the device on the target structure. a. Add image from local drive: Tap icon, and select the image from your local drive. Add a suitable label for the image being uploaded, and then tap **Done**.

Items	Description
	After selecting an image, you can tap icon to rotate the uploaded image, or tap icon to reselect or re-upload the image. b. Capture image using tablet camera: Tap icon, and adjust the tablet camera to capture the image of Honeywell Versatilis Signal Scout mounted on the target structure. c. The captured image can be edited, deleted or downloaded to your local drive.

Tap to go to the **Configuration Summary** tab.

Configuration Summary

The following figure illustrates the corresponding fields of the Configuration Summary screen:
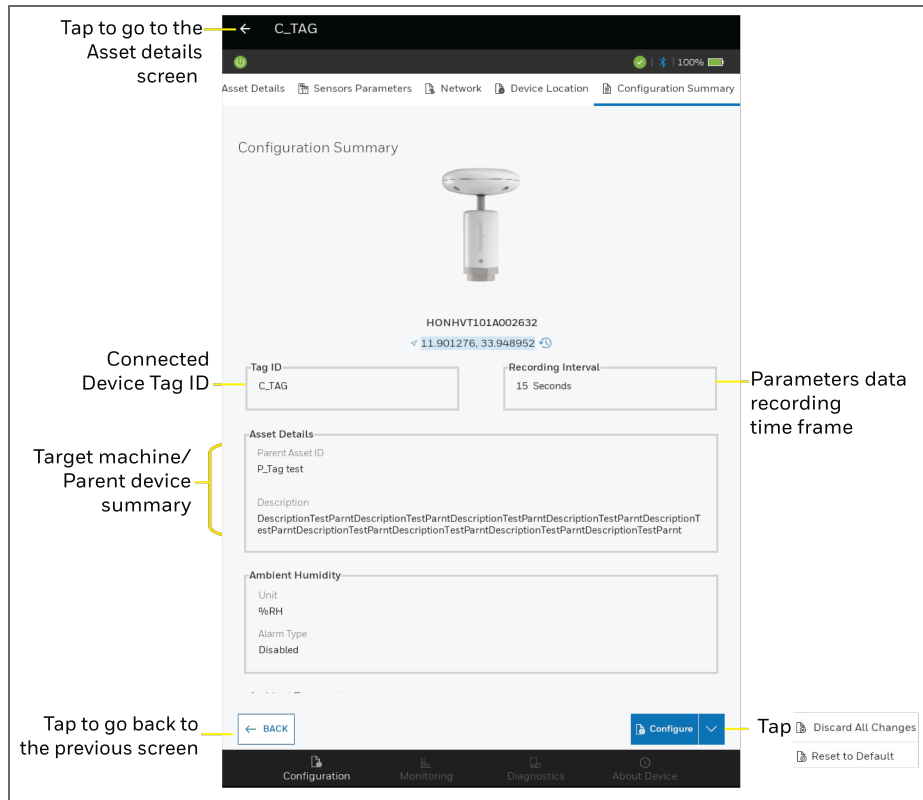
Figure 4-39: Configuration summary screen

Offline Configuration

The Offline Configuration lets you to perform bulk configurations of the devices that are having the same configurations requirements, through an offline template. The offline template allows you to copy, duplicate, share, or modify, and then use for other devices as well.

Open the [icon] Honeywell Versatilis Connect on your Tablet/ Smartphone. The homepage (dashboard) appears.

On the homepage (dashboard), tap **Offline Configuration**. The Offline Configuration page appears as illustrated in the following figure:
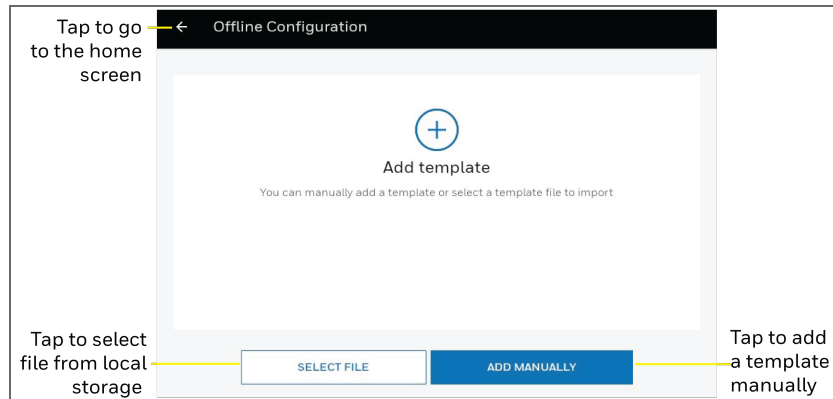

Figure 4-40: Offline Configuration Page

Creating a Template

To create an offline template manually:

1. On the Offline Configuration page, tap **ADD MANUALLY.** The ADD Template page appears as illustrated in the following figure. Provide the template details as required.
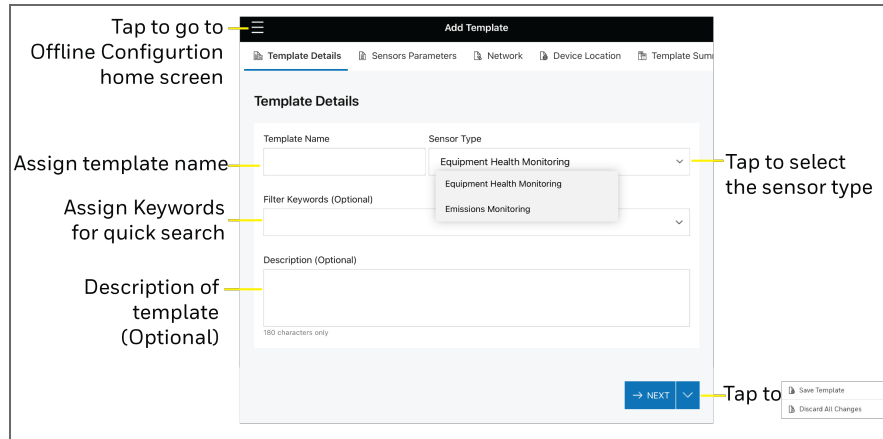

