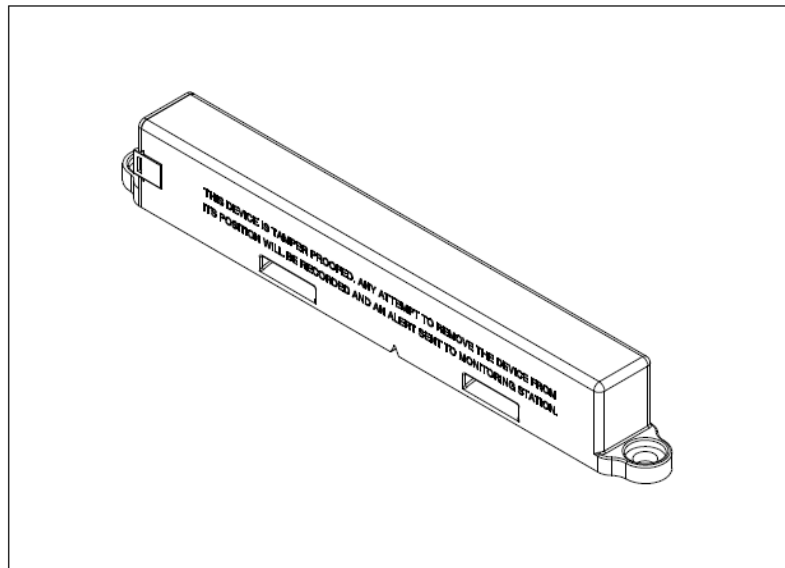


Asset Tracker IET10N User Manual



2024-08-05



Contents

1. Revision History3

2. Features4

3. Device Specifications5

4. Precautions.....6

5. Enclosure.....8

6. How to install9

7. Getting Started 13

8. Package..... 14

9. Warranty..... 15

1. Revision History

Date	Rev.	Editor	Description
2024-01-30	1.0	SW Moon	First release
2024-06-26	1.1	KD Kim	Added FCC requirements. – p14 Sigfox frequency bands are divided by region. – p4
2024-07-04	1.2	KD Kim	Updated Sigfox frequency bands – p4 Added System operating voltage – p5

2. Features



Items	Description		
Bluetooth	BLE 5.0 support FOTA		
GNSS	GPS + Beidou + Galileo+ SBAS + QZSS		
WIFI	IEEE 802.11 b/g/n 2.4GHz only		
Sigfox	Zone	Uplink / TX	Downlink / RX
	RC1(EU)	868.130MHz	869.525MHz
	RC2 (FCC/IC)	902.200MHz	905.200MHz
	RC3 (JAPAN)	923.200MHz	922.200MHz
	RC4 (FCC/IC)	920.800MHz	922.300MHz
	RC5 (KC)	923.300MHz	922.300MHz
Built-in NFC tag	Tag-A support Product startup via NFC tagging		
3-axis accelerometer	12bit resolution Vibration, motion and shock detection		
Hall-effect switch	Magnet detect Deviation detection via magnet		
Temperature sensor (option)	Temperature Range: -40°C to +125°C Accuracy of measured temperature: $\pm 2^{\circ}\text{C}$ <i>△Because the inside of the product is sealed, the external temperature cannot be immediately reflected and may differ from the actual temperature.</i>		

3. Device Specifications

Items	Description
Operating Temperature	-20 ~ +60°C
Storage Temperature	+30°C (Max.)
Dimensions	197mm X 20mm X 27mm
Enclosure Material	PC (Polycarbonate) Flammability : V-0 RTI 80°C
Weight	Approx. 105g
Ingress Protection code	IP68 IPx8 conditions: 1 meter depth for 2 hours
Battery Spec.	5400mAh, Custom Battery pack Lithium Thionyl Chloride (Li-SOCl ₂) Battery Rated voltage : DC 3.6V
System operating voltage	DC 3.3V
Life Time	If you send 2 messages per day in RC1 at 20 degrees, it can be used for about 10 years. Actual usage time may vary depending on ambient temperature and operating scenario.

- Certification Information

Certification Name	Certification Number
CE	DoC
FCC	2BEK7IET10N
IC	32019-IET10N
KC	R-C-XTM-IET10N
Sigfox Ready	P_00D3_A0C0_01

- FCC Certification Notice

FCC ID : 2BEK7IET10N

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.

