



**Honeywell Versatilis™ Transmitter**

**Multi-Variant Sensing(MVS)**

**Release 100**

Equipment Health Monitoring(EHM)

Installation and User's Guide

34-VT-25-01  
*November 2022*

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# CONTENTS

<b>Chapter 1 - About this guide</b> .....	<b>5</b>
Revision history .....	5
Related documents .....	5
Terms and abbreviations .....	5
<b>Chapter 2 - Instructions and safety measures</b> .....	<b>7</b>
Precautions .....	7
Hazardous locations .....	7
Best practices .....	8
<b>Chapter 3 - Honeywell Versatilis Transmitter Overview</b> .....	<b>10</b>
Key features .....	10
Illustrations and dimensions .....	11
<b>Chapter 4 - Specifications</b> .....	<b>12</b>
<b>Chapter 5 - Setting up the Honeywell Versatilis Transmitter</b> .....	<b>15</b>
Unpacking the contents .....	15
Mounting Honeywell Versatilis Transmitter .....	17
Magnetic Mounting .....	17
Adhesive Mounting .....	17
Screw Mounting .....	18
<b>Chapter 6 - Configuration</b> .....	<b>20</b>
Installation of the Honeywell Versatilis Connect app .....	21
Configure LoRa Gateway .....	24
Configure LoRaWAN .....	25
<b>Chapter 7 - Security</b> .....	<b>27</b>
Security features .....	27
Physical security .....	27

<b>Chapter 8 - Maintenance</b> .....	<b>28</b>
Replacement of Honeywell Versatilis Transmitter .....	28
Firmware update .....	28
System logs .....	28
<b>Chapter 9 - Troubleshooting</b> .....	<b>29</b>
<b>Chapter 10 - Certifications</b> .....	<b>34</b>
<b>Notices</b> .....	<b>42</b>

# ABOUT THIS GUIDE

This guide provides information to assist you in installation, configuration, maintenance, and troubleshooting scenarios of the Honeywell Versatilis Transmitter.

## Revision history

Revision	Date	Description
A	November 2022	The initial release of the document for R100.

## Related documents

Document Name	Document Number
Honeywell Versatilis Connect App User's Guide	34-VT-25-03
Experion HS User's Guide	34-VT-25-05
Honeywell Versatilis Transmitter Technical Specification	34-VT-03-01

## Terms and abbreviations

Terms	Definitions
ATEX	Appareils destinés à être utilisés en Atmosphères Explosives
BLE	Bluetooth® Low Energy
CCoE	Chief Controller of Explosives
CAPEX	Capital Expenditures
iOS	iPhone Operating System
IIoT	Industrial Internet of Things

Terms	Definitions
LoRa	"Long Range" Radio Communication Technique
LPWA	"Low Power, Wide Area" networking protocol
MPS	Molecular Property Spectrometer
OPEX	Operational Expenditure

# INSTRUCTIONS AND SAFETY MEASURES

## Precautions

The following precautions must be exercised to use the Honeywell Versatilis Transmitter safely and effectively:

- Honeywell will not provide any guarantee, if the Honeywell Versatilis Transmitter is disassembled.
- The battery may present a potential electrostatic ignition hazard when dissembled.
- Improper use may lead to battery fluid leakage, excessive heat, ignition, or explosion.
- Honeywell will not be liable for any hazard that might be caused due to negligence in handling the Honeywell Versatilis Transmitter.
- Care should be taken to protect this Honeywell Versatilis Transmitter from impact or abrasion if located in a Zone 0/ Class I Div 1 environment.
- It is the responsibility of the end user to verify that the Honeywell Versatilis Transmitter has the necessary approvals required for the intended area of use.
- Verify that the operating environment of the Transmitter is consistent with the appropriate hazardous location's certification.










## Hazardous locations

Honeywell Versatilis Transmitter is available with IECEx, ATEX, UKCA Ex, North America Class I Div I & CCoE approvals.

For more details, see [certifications](#) and the same information is also available in *Honeywell Versatilis Transmitter Technical Specification* document.

# Best practices

Table 2-1: Best practices - DOs

DOs	
	Ensure there is adequate space to access the Honeywell Versatilis Transmitter before selecting an installation position.
	Install the Honeywell Versatilis Transmitter vertically on the target machine for overall best performance.
	It is recommended to install the Honeywell Versatilis Transmitter vertically perpendicular to the rotating shaft.
	Pay special attention in case of necessity to install the Honeywell Versatilis Transmitter horizontally on the target machine.
	While using a magnetic mounting adapter, the vibration measurement frequency band drops. Ensure the target surface is free from greasy, corrosion, abrasion, and uneven surfaces so that the magnetic adapter attaches firmly to the target, thereby improving the measurement of frequency response.
	While using a magnetic mounting adapter, the surface temperature accuracy may vary, if the surface is not clean enough. Ensure the target surface is free from greasy, corrosion, abrasion, and uneven surfaces so that the magnetic adapter attaches firmly to the target, thereby improving the accuracy of surface temperature.
	Ensure there are no damages, pigments, dents, or contortion to the surface of the Honeywell Versatilis Transmitter base. Any such deformations or pigments may affect performance and measurement accuracy.
	Perform suitable adjustments to align the x-axis, y-axis, and z-axis to the desired orientation on the target machine.
	Dispose the transmitter and battery according to laws and regulations.






DOs	
	Installation in an explosive environment must be under the appropriate local, national, and international standards, codes, and practices.