Figure 4-41: Template Details

2. Tap [→ NEXT], the Sensor Parameter details appear as illustrated in the following figure. Configure the sensors parameters details as required.
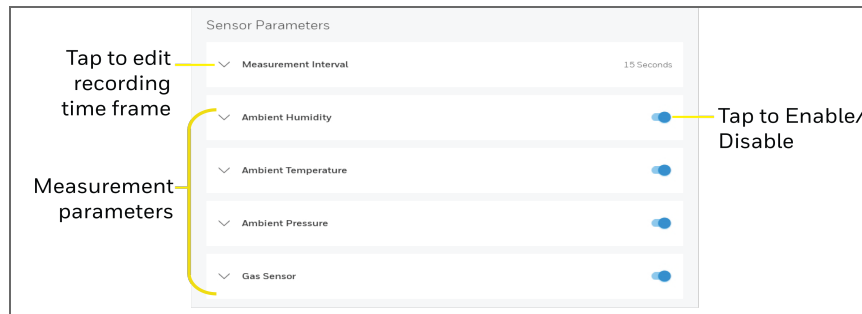

Figure 4-42: Sensors Parameters in offline template

3. Tap [→ NEXT], the Network screen appears.

Tap to go to Offline Configurtion home screen

Tap to edit reporting interval (multipe of measurement interval)

Tap to select ABP Activation Mode

Tap to go back to the Sensor Parameters screen

Tap to select LoRa Region

LoRa network session keys

Tap to

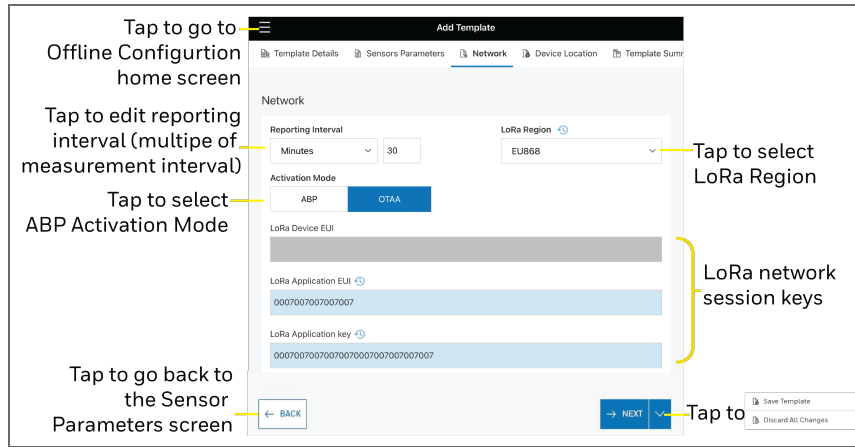*Figure 4-43: Network details in offline template*

For more information, see Network.

4. Tap [→ NEXT], the Device Location screen appears.

Tap to go to Offline Configurtion home screen
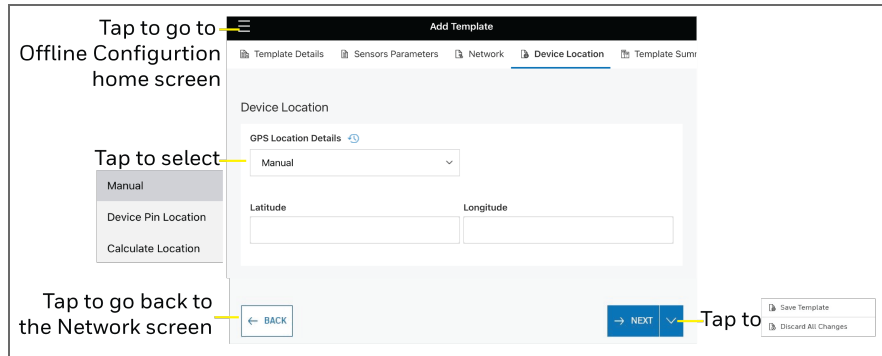
Tap to select

Tap to go back to the Network screen

Tap to

Figure 4-44: Device Location in offline template

For more information, see Device Location.

5. Tap [→ NEXT], the Template Summary screen appears.

Tap to go to
Offline Configurtion
home screen
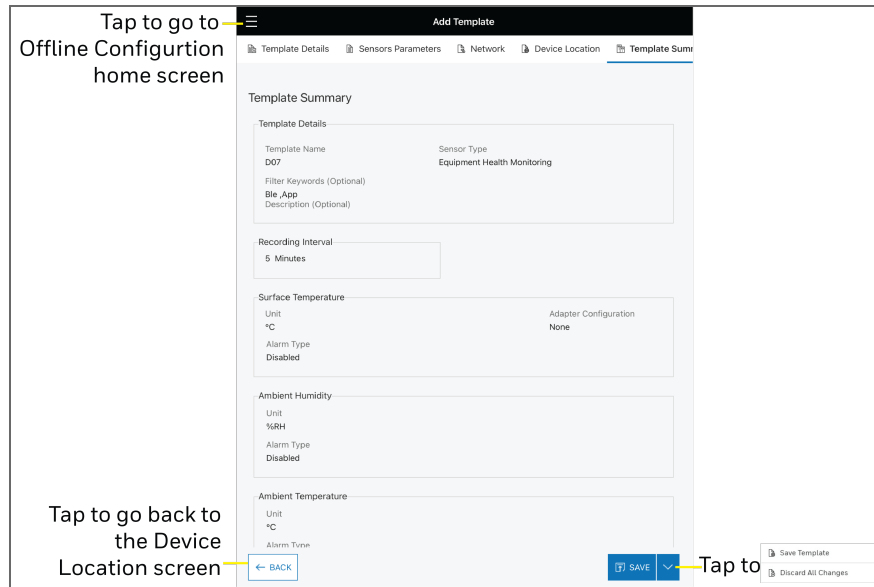
Tap to go back to
the Device
Location screen

Tap to

Figure 4-45: Template Summary

6. Preview the summary page, and then tap [SAVE] to save the offline template for future use. A success dialog appears, tap **OKAY**.