4. Precautions

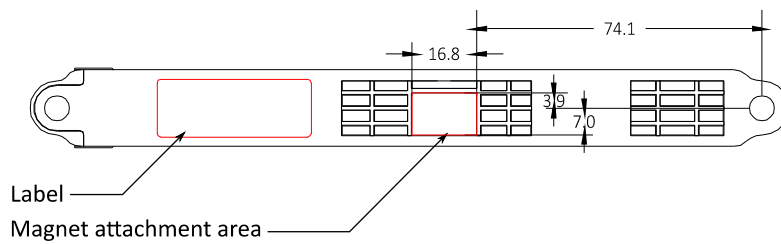
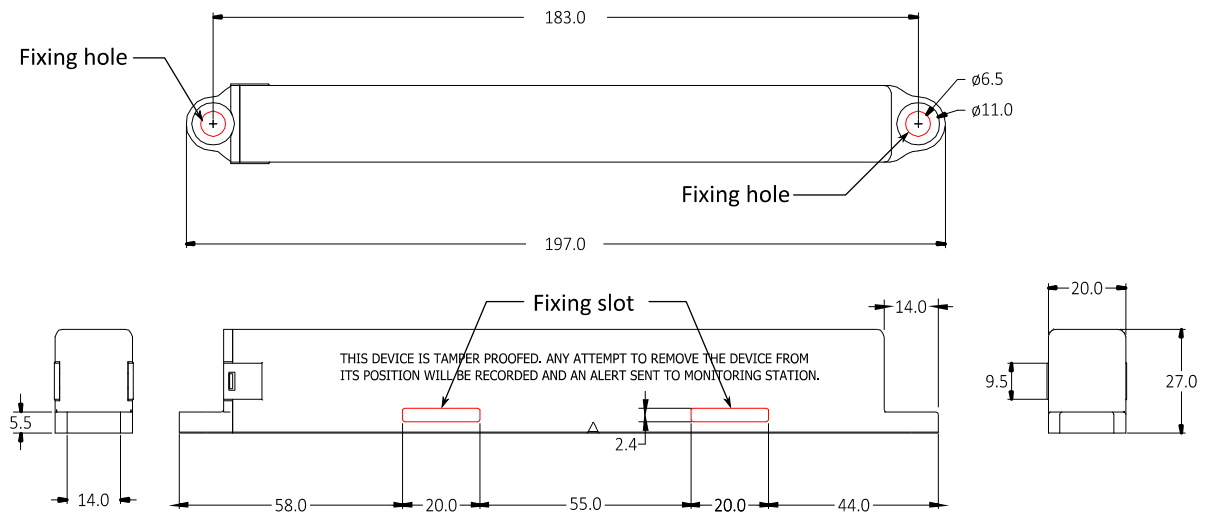
- **Wireless Communication**
 - This product may cause radio interference or be affected depending on the wireless environment of the installation and operation location. The wireless performance of the product may be degraded due to radio interference.
 - There may be dead zone for wireless communication. Communication may not be possible depending on the proximity and availability of nearby base stations. Communication may be unreliable in dense urban areas
 - The location information obtained may contain errors, depending on the status of each location service and the surrounding environment.
- **Installation**
 - The product's installation direction or method may adversely affect wireless performance. Follow the installation instructions in this manual.
 - Nearby metal objects can interfere with wireless performance. Install the product in a location free from metal objects, if possible.
 - Install the product in a location where there is no risk of damage from contact, considering the operational, movement, loading, and storage conditions of the intended asset.
 - Install the product on a flat and clean surface to prevent deformation of the product.
 - This product supports waterproof function, but incorrect installation method may result in loss of waterproof function.
- **Battery**
 - Do not charge the battery.
 - When disposing of batteries, follow local government regulations.
- **Life span**
 - The product's lifespan may vary depending on the operating environment or conditions.
 - Surrounding temperature can greatly impact battery capacity, resulting in a shorter lifespan than expected in very cold or hot environments.
 - As the temperature decreases, battery capacity also decreases.
 - The product can be used for the longest duration when the temperature is between 20 to 25 degrees Celsius.
- **Magnet detection function**
 - The magnet detection function may not work properly near equipment that generates strong magnetic fields.
 - If another magnet is brought close to a specific area on the product while a magnet is already detected, the function may malfunction.