Table 2-2: Best practices - DON'Ts

DON'Ts	
	<p>Do not remove the Honeywell Versatilis Transmitter enclosure without written consent from Honeywell. The Honeywell Versatilis Transmitter is packaged with battery and sensitive electronics, that may be damaged without proper care. Pay attention to don'ts when the Honeywell Versatilis Transmitter enclosure is removed:</p> <ul style="list-style-type: none"><li>• Do not short-circuit.</li><li>• Do not disassemble or change</li><li>• Do not expose to heat or fire.</li><li>• Do not spill water or liquids.</li></ul>
	Avoid using bare hands while installing the magnetic adapter on the target machine.







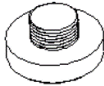
# HONEYWELL VERSATILIS TRANSMITTER OVERVIEW

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.

## Key features

The key features of Honeywell Versatilis Transmitter are:

*Table 3-1: Key features of Honeywell Versatilis Transmitter*

	Based on the latest LoRaWAN® protocol communication technology for large area coverage.
	Built-in battery compartment, lasts for five years.
	Quick and easy installation & commission .
	Robust, and intrinsically safe. Built-in environmental compensation and self-testing for fail-safe operation.
	Access real time and historical data, with insights visualization supported.
	Configurable sensor parameters, and data update frequency rate.
	Multiple mounting options available.

## Illustrations and dimensions

The physical dimensions of the Honeywell Versatilis Transmitter are shown below:

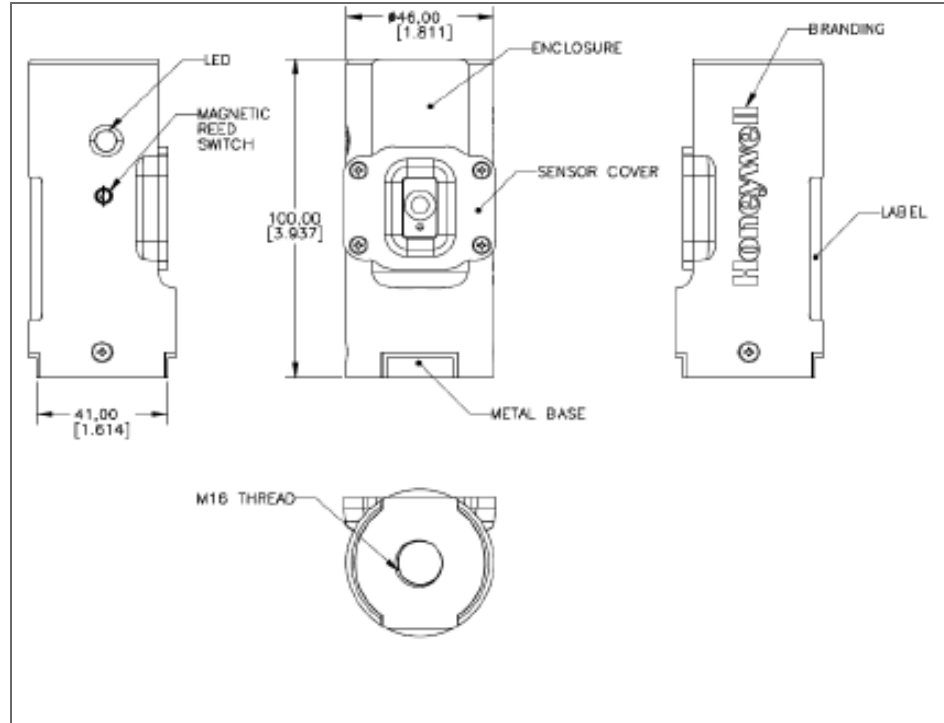


Figure 3-1: Honeywell Versatilis Transmitter dimensions

# SPECIFICATIONS

## Hardware Specifications

The hardware specifications of Honeywell Versatilis Transmitter are:

*Table 4-1: Honeywell Versatilis Transmitter - Hardware Specifications*

Parameters	Description
Measurement parameters	Surface Temperature, Ambient Temperature, Ambient Pressure, Humidity, Vibration, and Audio Acoustics.
LoRaWAN® Class-A	For information on Honeywell Versatilis Transmitter LoRaWAN® Frequency and Channel details, see <i>Honeywell Versatilis Transmitter Technical Specification</i> .
Bluetooth Communication	2.4 GHz, Low Energy 5.0 Communication
Battery life	5 years with 30 minutes update rate
Battery voltage	3.6V DC
Honeywell Versatilis Transmitter LED status	LED status indication: <ul style="list-style-type: none"> <li>• Green color LED blinking indicates: Honeywell Versatilis Transmitter ON/Operational</li> <li>• Red color blinking indicates: Honeywell Versatilis Transmitter broadcasting.</li> </ul>
Operating temperature	-40°C to 80°C (-40°F to +176°F)
Dimensions	W: 46 mm (1.81 Inches) x H: 100 mm (3.93 Inches)

Parameters	Description
Weight	200 grams
Mounting adapters	Magnetic, Screw, and Adhesive mount adapters. For more details, see Mounting options.

## Environmental conditions

The following table provides the operating conditions of Honeywell Versatilis Transmitter:

*Table 4-2: Environmental conditions of Honeywell Versatilis Transmitter*

Information	Value
Tamb range	-40°C to +80°C (-40°F to +176°F)
Relative Humidity	5% to 100%
Usage	Indoor and Outdoor
*NEMA Type 4X rating approval is in progress. This will enable Outdoor installations for North America region	

For more information, see *Honeywell Versatilis Transmitter Technical Specification* sheet.

## Product label:

The following figure shows the Honeywell Versatilis Transmitter product label. The contents of the label will be printed on the product.

