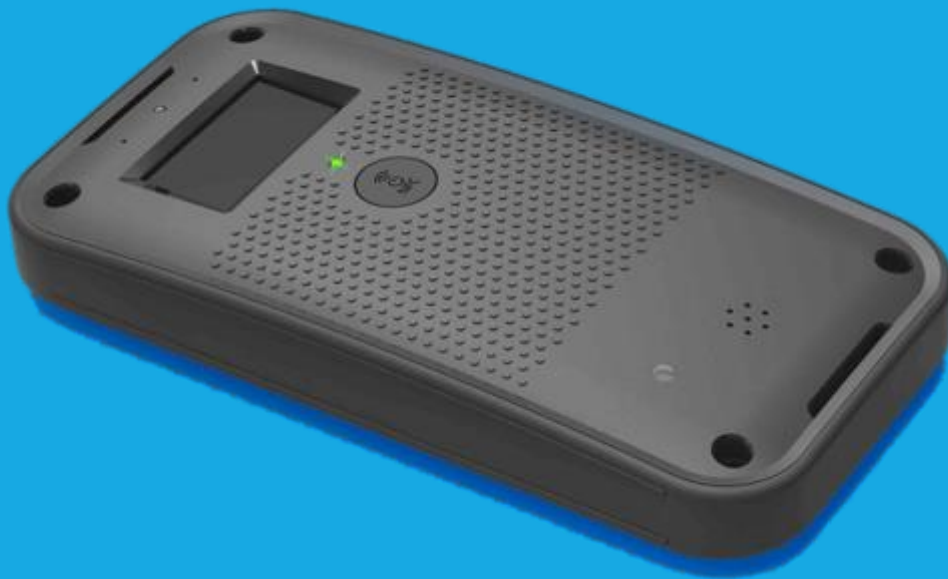


# HARDWARE USER MANUAL



GWS-CSCG  
Logistics Monitoring Gateway

## Copyright

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## Acknowledgements

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## Federal Communications Commission (FCC)

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 or television 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 the receiver
- Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio technician for help

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

## FCC Label Compliance Statement

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
- (2) This device must accept any interference received, including interference that may cause undesired operation.

## RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 4.0 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of [www.fcc.gov/eot/ea/fccid](http://www.fcc.gov/eot/ea/fccid) after searching on FCC ID: WL6GWS-CSCG

## Canada, Industry Canada (IC) Notices

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

## Canada, avis d'Industry Canada (IC)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized. This device has been evaluated for and shown compliant with the IC Specific Absorption Rate ("SAR") limits when operated in portable exposure conditions.

## Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal. Ce dispositif a été évalué pour et démontré conforme à la Taux IC d'absorption spécifique ("SAR") des limites lorsqu'il est utilisé dans des conditions d'exposition portatifs. Ce dispositif a été évalué pour et démontré conforme à la Taux IC d'absorption spécifique ("SAR") des limites lorsqu'il est utilisé dans des conditions d'exposition portatifs.

- o compliance to ALL applicable EU standards to support CE mark.
- o compliance to FCC 47 CFR Part 15 Subpart B & ICES-003 Issue 6-2016
- o compliance to EU Radio Equipment Directive
- o compliance to FCC 47 CFR Part 15 Subpart

## Packing List

Before setting up the system, check that the items listed below are included and in good condition. If any items are missing, please contact your dealer immediately.

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- Lorem ipsum dolor sit amet, consectetur adipiscing elit.

## Safety Instruction

Your system is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

## Setting Up Your System

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source such as a radiator.
- Set up the system on a stable surface.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation.
- Never insert objects of any kind into the ventilation openings.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

## Attention During Use

If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.

- The power cord or plug is damaged.
- Liquid has been spilled into the system.
- The system does not function properly even if you follow the operating instructions.
- The system was dropped or the cabinet is damaged.
- The system performance changes



The warranty does not apply to products that have been disassembled by users.



### **IMPORTANT:**

This product is intended to be supplied by an UL certified DC source rated 5Vdc; 3A. Tma 60 degree C minimum and output meets SELV,

Non-hazardous energy level, if need further assistance, please contact ECS (or Intel®) for further information.