- Storage
 - Storing the product at high temperatures may increase leakage current and shorten its lifespan.
 - If the product is stored at low temperatures, the internal electrolyte may solidify.
 - If the product has been stored at low temperatures for a long time, do not use it immediately, but wait at room temperature for at least 2 hours before using it.

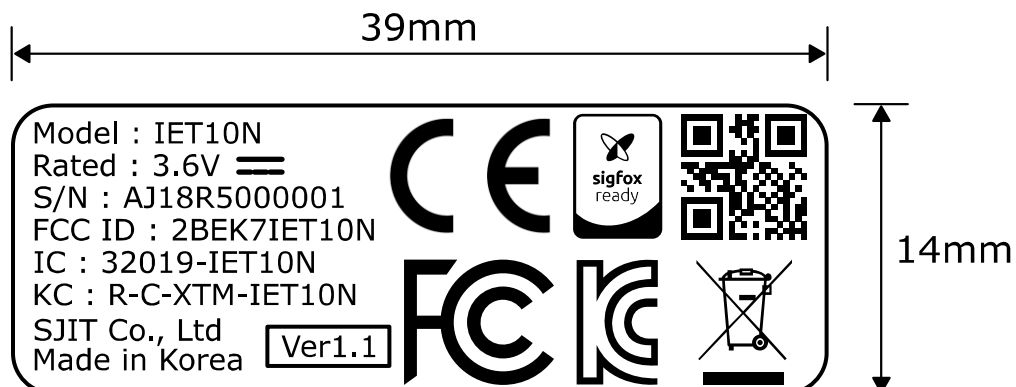
- Handle with care
 - Do not disassemble, repair or modify.
 - This product supports a waterproof function, but may not be waterproof due to incorrect installation, damage, wear, or arbitrary disassembly and reassembly.

5. Enclosure

- Dimensions: 197mm X 20mm X 27mm
- Material: PC (Polycarbonate)
- Color: Black



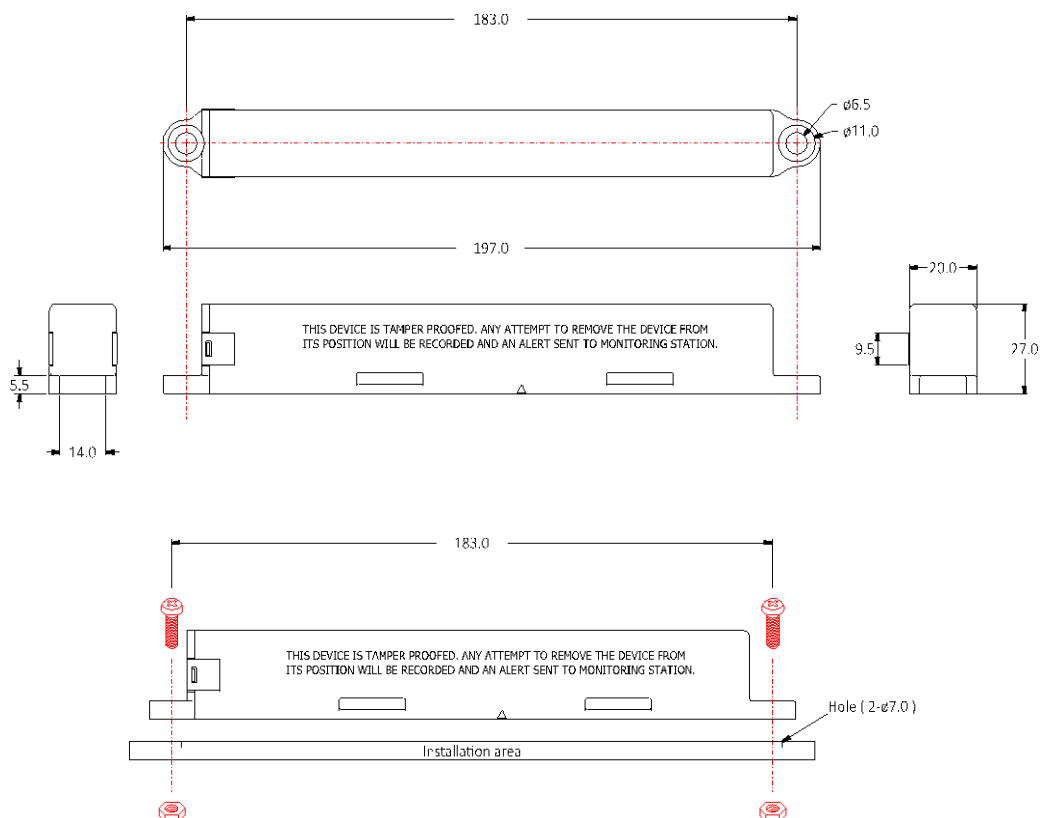
- Label



6. How to install

* Depending on the installation location and installation method, wireless performance may be affected and the device may be damaged. **We do not guarantee any problems that may arise if you do not follow the recommended installation method described below.** Therefore, it is advisable to inquire in advance about the installation method.