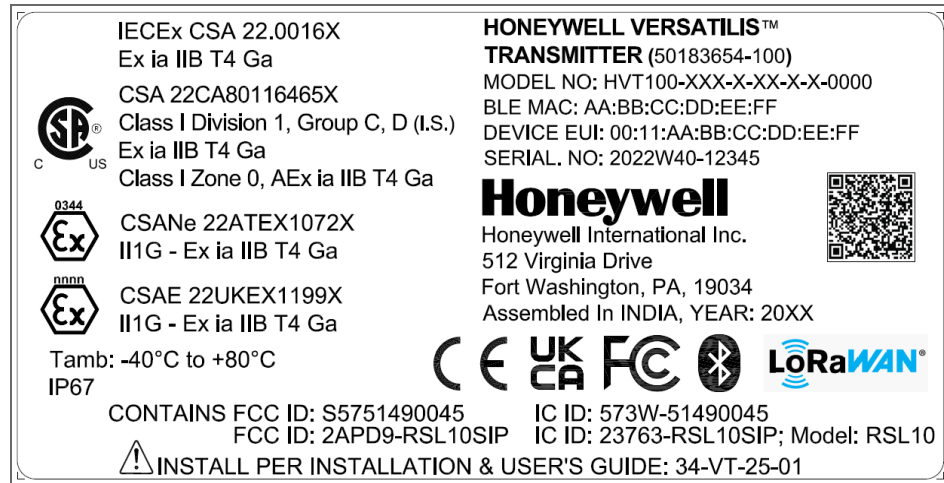


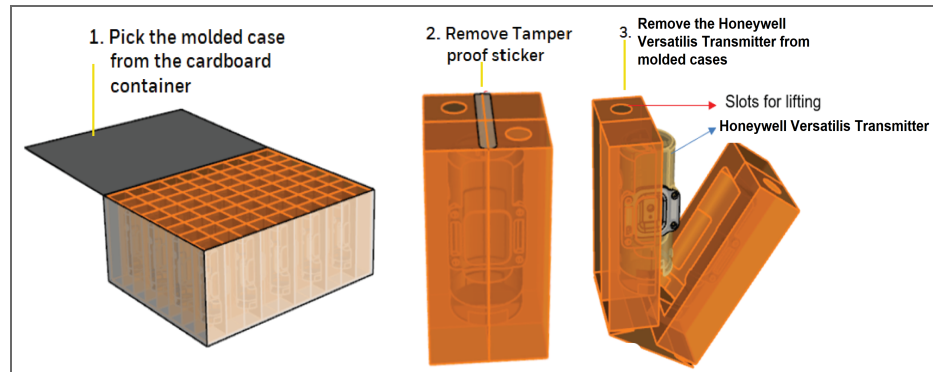
Figure 4-1: Honeywell Versatilis Transmitter label

# SETTING UP THE HONEYWELL VERSATILIS TRANSMITTER

## Unpacking the contents

The Honeywell Versatilis Transmitter comes in a molded pulp packaging of sustainable recyclable material, sealed with a tamper proof sticker. These multiple units of molded pulp packages are then inserted into the grids provided in the cardboard container for shipping.

See the instructions shown in the below figure to unpack the Honeywell Versatilis Transmitter from the shipping container:



*Figure 5-1: Unpacking the Honeywell Versatilis Transmitter*

The magnetic and adhesive mount adapters are supplied as kits along with Honeywell Versatilis Transmitter, if chosen the same while ordering.

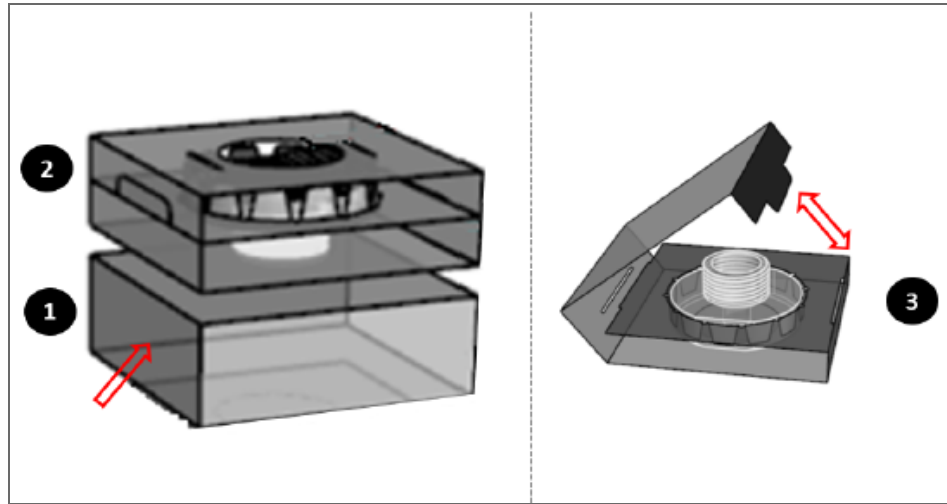


Figure 5-2: Unpacking mounting adapters

The following table provides the contents of the shipping package, while ordering the Honeywell Versatilis Transmitter with each adapter variants:

For Honeywell Versatilis Transmitter ordered with adapter variants	Contents in the package	Accessories (To be handy with users)
Screw Mount	Honeywell Versatilis Transmitter fitted with Screw Mount (Default option)	M6 Screw and M6 Nut (User needs to arrange based on target machine requirements).
Magnetic Mount	Honeywell Versatilis Transmitter, Magnetic mounting adapter	
Adhesive Mount	Honeywell Versatilis Transmitter, Adhesive mounting adapter	



**ATTENTION:** For disposing off the recyclable Transmitter and packaging materials, it is recommended to first remove the battery from the Honeywell Versatilis Transmitter. Then dispose it separately as per the manufacturer's recommendations, by following the concerned laid down regulations.

## Mounting Honeywell Versatilis Transmitter

The Honeywell Versatilis Transmitter offers multiple mounting options such as Magnetic Mount, Adhesive Mount, and Screw Mount to suit the mounting surface of the target machine to ensure good bonding and accurate measurement.