The Honeywell Versatilis Connect displays the list of offline configuration templates been created as illustrated in the following figure:

Tap to apply
required filter type

Tap to go to
the home
screen

Displays the
list of
created
templates

Tap to search with
template name

Tap to add
new template

Tap to import
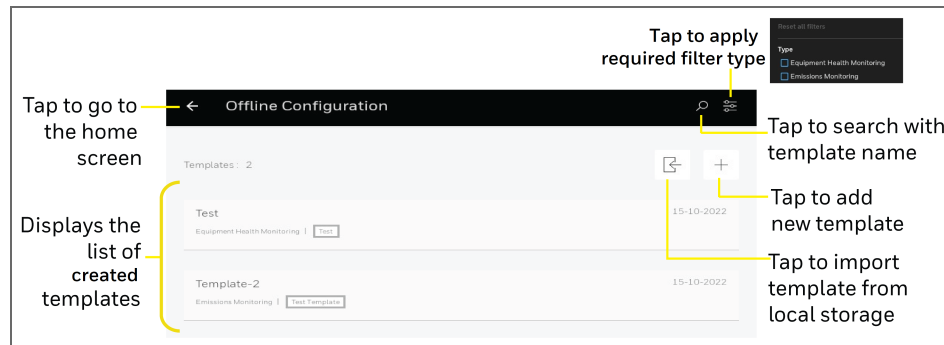template from
local storage

Figure 4-46: Offline Configuration List

Edit the template

Choose the required template from the Offline Configuration list, the respective template summary page appears as follows, tap **Edit**.
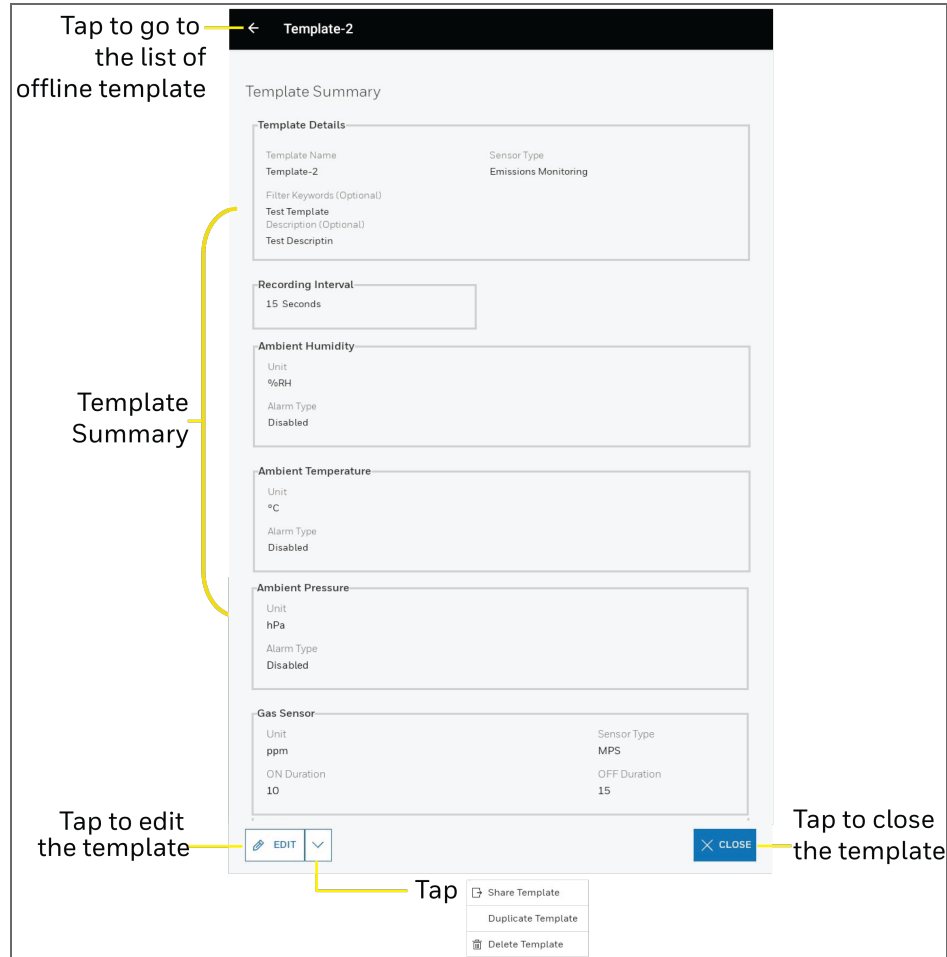

Figure 4-47: Edit Template Page

Share, Duplicate, and Delete the template

The Honeywell Versatilis Connect provides flexibility to edit an offline configuration template to re-use it as per our requirements.

From the list of offline configuration templates, tap the required template to perform the following actions.

Figure 4-48: Offline Configuration – Template Options

To export the template

Choose the offline template from the list:

1. Tap [SHARE].
2. Specify the file name, and browse the required destination path, and tap **Save**.
3. A success message appears, tap **OK**.

To duplicate the template

Choose the offline template from the list:

Tap [DUPLICATE] to duplicate the existing template.

A duplicated copy of the selected template is created, and is added to the Offline Configuration list.

To delete the template

Choose the offline template from the list:

1. Tap ![DELETE icon] .
2. In the confirmation dialog, tap **Proceed**.

The selected template gets deleted from the Offline Configuration list.