- Using the device's fixing hole
 - Install the product on a flat and clean place.
 - Be sure to observe the dimensions between the two fixing holes.
 - Do not install the product so that it is bent or deformed.
 - It is prohibited to install this product at once using self-drilling screws(SDS).
 - Screws or bolts must be tightened vertically.
 - Tightening screws or bolts with too strong force may damage the device.
- ▽ Recommended torque: up to 35kgf·cm (Based on nut or machine thread tapping hole)

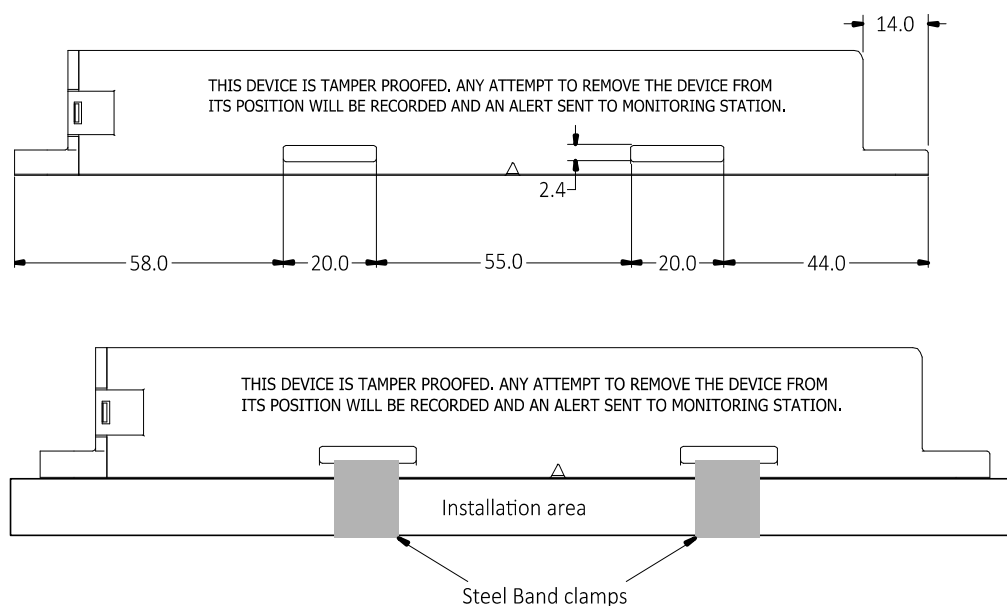


If you are installing on a hard surface such as a steel plate or wall, see additional instructions below.

- When using screws, use Bind-Head M6.0 X 12.0 and install after machining M6.0 machine thread taps.
- If it is difficult to accurately adhere to the 183.0mm dimensions, drill M4, M5 machine holes.
- Do not drill and install at the same time. (Strong torque and sludge will destroy the product.)
- If you can't machine threaded taps, use bolts and nuts.
- If bolts and nuts are used, drill 7-pie holes in the installation area at 183.0mm intervals.
- There is also a way to use a bracket.