**NOTE:** Users need to select the suitable mounting adapter while placing an order. Only the 'Screw mount' adapter comes pre-fitted with the Honeywell Versatilis Transmitter from the factory.

### Magnetic Mounting

Follow the below procedure to install the magnetic mounting on the target machine:

1. Screw-in the magnetic mount adapter into the threaded hole provided on the base of the Honeywell Versatilis Transmitter.
2. Attach the Honeywell Versatilis Transmitter fitted with a magnetic mount adapter to the target machine, with the magnetic pull force.

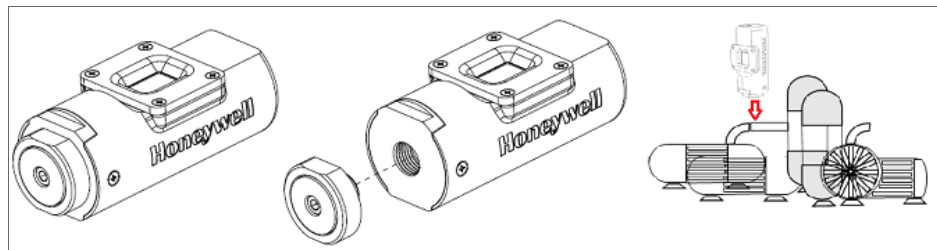


Figure 5-3: Magnetic mounting

### Adhesive Mounting

Perform the below instructions for adhesive mounting on the target structure:

**Prerequisite:** Remove oil, moisture, and dirt from the intended mounting surface of the target structure on which the Honeywell Versatilis Transmitter will be mounted. If the dirt is strong, remove it with some plant approved solvent.

**ATTENTION:** Use the adhesive mounting adapter preferably on a flat surface. As there is a potential risk of falling down of the Honeywell Versatilis Transmitter if it is mounted on uneven, rough, or curved surfaces, due to lack of sufficient bonding area.

1. Screw-in the adhesive mount adapter into the threaded hole provided on the base of the Honeywell Versatilis Transmitter.
2. Remove the protective film from adhesive face of the adapter.
3. Stick the Honeywell Versatilis Transmitter fitted with an adhesive adapter onto the target machine. Apply an adequate pressure on the Honeywell Versatilis Transmitter after it is mounted, to ensure proper bonding of the pressure-sensitive adhesive with the mounting surface.

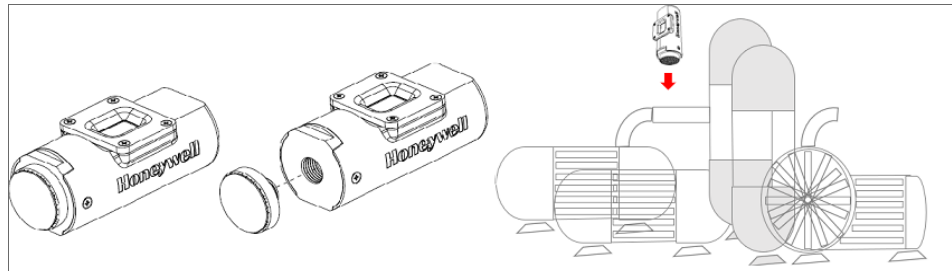


Figure 5-4: Adhesive mounting

## Screw Mounting

Perform the below instruction for screw mounting on the target machine:

1. Insert the M6 socket head screw into the hole provided on the screw-mount adapter (where the head of the screw sits inside the adapter and the tail protrudes outwards).
2. Insert the protruding M6 screw (with adapter) into the hole provided on the target machine, and then secure the adapter with M6 nut from the other side. Ensure a Torque of 3.5 to 4 Nm is applied for tightening.
3. Fit the Honeywell Versatilis Transmitter onto the installed adapter.

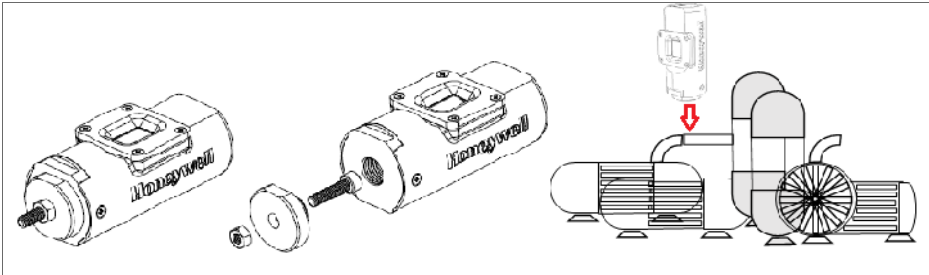


Figure 5-5: Screw mounting

## CONFIGURATION

The following figure and table provide information about the complete solution architecture designed and implemented for Honeywell Versatilis Transmitter. This information helps the user to understand the various process involved, right from the configuration of the Honeywell Versatilis Transmitter to access the analytic solutions.