Import a Template

Users can import the predefined offline template from the local drive.

To import a template:

1. Tap ![import icon] on the Offline Configuration list.
2. Browse the required template, and then tap **Open**.
3. The Configuration Changes Summary dialog appears confirming successful import of the template, tap **OK**. The imported template is now added to the Offline Configuration list.

Monitoring

The Honeywell Versatilis Connect allows you to monitor the sensor parameters by viewing its live data. The sensors parameters configured to the device are tracked here.

To access the Monitoring data, go to the **homepage** of the Honeywell Versatilis Connect **> Online Configuration & Diagnostics > Monitoring**.

View Live Data

The Live Data page includes dashboards that provide quick glance at the recently configured sensor parameters.

To access Live Data:

On the Monitoring page, tap **Live Data**. The following page showing live data appears:

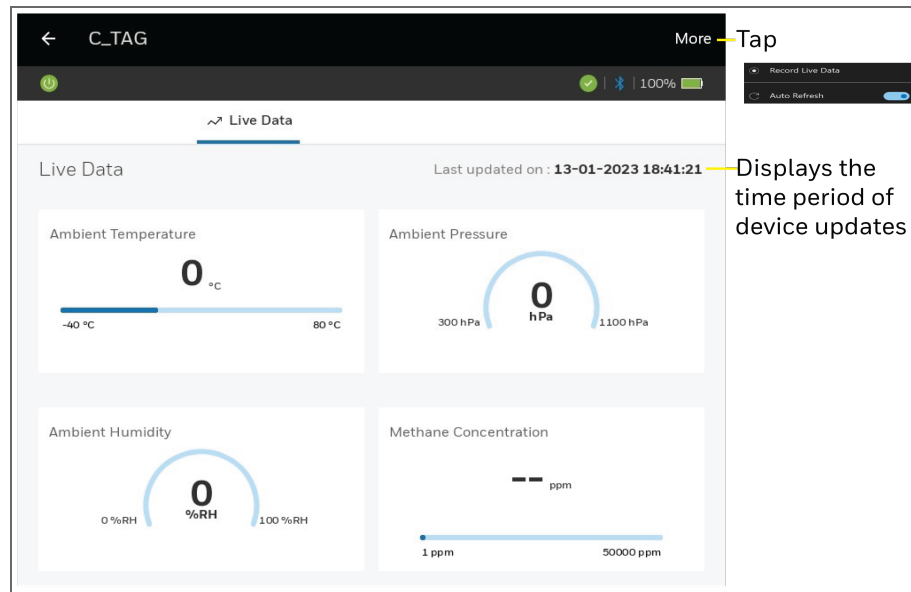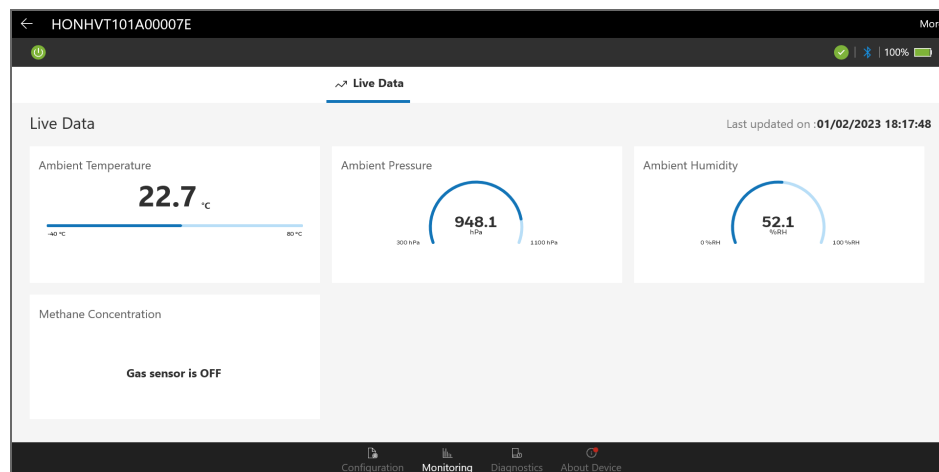*Figure 4-49: Live Data screen*

Figure 4-50: Live Data screen - Gas Sensor OFF

Record Live Data:

1. On the **Live Data** screen, tap **More** > **Record Live Data**.

2. A timer is shown on the top of the screen, tap ⏹ to end the recording.

3. Give a suitable file name, and tap **Save** to store the data file in the local drive.

4. **Recording Saved** dialog appears, tap **OK**.

Auto Refresh:

On the **Live Data** screen, tap **More**, then Enable/ Disable the **Auto Refresh** toggle button to refresh the Live Data recording values.

Diagnostics

On the homepage (dashboard), tap **Diagnostics**. The following page appears, showing the overall health of the device, status of each configured parameter of the device, and the connectivity status of the respective communication modes.
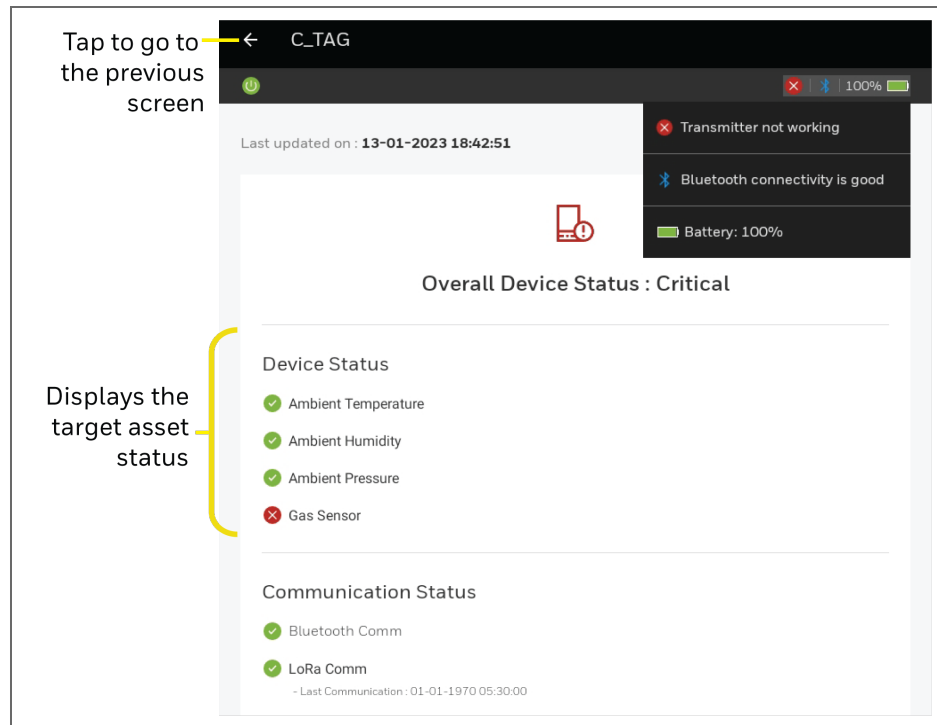