## Safety Notice and Warnings



### **IMPORTANT: Product disposal notice**

In the European Union, this symbol indicates that this product including battery must not be disposed of with household waste. It is your responsibility to hand it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your local waste collection center or the point of purchase of this product.

### **CAUTION:**

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

### **Nordic Lithium Safety Notice (for lithium-ion batteries)**



#### **Safety Notice:**

Danger of explosion if battery is incorrectly replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### Attention during use



- Do not place this product underneath heavy loads or in an unstable position.
- Do not use or expose this product around magnetic fields as magnetic interference may affect the performance of the product.
- Do not storage this product to high levels of direct sunlight, high-humidity or wet conditions.
- Do not carry the product on the body (or pockets).

- CE marketing



- FCC marketing



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# Chapter 1

General information

## 1.1 Brief Introduction

The **Connected Logistics Platform** is a hardware and software solution that was designed to help 3PLs / Carriers collect real-time data on their package health while they're in transit. The solution consists of a Gateway, Sensor Tags, and mobile device with shipment app. Carriers can then set up sensing parameters such as temperature, shock, tilt and geofences for the tags that are attached to individual boxes and pallets. These tags then communicate with a gateway device attached to one of the pallets that transmits the tag data to the cloud. This enables the 3PLs to monitor real-time tag data to ensure shipment health and security.

## 1.2 Cleaning/Disinfecting

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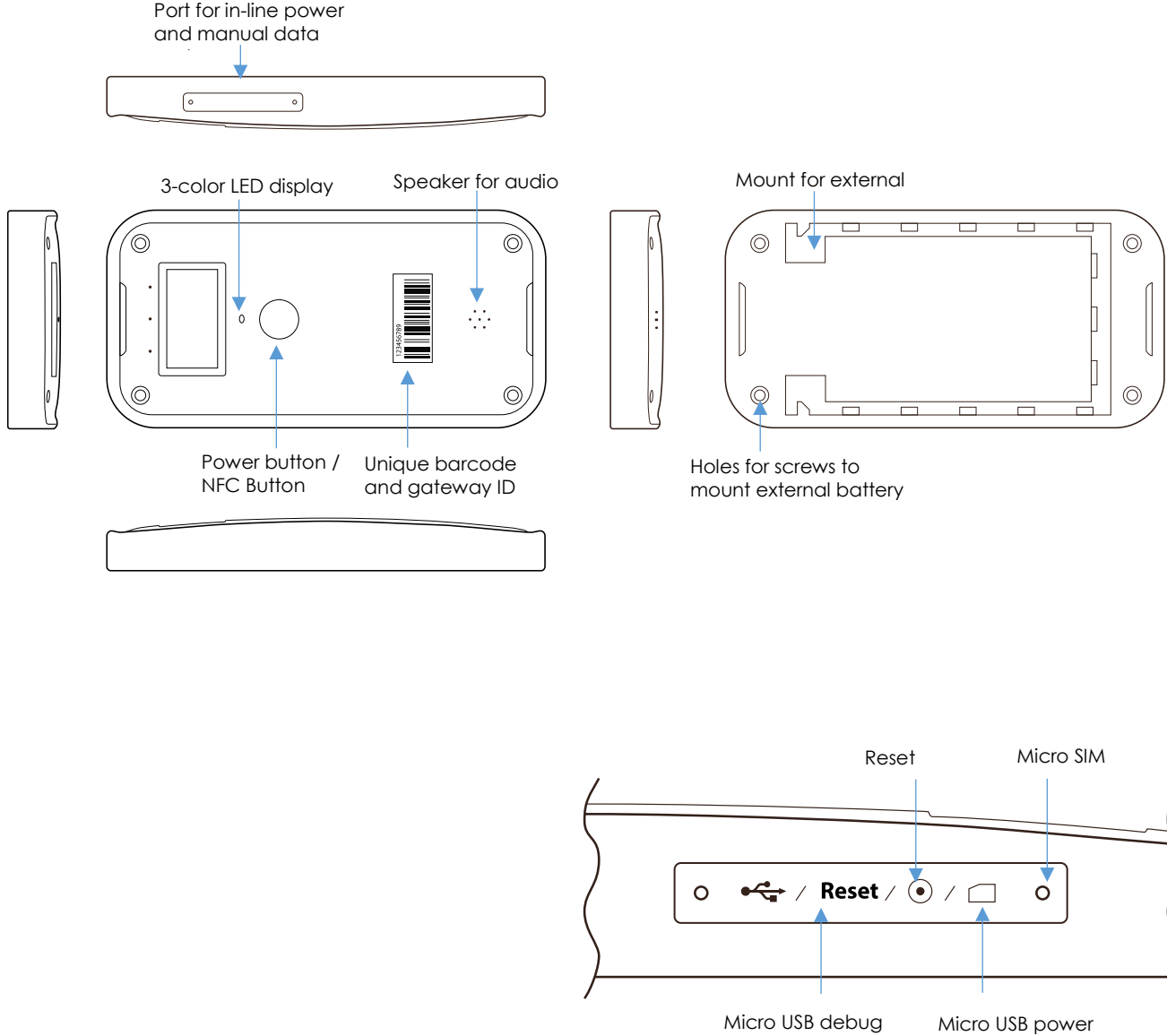
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## 1.3 Specifications