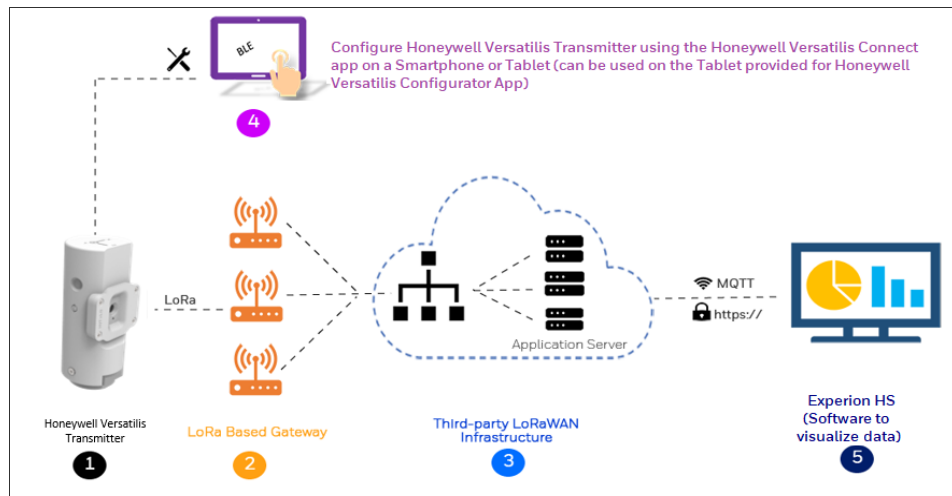


Figure 6-1: Architecture of Honeywell Versatilis Transmitter

Table 6-1: Description of architecture flow

Sequence	Integration	Description
1	Honeywell Versatilis Transmitter	<p>The Honeywell Versatilis Transmitter measures six parameters on the target machine, which are as follows:</p> <ul style="list-style-type: none"> <li>• Surface temperature</li> <li>• Ambient Humidity</li> <li>• Ambient temperature</li> <li>• Ambient pressure</li> </ul>

Sequence	Integration	Description
		<ul style="list-style-type: none"> <li>• Vibration</li> <li>• Audio acoustics</li> </ul>
2	LoRa Gateway	The third-party LoRa based gateways acts as a medium to push the sensor data from the Honeywell Versatilis Transmitter to the LoRaWAN infrastructure in a secured way.
3	LoRaWAN Infrastructure	The third-party LoRaWAN Infrastructure applies the payload formatter to encrypt the incoming data from the LoRa gateways, and securely transfer it through the MQTT protocol to the Experion HS.
4	Honeywell Versatilis Connect App	The Honeywell Versatilis Connect App enables user to connect to the Honeywell Versatilis Transmitter through bluetooth using a tablet, or smartphone. It helps user to configure the end Transmitter's sensor parameters, view live data, update firmware, etc.
5	Honeywell Experion HS	The Experion HS software provides the platform to visualize the transmitted sensor data and provide useful insights to monitor and track the health of the target machines.

## Installation of the Honeywell Versatilis Connect app

The Honeywell Versatilis Connect app provides flexibility to install on Smartphone or Tablet, that supports Android or Microsoft Windows platform. Users can also use the Tablet (if any) provided with Honeywell Versatilis Configurator App to install and run the Honeywell Versatilis Connect app with ease.

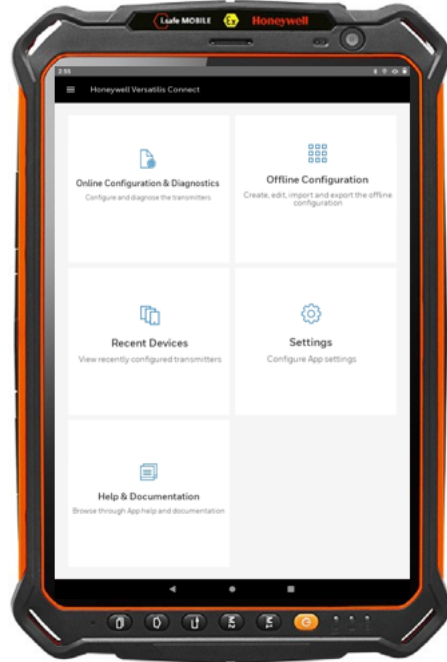


Figure 6-2: Honeywell Versatilis Connect app installed on "Honeywell Versatilis Configurator Tablet"

## Prerequisites:

Table 6-2: Prerequisites of Honeywell Versatilis Connect app

Tablet / Smartphone Specifications	Windows	Android
Operating System	Windows 10 or higher versions	Android 10 or higher versions
Process and Speed	64-bit, 1.6GHz or faster	ARM V7 or V8, 1.6GHz or faster
RAM	Minimum: 8GB	Minimum: 4GB Recommended: 8GB
Storage space	Higher than 64GB is recommended	Higher than 64GB is recommended

To download and install the Honeywell Versatilis Connect app, follow the procedure described below:

*Table 6-3: Installation procedure of Honeywell Versatilis Connect app*

For Windows Platform	For Android Platform
<ol style="list-style-type: none"><li>1. Open the <b>Microsoft Store</b> app, and search for Honeywell Versatilis Connect.</li><li>2. Tap <b>Get</b> to install.</li><li>3. Tap <b>Open</b>.</li></ol>	<ol style="list-style-type: none"><li>1. Open the <b>Google Play Store</b> app, and search for Honeywell Versatilis Connect.</li><li>2. Tap <b>Install</b>.</li><li>3. Tap <b>Open</b>. In the permissions dialog, tap <b>Allow</b>.</li></ol>

When the user launches the Honeywell Versatilis Connect App for the first time, the app gives a tour of its overall features.

For more information on how to configure Honeywell Versatilis Transmitter, see *Honeywell Versatilis Connect App User's Guide*.

## Configure LoRa Gateway

LoRa Gateways acts as communication bridge between Honeywell Versatilis Transmitter and LoRaWAN application.

**NOTE:** There are many LoRa based Gateway manufacturers in the market. Choose the LoRa gateway best suited for your needs. For more information on how to set up the LoRa Gateway, refer the respective manufacturer's product documentation.