Figure 4-51: Diagnostics Page

The status are indicated as follows:

Green tick: Indicates good working condition of the sensor(s) or the healthy connection status for communication mode(s).

Red cross: Indicates some error or malfunction with sensor(s), or some connectivity issues with communication mode(s).

> **NOTE:** You can also investigate the cause of the particular
>
> parameter indicated with Red cross by verifying the respective
> parameter's configuration field(s) under the <u>Sensors Parameters</u>
> tab.

Recent Devices

The Honeywell Versatilis Connect stores the data of the recently
configured devices. You can remotely access the data of the recently
configured devices in offline mode. Tap the required device from the
list to preview its summary of the configuration details.

On the homepage (dashboard), tap **Recent Devices**. The
Recent Devices page including the list of recently configured devices
along with the options to search, filter, or delete appears, as
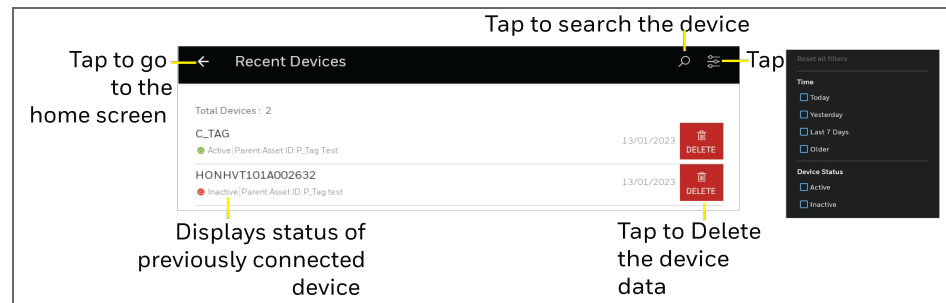illustrated in the following figure.:

Figure 4-52: Recent Devices Page

Settings

The Honeywell Versatilis Connect provides flexibility in configuring
the app related settings to suit your requirements.

To configure the Honeywell Versatilis Connect settings:

On the homepage, tap **Settings**. The following **Settings** screen
appears:
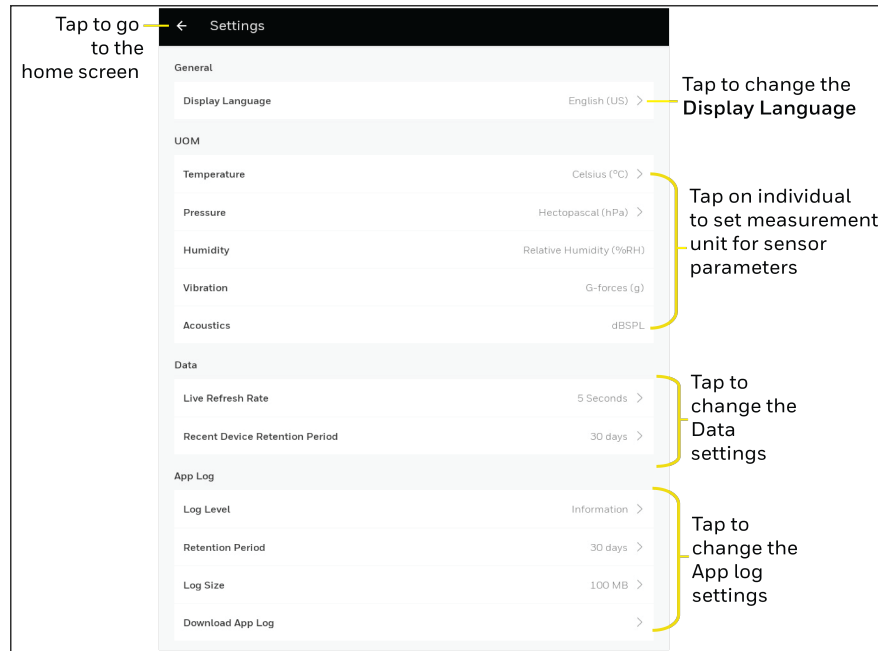
Figure 4-53: Settings Page

> **NOTE:** The Honeywell Versatilis Connect must be restarted (i.e. to close, and re-open the app) to implement the modified settings.

General:

English is the default display language of Honeywell Versatilis Connect. The app provides options to switch the display language to Chinese/Spanish/French/German as required.

UOM

The UOM section shows the units of measurement associated with the respective parameters. The app allows you to change the unit of measurement for the below sensor parameters as shown in the following table:

Parameters	Unit of Measure (UOM)
Temperature	Celsius (°C) or Fahrenheit (°F). The default unit is "Celsius (°C)".
Pressure	Hectopascal (hPa) or Atmospheric (atm). The default unit is "Hectopascal (hPa)".