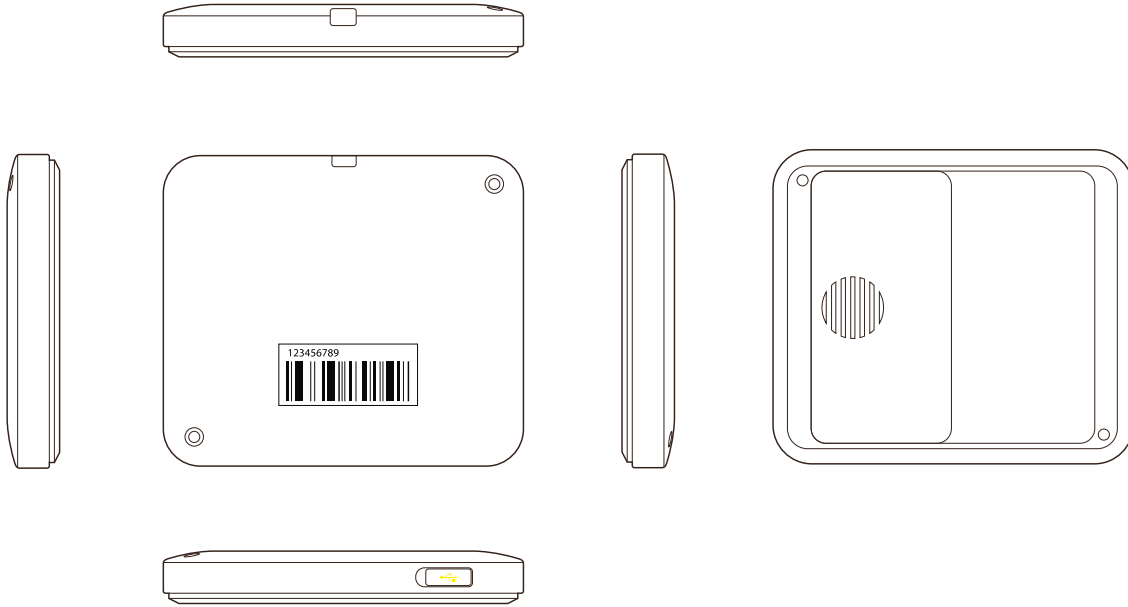
Item	Spec Description
Processor	Intel Atom X3 Telit HE922
	Cache:16Kbytes L1
	Memory: eMMC interface 8GB
	RAM: 8Gb LDDR3
External IO Port	Charging Port (Extension Battery/ CST)
	Charging Port (Micro USB output5V3A/ input 110V~240V
	Micro USB Debug
Buzzer	Buzzer
LED	LED(CPU /Device Status)
Display	OLED 54.6*32mm / 128*64 pixd
Key/Button	Power / NFC
	Reset
Expansion	SIM Slot
Connectivity	3G
	WiFi
	GPS / GNSS
	Zigbee
	NFC
Sensor	Ambient
	Temp/Humidity
	G-Sensor
	Air Pressure
	Proximity
Battery	3930mAH Li-Polymer(Typical)
Battery Life	10 days
Operating Temperature	-10°C ~ 60°C
Dimensions (h/w/l)	22.5*82*178.5mm
IP Level	IPX0 for safety standard
Power Consumption	Hi: 4.4V / Normal: 4.2V / Low 3.75V