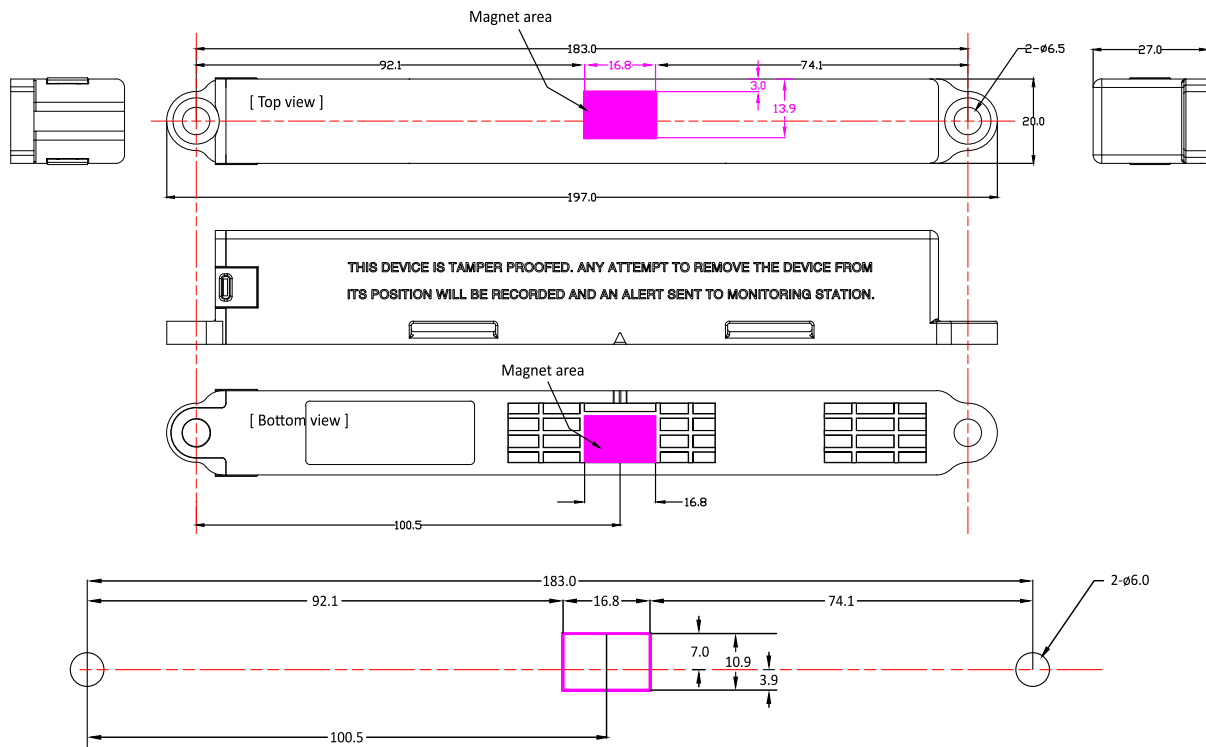
- Using the device's slots

- Install the product on a flat and clean place.
- Fix it to the slot of the product with band clamps or cable ties.
- Please refer to the slot sizes below when choosing a band clamp or cable tie.
- Fix the product firmly so that it does not move.
- When fastening with screws once again after attaching a clamp or tie, follow the fixing hole installation method described previously.



- Magnet installation

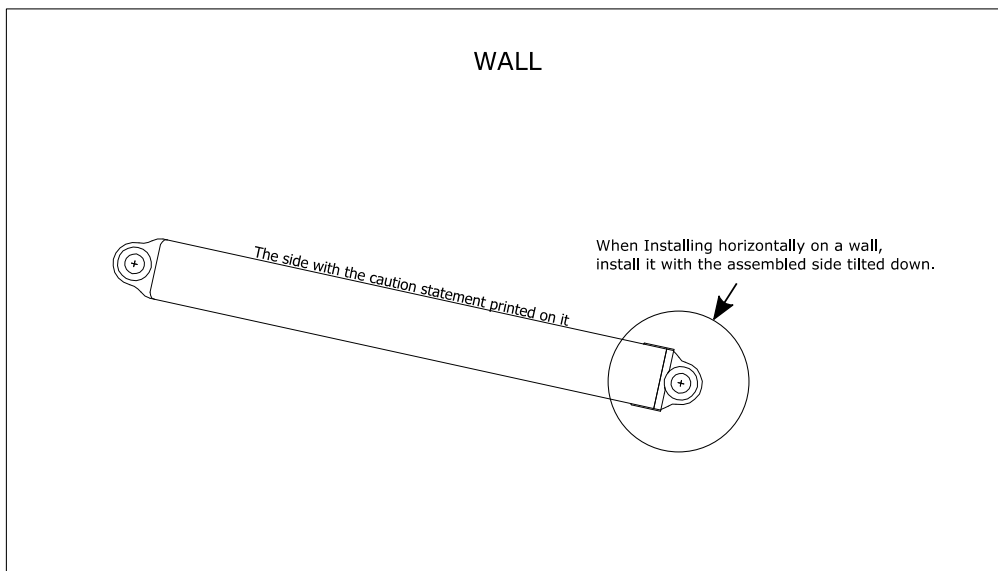
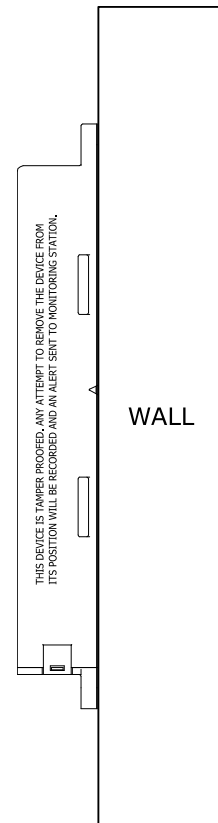
- When using the magnet detection function, please refer to the figure below to attach the magnet.
- Dimension of magnet(WxDxH): 15mm x 10mm x 4mm
- Magnet attachment Space: 16.8mm x 10.9mm x 4.5mm



