

# **TaiSEIA HAN USB Dongle**

## **“Baton”**

### **Product Specification V1.2**

## History

Version	Publish date	Content
1.0	2021/11/28	First version released
1.1	2021/12/07	1. Modify page 5 “Google Market” to “Google Play” 2. Modify page 7 “ home gateway (HN)” to “home gateway (HG)”
1.2	2022/06/13	Delete “BLE bluetooth 5 compliant” from hardware spec.

## 1. Preface:

“Baton” is an universal WiFi USB transceiver dedicates to TaiSEIA HNA specification. HNA (Home Network Adaptor) is a specific device which is in charge of linking SA (Smart Appliance) and HG (Home Gateway) in TaiSEIA protocol.

As there are many different brands and different types of smart home appliances, with the TaiSEIA standard, Baton is used as a bridge to communicate and connect smart home appliances and the back-cloud platform, so that smart home appliances can be connected to the Internet to achieve the purpose of smart energy saving.

Following is the application scenario of “Baton” with TaiSEIA

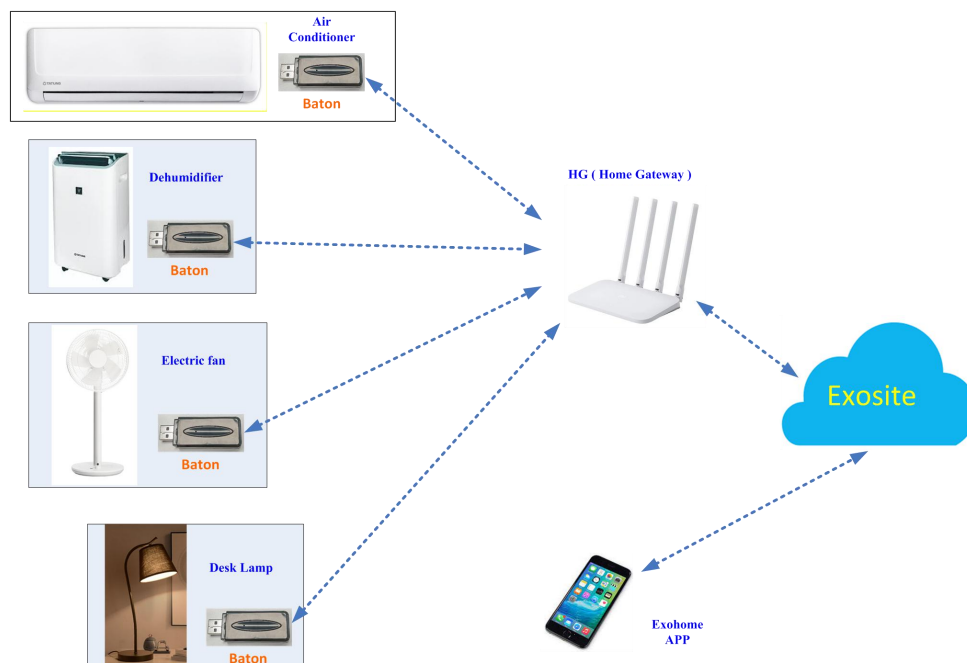
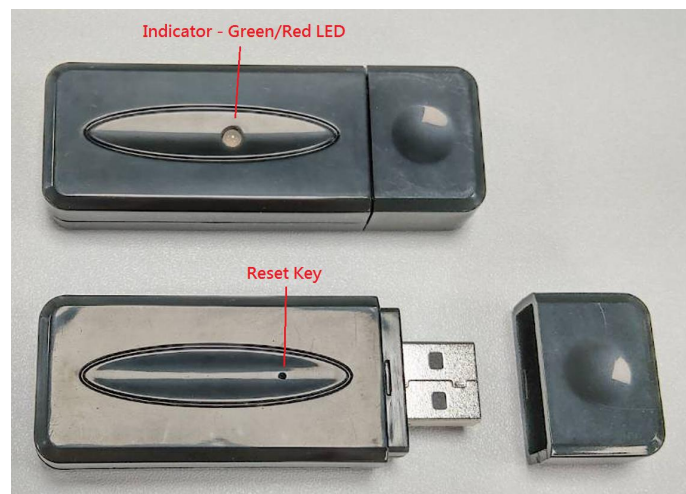


Figure 1: TaiSEIA application scenario

In figure 1, users install “Exohome” App in mobile phone then users can easily control all the smart appliances on App via device “Baton” inserted in the smart devices.