# Chapter 2

# 2.1 Gateway Device



## 2.2 Tag

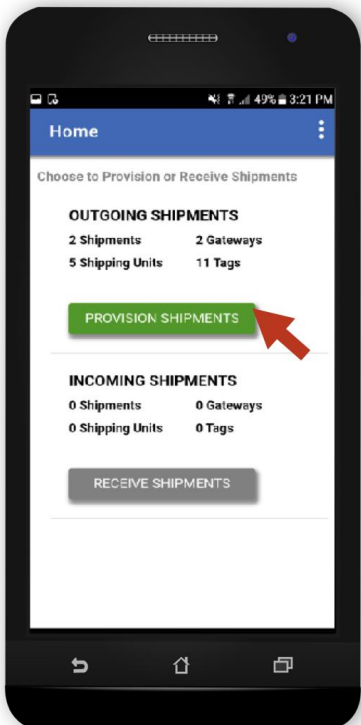


# 2.3 Review Shipment Provisioning in Mobile Device (OBT)

**Step 1:** Open the Shipment App on the mobile device.

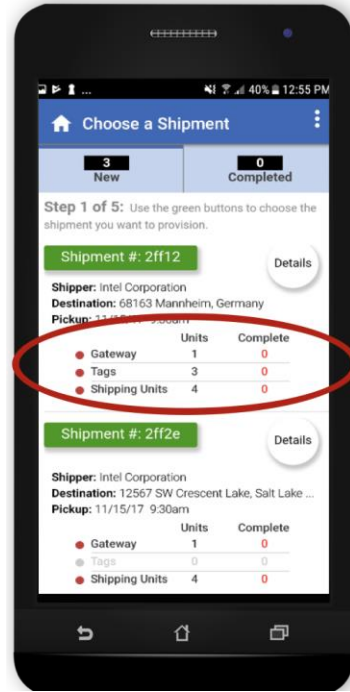
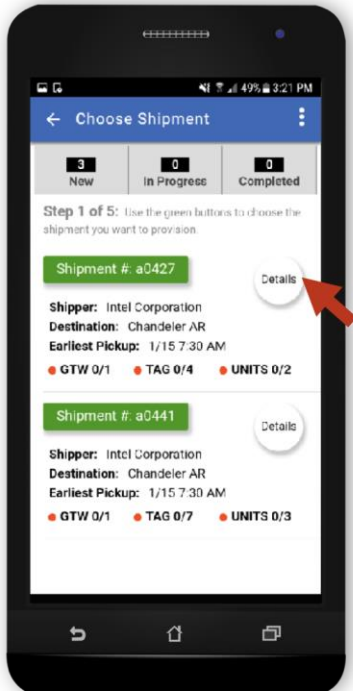


**Step 2:** Select 'Provision Shipments'



**Step 3:** Select 'Details' to view shipment provisioning information.

**Step 4:** Review shipment, Tag, and Gateway requirements and cross-reference that information with shipment paperwork.





# 2.4 Prep Items

## Step 5: Gather materials

- 1. Quantity of Gateways and Tags listed on the shipment document
- 2. Mobile Device (OBT)
- 3. Tag and Gateway shipping sleeves