Data

The **Data** section allows you to change the following:

- **Live Refresh Rate**: The rate at which the app refreshes/ reloads. You can set it within the range of 5 to 30 seconds. The default value is "5 seconds".

- **Recent Device Retention Period**: The period for which the recent devices data will be stored in the app. You can set it within the range of 30 to 90 days. The default value is "30 days".

App Log

The App Log section allows you to specify the following details to download the app logs in the required manner.

- **Log level:** Select the required log level from the list as follows:

  - **Information**: Captures some important information about application flow. This is the default and recommended log level.

  - **Debug**: Captures detailed information about the field device communication.

  - **Error**: Captures the failed instances of exceptions and errors.

  - **Warning**: Captures warnings messages.

  Once the log level is modified to reflect the changes, restart the Honeywell Versatilis Connect app.

- **Retention Period:** Select the period with in the range of 30 to 90 days for which the log data will be stored in the app. The default value is "30 days".

- **Log Size:** Select the maximum size with in the range of 100 MB to 400 MB for the log data storage. The default value is "100 MB".

- **Download App Log:** Displays the list of available log files. Select the required file and save. A success message appears, tap **OK.**

Tap ← to move to the Settings page.

ABOUT DEVICE

Displays the device details such as TagID, Serial number, Bluetooth address, LoRa and Device Firmware configured through Honeywell Versatilis Connect app.

To access the device information, go to the homepage of the Honeywell Versatilis Connect app > **Online Configuration & Diagnostics** > **About Device**.
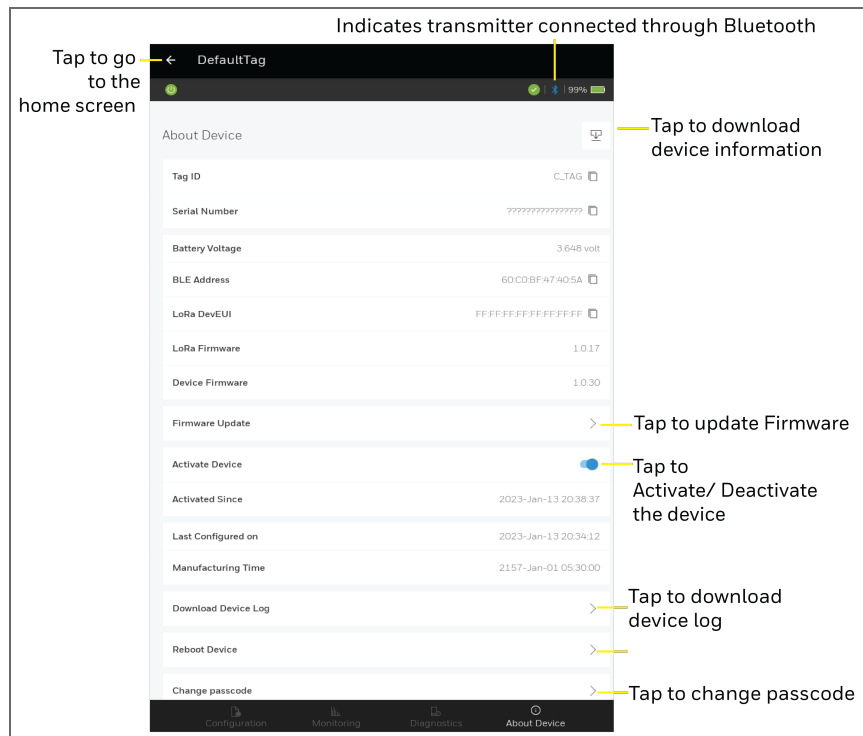

Figure 5-1: About device screen

Download device information:

1. Tap [icon] to download the device details file. Enter the file name, browse the intended destination path, and tap **SAVE**.
2. A success dialog appears, tap **OK**. The device details file is now saved to your local drive.

Update Firmware

To update firmware for your device:
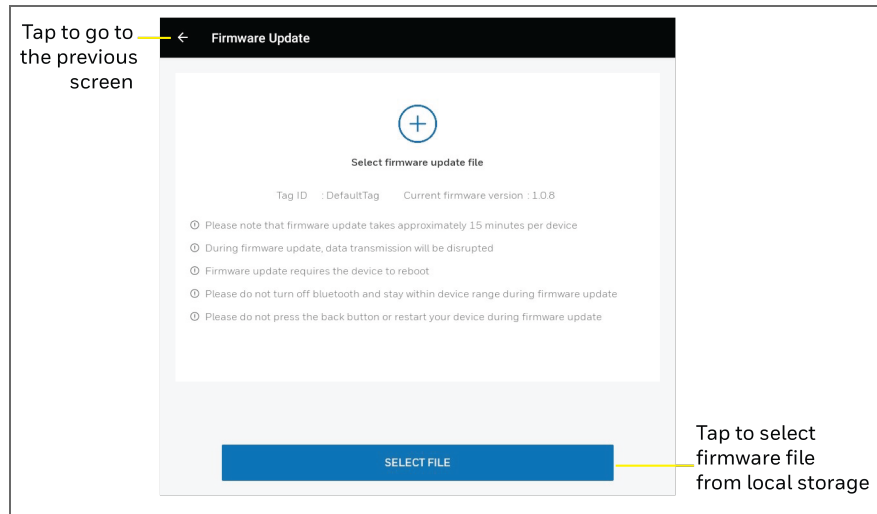
Figure 5-2: Firmware update screen

1. Select the required version of the firmware file from your local drive, and tap **Update**.
2. A **Firmware update success** dialog appears, tap **OKAY**.

The Honeywell Versatilis Connect app shows the updated firmware version in the Device Firmware section.

> **NOTE:** The devices with firmware V1.0.35 must be forget and paired again after successfully upgrading to the latest firmware version.

> **NOTE:** For iOS support, users need to update the device's firmware with V1.0.40 or above. To update the latest firmware, click Honeywell Versatilis Transmitter and go to **Support** tab to download the firmware file.