* The neodymium magnets provided may be subject to corrosion due to moisture, and if corrosion continues, the magnetic force may be reduced. magnetic force may also decrease if exposed to conditions above 60 to 80 degrees Celsius for a long period of time.
If you have any difficulties with the installation conditions, please contact us.

- Installation Environment Guide

- When installing vertically on a wall, install with the assembled side facing down.
- Avoid installing it on an metal plate or in a place surrounded by metal.
- Wireless performance may be degraded if installed on metal.
- Consider a bracket for installation, as distance from metal can ensure wireless performance.

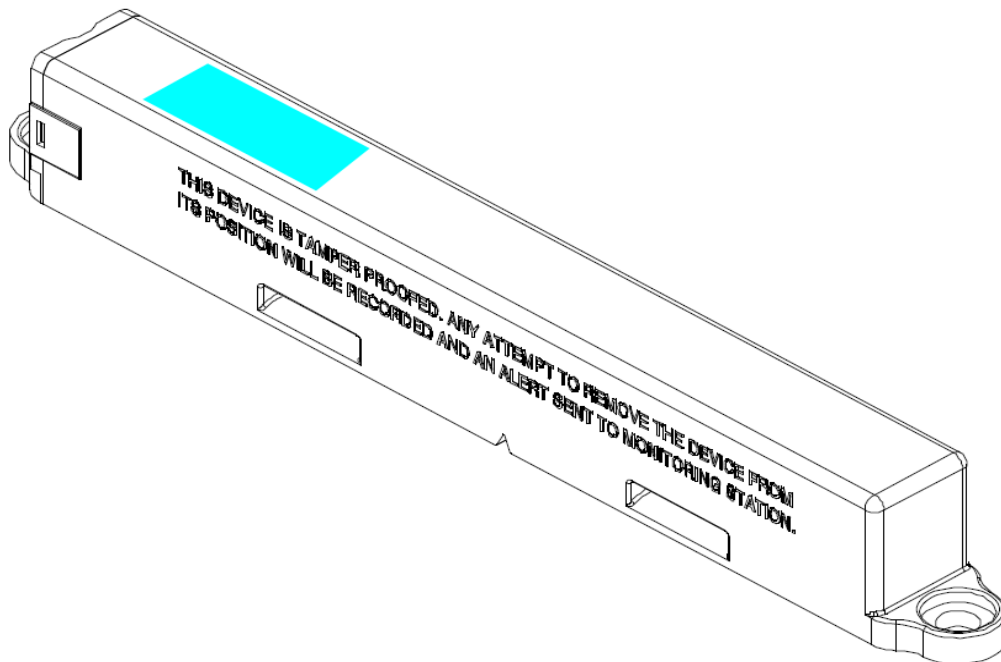


- When installing horizontally on a wall, install it with the assembled side tilted down.
- ※ GPS coordinates are best obtained when the caution statement printed side faces the sky.