Gateway Device



Tags



Mobile Device



Shipping Sleeves

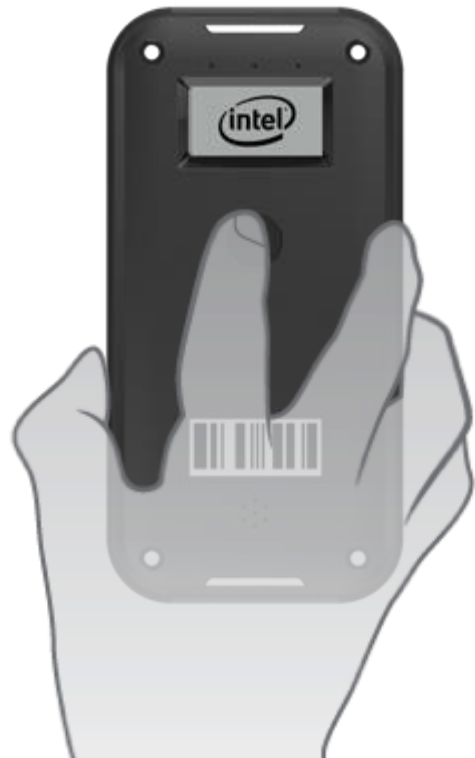
## 2.5 Set up the GWS-CSCG and Tags

### Step 6: Power On Gateway

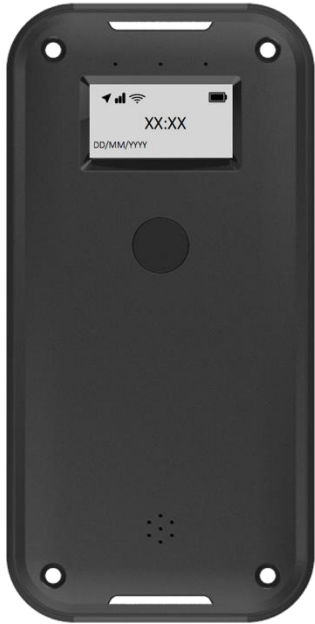
To Power On: Press the power button for 1 second until the boot screen appears. **Until the Gateway LED displays green light, and a positive audio tone is heard.**





Note: To power off, long press the power button for 3 seconds. Shutdown icon will show on screen, LED will display red light, and a short audio tone is heard.

Note: User will not be able to power down device if the shipment is still active





**Step 7:** Check the Gateway Battery is Fully Charged



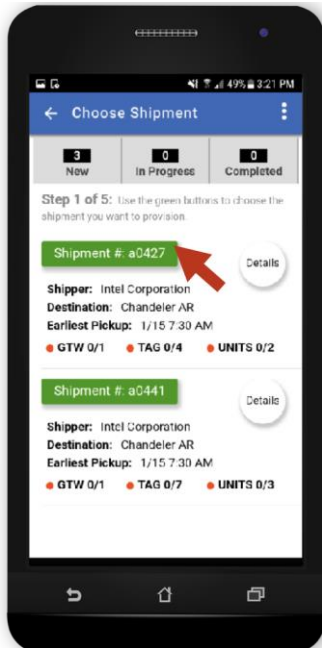
-  Full Charge
-  Partial Charge
-  No Charge or Low Charge
-  Extension battery

**Step 8:** Check the WIFI status.



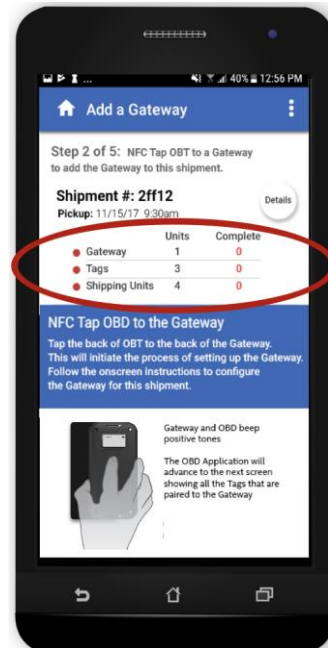
-  Connected to Wifi
-  No Wifi Connection

**Step 9:** Select Shipment to provision.



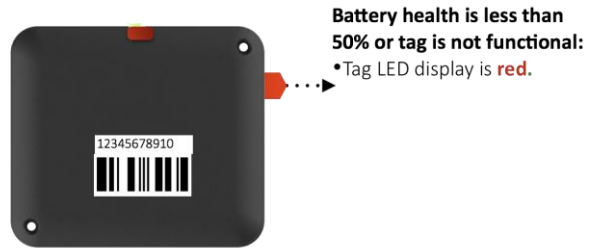
**Step 10: Link Shipment With Gateway**

Hold down the NFC button on the Gateway and press the back of the Gateway to the back of the OBT .