Activate or Deactivate the Device

On the About Device page, tap the ⬤ (toggle button) to activate or deactivate the device.

> **NOTE:** This feature is also available on every screen in the Online Configuration & Diagnostics module. Green ⏻ indicates that device is in "active" state and Red ⏻ indicates "inactive" state.

Download Device Log:

1. Tap ❯ icon against the **Download Device log**. The following screen appears:

Figure 5-3: Firmware update screen

2. Tap **Download,** the log file starts downloading.

The device log is now saved to your local drive.

Reboot Device

> **ATTENTION:** The data transmission will be disrupted while the device reboots.
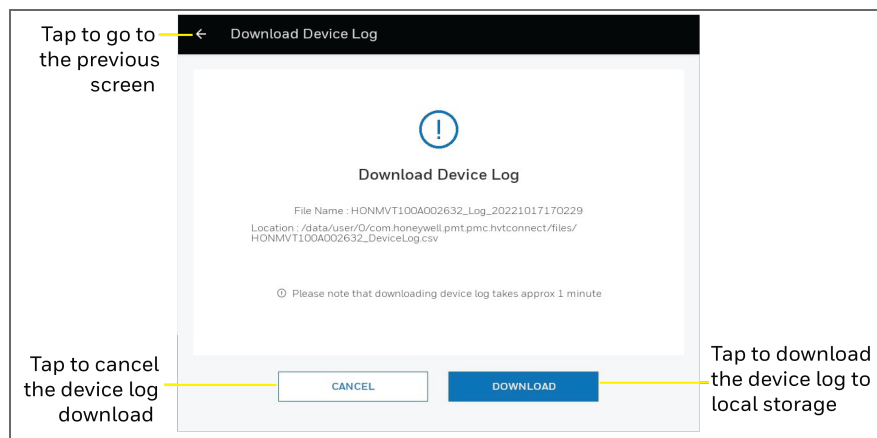
Tap ⟩ icon against the **Reboot Device**. A **Reboot Confirmation** screen appears. Tap **Reboot** and then **OKAY**.
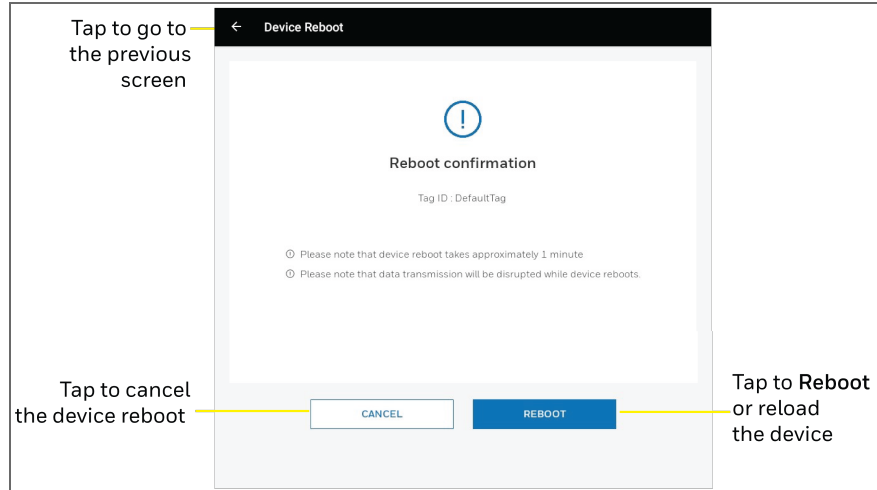
Figure 5-4: Reboot device screen

Change Connect App Passcode

To change the passcode assigned to the device in the app:

1. Tap ⟩ icon against the **Change passcode**.
2. A pop-up screen prompts to specify the new passcode, and then confirm the specified passcode. Set the six-digit new passcode, and click **Save**.

The passcode is now successfully changed.

> **NOTE:**
> In case you forgot your changed passcode, you can reset the changed passcode to the default passcode using reed switch provided on the Honeywell Versatilis Transmitter. For more information on how to reset the passcode, see *Installation and User's Guide* for Honeywell Versatilis Transmitter.

FIRMWARE UPDATE (BULK)

The Honeywell Versatilis Connect app has the provision to update the latest firmware available for the Honeywell Versatilis Transmitter for multiple devices.

Download firmware:

- Click the following link: Honeywell Versatilis Transmitter
- Click the **Resource** tab on the product page.
- Click the **Honeywell Versatilis Transmitter Firmware** file.
  The file starts downloading and is saved in your local storage.

To update the firmware for multiple devices:

1. Go to the homepage of the Honeywell Versatilis Connect app > **Firmware Update**.

2. A pop up with the important considerations appears, tap **CLOSE**.

3. The **Firmware Update** screen appears, follow the below procedure:

Tap to scan the devices

Select the check box to choose all the available devices

Displays the device's firmware version

Tap to browse firmware file from the local storage
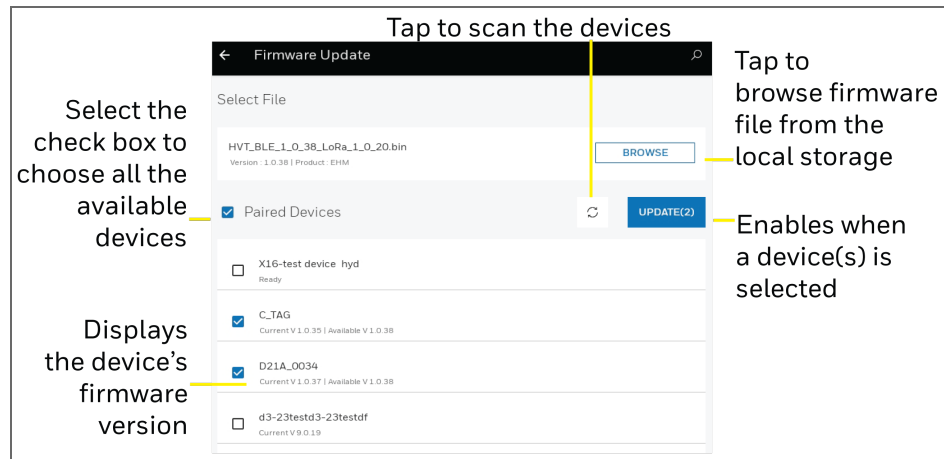
Enables when a device(s) is selected

Figure 6-1: Bulk firmware update

a. Tap **Browse** to open the required firmware file from your local drive.

b. If the required device is not found under the **Paired Devices**, tap ⟳ to refresh the displayed list.

c. Select the required device(s) that needs firmware update and then tap **UPDATE**.