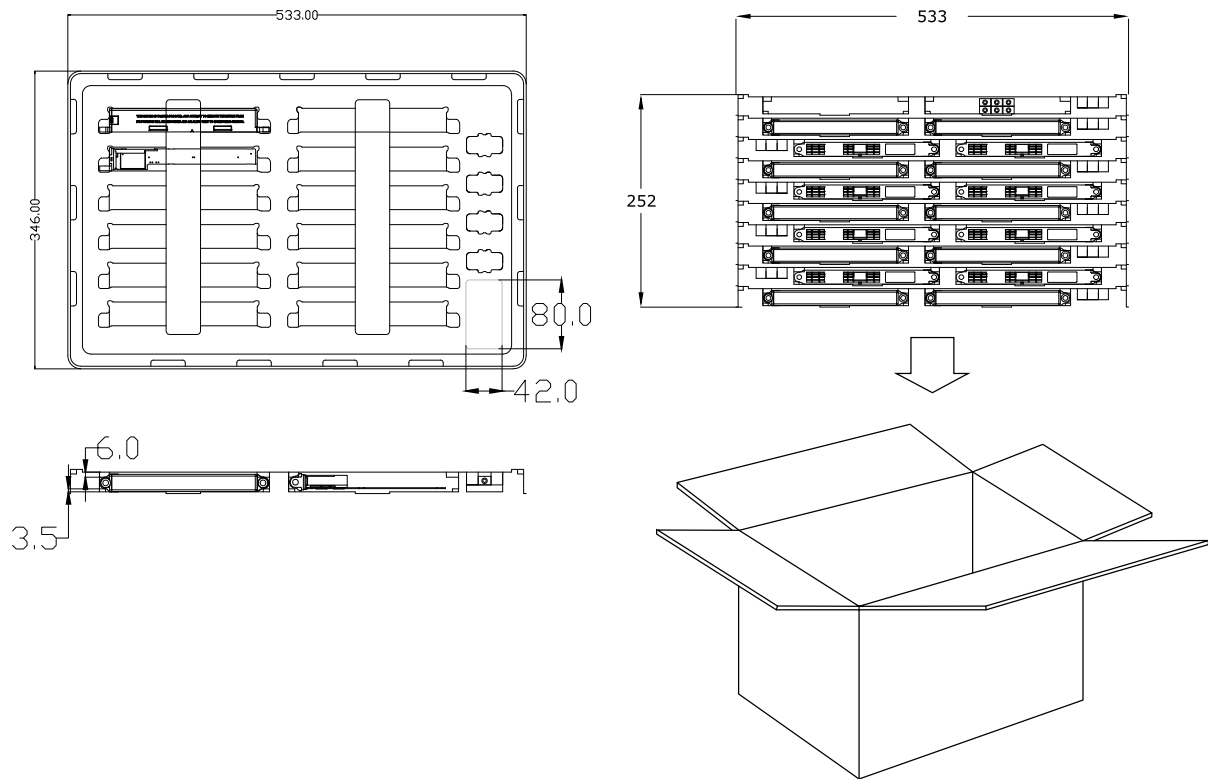
7. Getting Started

- ① The user receives the product set in the shipping mode.
- ② To activate the product, touch the NFC reader on the top of the product.
You can also activate it with the NFC function of your phone.
- ③ It takes about 10 seconds to activate the product.
When activated, actions are performed according to the set scenario.
- ④ After activation, you can connect to the product through the provided APP.
- ⑤ When connected to the product, Sigfox ID, Sigfox PAC and BT MAC can be obtained, and scenario operation is also possible.

NFC tag is built in the blue marked part in the picture below.



8. Package



1Tray Q'ty : 2*6 = 12EA

1BOX Q'ty : 9Tray * 12EA = 108EA

9. FCC Statement

- **FCC Part 15.105 statement(Class B)**

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

- **FCC Part 15.21 statement**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

- **RF Exposure Statement (MPE)**

The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times

10. Warranty

- This product was produced through strict quality control and technical verification.
- The warranty period of the product is 1 year from the date of purchase.
- We are not responsible for product loss due to customer negligence.
- In case of malfunction due to customer's carelessness, repair cost may be charged.
- This product is a wireless communication product, but it does not guarantee the communication distance..
- Problems arising from failure to follow the installation method described in this user manual are not covered by the warranty.
- For any reason, if a customer arbitrarily disassembles the product, it will be excluded from warranty coverage.

Support	lotsupport@seongji.co.kr
Warranty Term ¹⁾	1 year from date of purchase
Manufacturer	SJIT Co., Ltd
Country of manufacture	Republic of Korea

¹⁾This is not the meaning of life time to able use this device.

The life time of device is different depending on messages per day.
Especially when the message is sent to Sigfox network every one hour,
the life time can be shorter than one year.

*** The contents of this document are subject to change at the discretion of the manufacturer, and notification of changes is not mandatory. Get the latest documentation from our support team.*

- End of document -