Following are some common parameters for your reference that needs to be configured for LoRa gateway:

Functions	Key Parameters
Gateway Information	<p>Displays information such as Model Number, Serial Number, IMEI, Frequency Band, Gateway EUI, LAN, WAN, Ethernet, and etc.</p> <p>User can verify these information by checking the same on the sticker provided on the panel of the gateway.</p>
LoRaWAN/ Network Settings	<p>Below information needs to be configured:</p> <ul style="list-style-type: none"> <li>• LoRa Mode Selection: Packet Forwarder Make sure the status of Packet Forwarder shows as "Running".</li> <li>• Network selection: E.g. Radio Bridge ChirpStack, The Things Network, Senet, Loriot, etc.</li> <li>• Frequency Plan selection</li> </ul>
Connection Configuration	<p>These options for configuring connections are based on the different models of the gateways as it offers. Usually, the connection from the gateway to the LoRaWAN can be configured in Ethernet, Cellular, or Wi-Fi options.</p>
After gateway set up	<p>Make sure the gateway is powered ON and connected to the internet. The status should show as Connected in the LoRaWAN service provider application.</p>



# Configure LoRaWAN

LoRaWAN is a Low Power, Wide Area (LPWA) networking protocol based on LoRa radio modulation technique. Here, it wirelessly connects battery operated Honeywell Versatilis Transmitter to the internet and manages communication between Honeywell Versatilis Transmitter and network gateways.

**NOTE:** For more information on how to configure the Honeywell Versatilis Transmitter and LoRa Gateway in the required LoRaWAN service provider application, refer the respective product documentation.

Following are some common parameters for reference that needs to be configured to add Transmitter, and gateway in the LoRaWAN.

Functions	Key Parameters
Adding Honeywell Versatilis Transmitter	<p>LoRaWAN version, frequency, and regional parameters needs to be configured.</p> <p>For information on Frequency plan, LoRaWAN version and Regional parameters version, see <i>Honeywell versatilis Transmitter Technical Specification</i> document.</p>
Selecting the Activation Mode.	<p>The Honeywell Versatilis Transmitter supports both OTAA and ABP methods of activation. OTAA (Over The Air Activation) is the most preferred and secured method to connect the Honeywell Versatilis Transmitter.</p> <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p><b>NOTE:</b> By default, the OTAA activation mode is selected in Honeywell Versatilis Connect app. For more information on how to configure Honeywell Versatilis Transmitter with ABP or OTAA method of LoRaWAN, see the <i>Honeywell Versatilis Connect app User's Guide</i>.</p> </div>
Registering Honeywell Versatilis Transmitter	<p>Below parameters need to be configured:</p> <ul style="list-style-type: none"> <li>Device EUI: The 64 bit unique ID provided on the Honeywell Versatilis Transmitter packaging.</li> <li>App EUI: The unique identifier provided by the</li> </ul>

Functions	Key Parameters
	<p>manufacturer to identify the Join server during activation.</p> <div data-bbox="659 432 1373 621" style="border: 1px solid blue; padding: 5px;"> <p><b>NOTE:</b> Ensure that the same APP EUI specified here is used in the Honeywell Versatilis Connect app also, while configuring the LoRaWAN parameters.</p> </div> <ul style="list-style-type: none"> <li>• AppSKey: An Honeywell Versatilis Transmitter encryption key derived in LoRaWAN.</li> </ul> <div data-bbox="659 737 1373 957" style="border: 1px solid blue; padding: 5px;"> <p><b>NOTE:</b> Users can generate the Device EUI, App EUI and AppSKey. Make sure to program the same unique identifiers in the Honeywell Versatilis Transmitter using Honeywell Versatilis Connect app.</p> </div>
Adding Gateway	<p>Below parameters needs to be configured:</p> <ul style="list-style-type: none"> <li>• Assign a Gateway ID to identify the gateway.</li> <li>• Gateway EUI as mentioned on the gateway panel.</li> <li>• Gateway status and location as public/private.</li> <li>• Frequency that adheres to the local regulations.</li> <li>• Gateway delay time.</li> </ul>
After gateway added to the LoRaWAN service provider.	<p>Make sure the gateway is powered ON and connected to the internet. The status should show as Connected in the LoRaWAN service provider application.</p>

# SECURITY

The security mechanisms implementation rely on the well tested and cryptographic algorithms which are analyzed by the cryptographic community, NIST approved and widely adopted as a best security for constrained nodes and networks.

## Security features

The secure features of the Honeywell Versatilis Transmitter are:

- Secure firmware update.
- Secure end-to-end Bluetooth and LoRa (i.e., secure data communication by application payload and pairing).
- Authentication on the BLE security using passkey.
- IP protection feature to secure flash contents.
- Data protection, Data integrity and Confidentiality protection.
- Communication encryption as per BLE 5.0 version.
- The security supported by standard BLE and LoRaWAN protocols is well implemented.
- Supports LoRaWAN® Class-A protocol communication technology.

## Physical security

Keys are persistently stored in the Honeywell Versatilis Transmitter and their protection depends on the Honeywell Versatilis Transmitter's physical security. If the Honeywell Versatilis Transmitter is subject to physical threats, keys can be protected in tamper-resistant storage (secure element), where the extraction is extremely difficult.

## Replacement of Honeywell Versatilis Transmitter

The modularized design of the Honeywell Versatilis Transmitter allows the user to disassemble from current target machine and to mount on other target machine with ease, or to replace the currently fitted mounting adapter with some other adapter to suit change in mounting surface.

For more information on mounting procedure of Honeywell Versatilis Transmitter with various adapter types, see [Mounting options](#).

## Firmware update

The Honeywell Versatilis Connect app has the provision to update to the latest firmware available for the Honeywell Versatilis Transmitter. For more information, see the *Honeywell Versatilis Connect App User's Guide*.

## System logs



User has the provision to download the log files and save it to the local drive using Honeywell Versatilis Connect app.