### Step 11: Power on Tags

Pull battery tab to power on Tag.



### Step 12: Pair Tags with Gateway

Hold down the NFC button on a powered on Gateway and press the Gateway against the Tag.



- Successfully Paired**
- Tag and Gateway LED display is **green**
  - Gateway beeps positive tone
  - The number of paired tags increases by 1



- Not Paired or Bad Tag**
- Tag and Gateway LED display is **red**
  - Gateway beeps negative tone.
  - The number of paired tags stays the same

# 2.6 Link Packages With Tags Using Mobile Device

Step 13: Confirm the number of tags paired with the Gateway

Step 14: Scan the package barcode



Step 15: Scan the Tag barcode to link the package with that Tag.

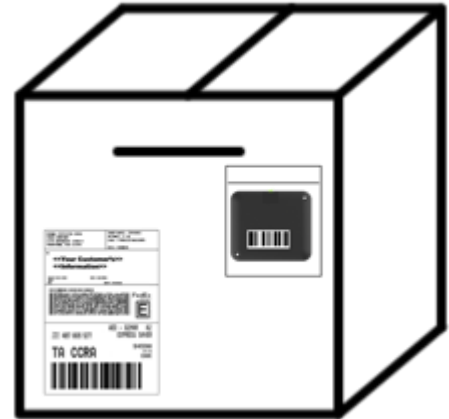


## 2.6 Place Labels, Tags and Gateway on Shipment

**STEP 16: Apply shipping labels and tags to package.**

- Apply shipping label to package
- Place tag in tag shipping sleeve
- Follow OBT instructions on where to apply the tag to the package.

**Steps 11-14 will repeat in the OBT until all packages and tags are linked and all tags are applied to packages.**



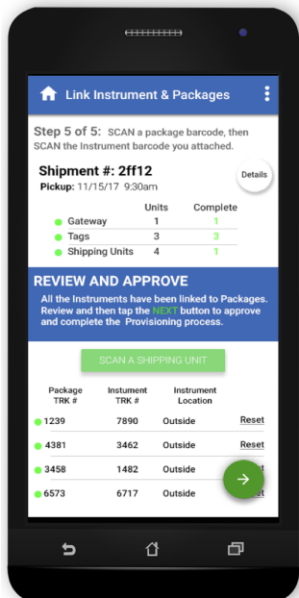
**STEP 17: Apply Gateway to package on shipment.**

- Place gateway in gateway shipping sleeve
- Apply to the package that will be loaded onto the truck last on the side that will face the door.

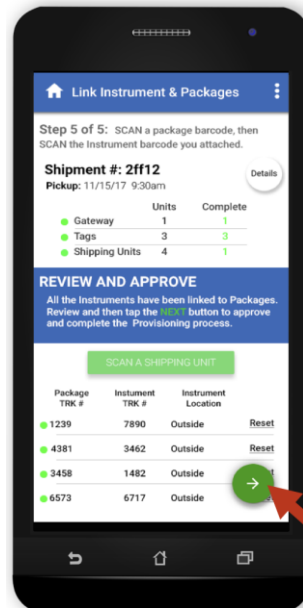


## 2.7 Review Shipment Provisioning Summary and Complete Shipment

**STEP 18:** Review shipment details and provisioning summary.



**Step 19:** Approve shipment details and complete shipment provisioning.





## 2.8 Load Shipment

### Gateway and Tag Calibration and Reporting

Once shipment provisioning is confirmed in the OBT, the Gateway and Tags will calibrate to their sensing parameters, and start reporting sensor data.

**STEP 20:** Load shipment so the Gateway is closest to the truck door to maximize cellular connectivity.