The firmware update for the selected devices begins transferring the updates and can be seen against each device.

Displays the Firmware version

Displays the list of device(s) for firmware update

Firmware V1.0.38 update

1 out of 2 completed | ~ 7min remaining

C_TAG

D21A_0034   TRANSFERRING 4 %

CANCEL

Firmware update requires the sensor to reboot

Tap to abort the firmware update
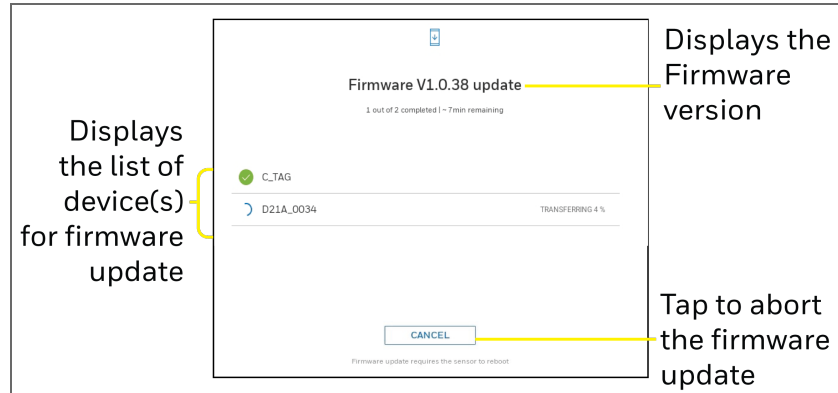
Figure 6-2: Firmware update confirmation screen

NOTE: Firmware update requires the sensor to reboot once the transfer is completed.

NOTE: The devices with firmware V1.0.35 must be unpaired and repaired after successfully upgrading to the latest firmware version.

After successful update, the confirmation status screen appears with the list of updated devices as shown below:

HELP & DOCUMENTATION

The **Help and Documentation** page guides you to successfully accomplish your tasks. It also serves as proactive assistance to prevent issues or to solve an encountered problem, if any.

On the homepage (dashboard), tap **Help & Documentation**. The following Help & Documentation screen appears.
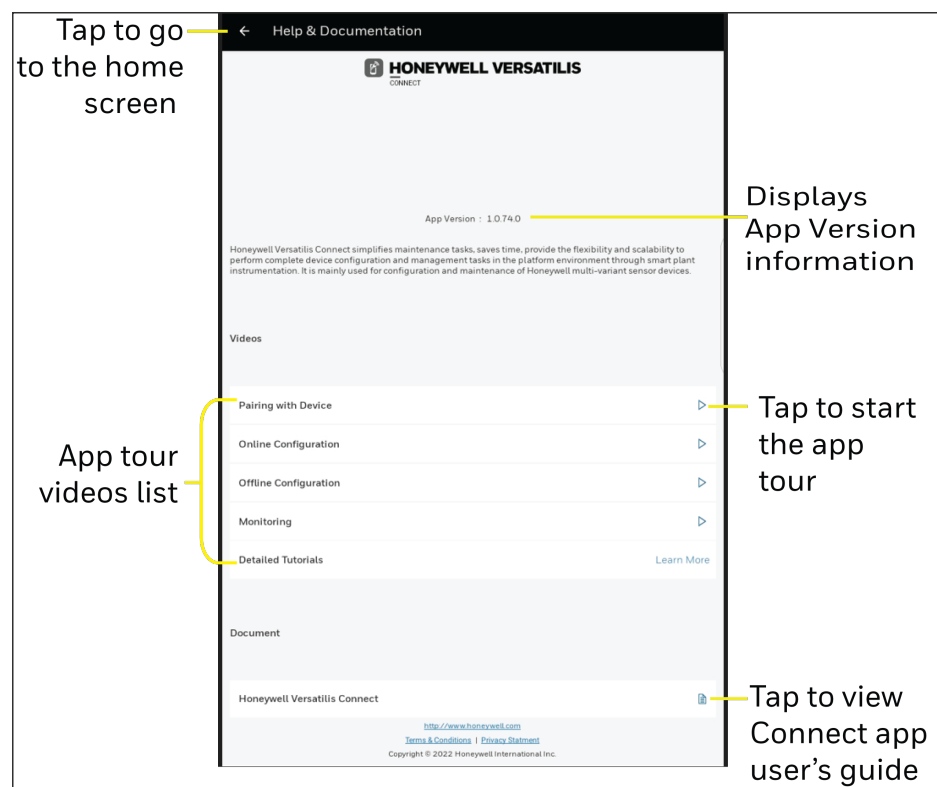
Figure 7-1: Help & Documentation screen

SECURITY FEATURES

The secure features of the Honeywell Versatilis Connect app are as follows:

- Secure firmware update.
- Secure end-to-end Bluetooth (i.e., secure data communication by application payload and pairing).
- Data protection, Data integrity, and Confidentiality protection.
- The security supported by standard BLE protocol is well implemented.
- Authentication on the BLE security using passcode.
- Communication encryption as per BLE 5.0 version.

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