For more information on how to download the Honeywell Versatilis Transmitter's logs using Honeywell Versatilis Connect app, see the *Honeywell Versatilis Connect app User Guide*.





## TROUBLESHOOTING



The following table provides various states of Honeywell Versatilis Transmitter's LEDs based on different scenarios, and the troubleshooting information in the case of error or unexpected behavior:

Table 9-1: Troubleshooting Information

Probable Scenarios	Honeywell Versatilis Transmitter Status	LED	On Screen	Troubleshooting Tips
On inserting the battery at the factory.	Power ON	 (Blinks thrice.)	NA	
	Power ON failure.	No visual indication on LED.	NA	<ul style="list-style-type: none"> <li>• Check battery, or</li> <li>• Honeywell Versatilis Transmitter not flashed proper firmware, or</li> <li>• Contact for problem.</li> </ul>
Connecting to the Honeywell Versatilis Transmitter using Bluetooth scan.	Successful pairing.	 (Blinks once for longer duration).	Moves to online configuration page.	

Probable Scenarios	Honeywell Versatilis Transmitter Status	LED	On Screen	Troubleshooting Tips
User selects the Honeywell Versatilis Transmitter from list displayed on the screen.	Unsuccessful pairing.	 (Blinks once).	Modal Window (pop-up) prompts to try again.	Retry pairing or troubleshoot the hardware.
	Not recognizing.	No visual indication on LED.		
Scanning QR Code	Successful pairing.	 (Blinks once for longer duration).	Moves to online configuration page.	
Scanning QR code imprinted on the Honeywell Versatilis Transmitter, flashes the Transmitter's summary.	Unsuccessful pairing.	 (Blinks once).	Modal Window (pop-up) prompts to try again.	
	Not recognizing.	No visual indication on LED.	NA	
User activates the Honeywell Versatilis Transmitter to start measuring parameters, or pushing configurations to the	During configuration		NA	

Probable Scenarios	Honeywell Versatilis Transmitter Status	LED	On Screen	Troubleshooting Tips
Transmitter as required.				
On successful configuration: 2 - 3 minutes time - input.	Configuration successful.	 (Blinks three times on successful completion).	Modal window of successfully configuring Honeywell Versatilis Transmitter appears.	
Configuring using "Offline Template".	Configuration failure.	 (Blinks three times).	Modal window with error message appears.	<ul style="list-style-type: none"> <li>• Check Bluetooth pairing, or</li> <li>• Retry configuring strength , or</li> <li>• Disconnect Bluetooth, and try again, or</li> <li>• Use reset option.</li> </ul>
Turning ON/ OFF LED - Preconfigured.	On activation.	 (Blinks three times).		
	Dormant	No visual indication on LED.		
Firmware update 4-5 minutes ( 2 to	While downloading/ updating.		Waiting spinner with updating % appears.	

Probable Scenarios	Honeywell Versatilis Transmitter Status	LED	On Screen	Troubleshooting Tips
3 upgrades).		(Blinks for every 10 seconds).		
	Successful updating, and restarting.	 (Blinks three times on successful completion).	Modal window of successfully updating firmware appears.	
	Unsuccessful	 (Blinks three times).	Modal window with error message appears.	<ul style="list-style-type: none"> <li>• Retry addressing the miss packets: If still not addressed, prompt for integrity check.</li> <li>• Authenticate complete file content at the end.</li> <li>• For invalid image: Check source file, or contact HWS.</li> </ul>
Diagnostic fault indication.	Battery low.	No visual indication on LED.	Low Battery indication.	Honeywell Versatilis Transmitter replacement.
	Sensor able to communicate		Health status indication at the	Restart the Honeywell



Probable Scenarios	Honeywell Versatilis Transmitter Status	LED	On Screen	Troubleshooting Tips
	but not healthy.		header of the application.	Versatilis Transmitter.
	Sensor interface failure.		Status indicator at sensor level as well as on the header.	Restart the Honeywell Versatilis Transmitter.
	Memory fault.		NA	Restart the Honeywell Versatilis Transmitter.
	LoRa communication status.		Communication fault.	Check battery status, restart the Honeywell Versatilis Transmitter(for software bug).
	Provision to automatically activate/ deactivate the LED module, so as to conserve the energy. Activate when the user is near by and deactivate when the Honeywell Versatilis Transmitter is accessed remotely.			

# CERTIFICATIONS

## Hazardous location certifications

Honeywell Versatilis Transmitter is certified for various Hazardous location standards and requirements.

The below tables gives the summary on the same:

*Table 10-1: Hazardous location certifications*

Certification	Standards	Approval/ Rating
IECEX	IEC 60079-0/COR1: 2020; Edition 7.0; 2017-12  IEC 60079-11: Edition 6.0; 2011-06	Ex ia IIB T4 Ga  Tamb: -40°C to +80°C
CE - ATEX (2014/34/EU)	EN 60079-0: 2018  EN 60079-11: 2012	II 1 G - Ex ia IIB T4 Ga  Tamb: -40°C to +80°C
UKCA Ex	EN 60079-0: 2018  EN 60079-11: 2012	II 1 G - Ex ia IIB T4 Ga  Tamb: -40°C to +80°C
North America	CAN/CSA C22.2 No. 61010-1-12 + UPD1: 2015,  UPD2: 2016, AMD 1- 18  CAN/CSA C22.2 No. 60079-0: 19  CAN/CSA-C22.2 No. 60079-11: 14 (R2018)  ANSI/UL 61010-1- 2018 Third Edition	Class I Division 1, Group C, D Ex ia IIB T4 Ga  Class I Zone 0, AEx ia IIB T4 Ga Tamb: -40°C to +80°C

Certification	Standards	Approval/ Rating
	ANSI/UL 913-2019 Eighth Edition  ANSI/UL 60079-0- 2020 Seventh Edition  ANSI/UL 60079-11- 2018 Sixth Edition	
CCoE	IS/IEC 60079-0: 2017  IS/IEC 60079-11: 2011	Ex ia IIB T4 Ga  Tamb: -40°C to +80°C

### Specific conditions of use:

- The nonmetallic enclosure parts of this equipment may become a spark ignition hazard in the presence of static electricity. The enclosure shall be cleaned only with a damp cloth, and the equipment shall be mounted to avoid building static electric charge from non conductive process flow, strong air currents, or other potential charging through friction.
- The aluminum enclosure may be capable of producing incendive sparks when impacted. This equipment must be mounted and/or physically guarded such that it is not subjected to impact or friction.

**WARNING:** DO NOT REPLACE BATTERY IN EXPLOSIVE ENVIRONMENT.  
USE ONLY "ER18505 BATTERY FROM EVE Energy Co., Ltd." or "SB-A01 from Vitzrocell, Co., Ltd".

## CE (Conformance to Europe)

Honeywell Versatilis Transmitter is compliant with all the Directives that are applicable as per CE certification requirements.

The below tables gives the summary on the same:

*Table 10-2: CE certification requirements*

Certification	Standards	Directive/ Regulation
CE	EN 61326-1: 2013 EN 61326-2-3: 2013 EN55011: 2009 + A1: 2010 EN 61000-4-2: 2009 EN 61000-4-3: 2006+A1+A2 EN 61000-4-8: 2010	Electro Magnetic Compatibility (EMC) Directive; 2014/30/EU
CE	ETSI EN 300 328 ETSI EN 300 220-1 V3.1.1 (2017-02) ETSI EN 300 220-2 V3.1.1 (2017-02) ETSI EN 301 489-1: 2019 ETSI EN 301 489-3: 2021 ETSI EN 301 489-17: 2020	Radio Equipment Directive (RED); 2014/53/EU
CE	EN 61010-1: 2010/A1: 2019	Low Voltage Directive (LVD); 2014/35/EU
CE	EN 50581: 2012	Restriction of use of Hazardous Substances (RoHS) in Electrical and

Certification	Standards	Directive/ Regulation
		Electronic equipment; 2011/65/EU; 2017/2102 amendment
CE	EN 50385: 2017	Minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (Electromagnetic fields); 2013/35/EU

### UKCA (United Kingdom Conformity Assessed)

Honeywell Versatilis Transmitter is compliant with all the Regulations that are applicable as per UKCA certification requirements.

The below tables gives the summary on the same:

*Table 10-3: UKCA certification requirements*

Certification	Standards	Directive/ Regulation
UKCA	EN 61326-1: 2013 EN 61326-2-3: 2013 EN55011: 2009 + A1: 2010 EN 61000-4-2: 2009 EN 61000-4-3: 2006+A1+A2 EN 61000-4-8: 2010	Electro Magnetic Compatibility (EMC) Regulations 2016

Certification	Standards	Directive/ Regulation
UKCA	ETSI EN 300 328 ETSI EN 300 220-1 V3.1.1 (2017-02) ETSI EN 300 220-2 V3.1.1 (2017-02) ETSI EN 301 489-1: 2019 ETSI EN 301 489-3: 2021 ETSI EN 301 489-17: 2020	Radio Equipment Regulations 2017
UKCA	EN 61010-1: 2010/A1: 2019	Electrical Equipment (Safety) Regulations 2016
UKCA	EN 50581: 2012	Restriction of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment Regulations 2012
UKCA	EN 50385: 2017	The Control of Electromagnetic Fields at work Regulations 2016

## FCC & IC Certifications

Honeywell Versatilis Transmitter is complaint with all the requirements that are applicable as per FCC & IC certification specifications.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

The below tables gives the summary on the same:

*Table 10-4: FCC and IC certification requirements*

Certification	Standards	Approval/ Rating
FCC	47 CFR Part 15 [10-01-20 Edition]  ANSI C63.4: 2014	Compliance as per Subpart B & Subpart C  FCC ID: S5751490045  BLE FCC ID: 2APD9-RSL10SIP
IC	ICES-003 Issue 7: 2020  ICES-Gen Issue 1: 2018+A1: 2021  RSS-247 Issue 2 Equipment Certification	Compliant for Wireless requirements  IC ID: 573W-51490045  BLE IC ID: 23763-RSL10SIP

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency

energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio technician for help.

**NOTE:**

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- \* This device may not cause interference.
- \* This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- \* L'appareil ne doit pas produire de brouillage.
- \* L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**Caution:**

To maintain compliance with the FCC's RF exposure guidelines, place the unit at least 20cm from nearby persons.



## Wireless Certifications & Approvals

Honeywell Versatilis Transmitter has LoRaWAN & BLE Wireless communication technologies. Required certifications and approvals have been attained for this product.

The below tables gives the summary on the same:

*Table 10-5: Wireless certification and approvals*

Certification	Standards/ Specification	Approval
LoRaWAN	LoRaWAN 1.0.4	End Device certification Requirements for all regions: Version 1.4
Bluetooth Low Energy (BLE)	Bluetooth Specifications	Bluetooth SIG Listed

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## Documentation feedback

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## How to report a security vulnerability

For the purpose of submission, a security vulnerability is defined as a software defect or weakness that can be exploited to reduce the operational or security capabilities of the software.

Honeywell investigates all reports of security vulnerabilities affecting Honeywell products and services.

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## Training classes

Honeywell holds technical training classes that are taught by process control systems experts. For more information about these classes, contact your Honeywell representative, or see <http://www.automationcollege.com>.

## Factory Information

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