## 2. Outlook



## 3. Hardware Specification

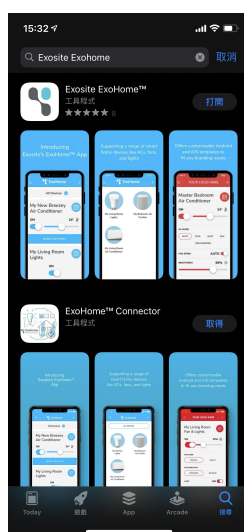
	Item	Content
Dimension	L x W x H	67.5 x 24.7 x 11.0 mm
Power	Voltage	3.3V ~ 5.5V@500mA
WiFi module	Model Name	ESP32-C3-Mini-1
	Specification	IEEE 802.11b/g/n
	Frequency	2412 ~ 2484 MHz
	data rate	1T1R mode up to 150 Mbps
	RF – WiFi TX power	802.11b : 20.5 dBm 802.11g : 18.0 dBm 802.11n : 17.0 dBm
	RX sensitivity	802.11b : -98.0 dBm 802.11g : -92.8 dBm 802.11n : -90.0 dBm
Interface	UART	The UART signal is wrapped in a USB type A connector. There is also a set of parallel inputs available for use
	Green/Red LED	RED 1 Hz - AP mode: initialize and wait WiFi provision RED 1 Hz - Reset to default Green 1 Hz - STA mode: wait mqtt connection Green Solid - STA mode: connect to Murano successful and turn off led after 3 min Green/Red Switch 1 Hz - Firmware Update
	Reset Key	Press more than 5 seconds to reboot
	DI/DO	Reserved DI x 2 / DO x 3
Environment	Temperature	Operation : -40°C ~ 85°C Standby : -40°C ~ 105°C

	Humidity	~ 85%RH ( max )
Certification	CNS16014	Applying ( Exosite Exohome certified )
	NCC/FCC	Applying

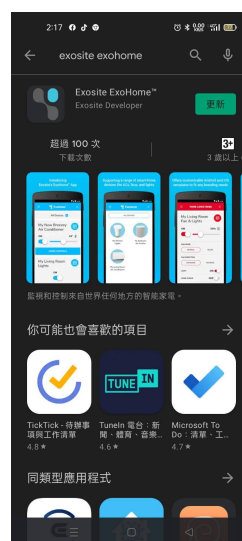
## 4. Operation

### 4.1 、 Download Exohome APP

Please download APP “Exohome” at Apple Store or Google Market, it looks as:



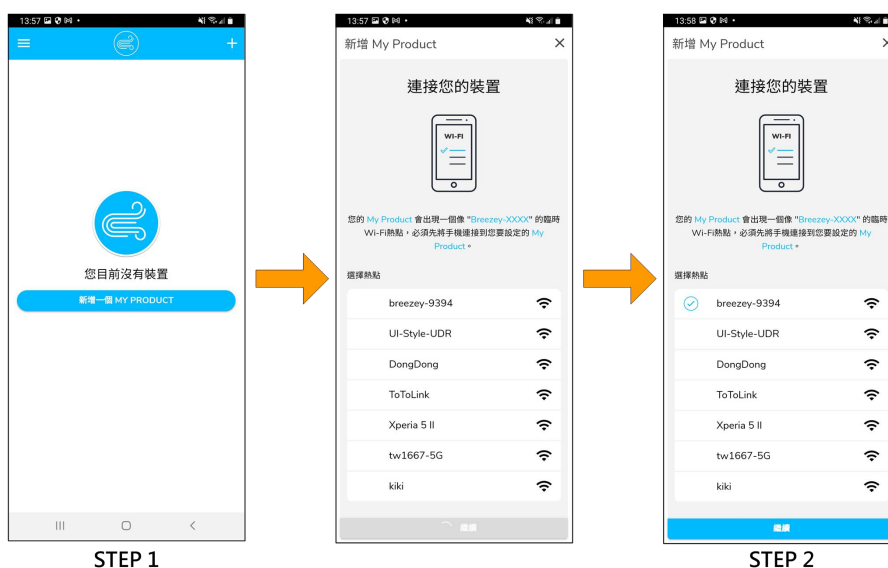
Apple Store



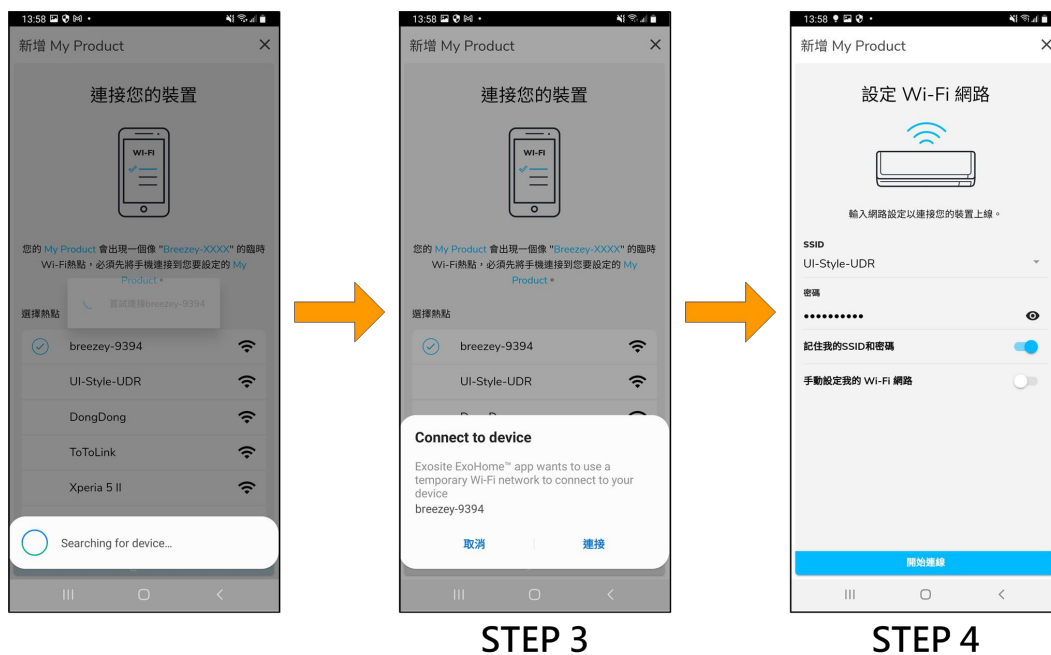
Google Play

### 4.2 、 Install Exohome APP and link to Home Gateway (HG)

After your download “Exohome” APP, please install it followed the instructions.



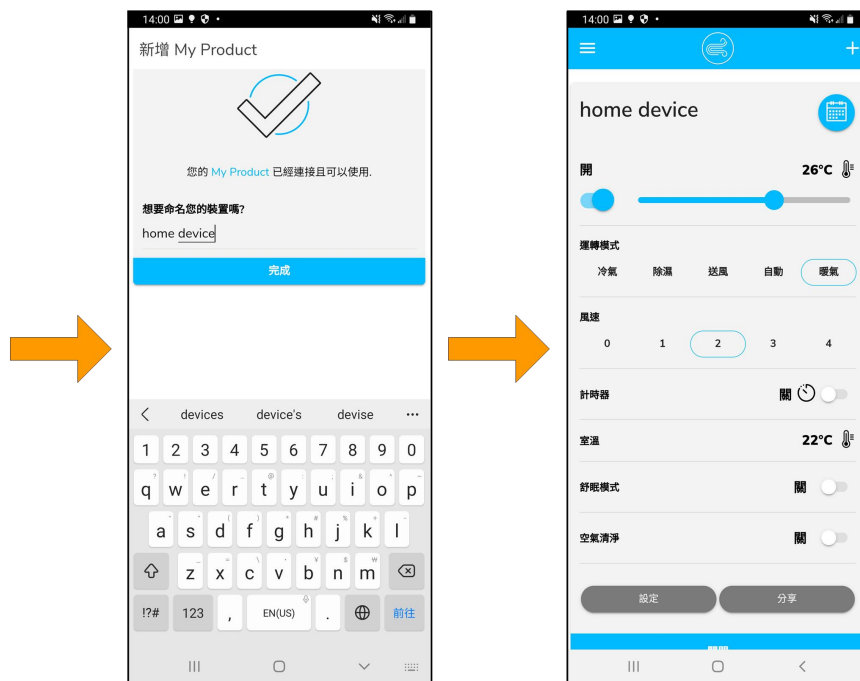
At STEP2, please select one access point (AP) as home gateway (HG) to connect to your appliance.



At STEP4, please enter SSID and password to access the AP (HG).



User's Exohome APP sets up the connection between the appliance and AP (HN) successfully at STEP5. User can name the appliance at STEP5.



## STEP 6

After naming the name of the appliance at STEP 5 then “Exohome” APP shows the UI and the items that user can clearly realize the appliance status or change the item settings at STEP 6.

The UI and the items APP shows up depending on what the appliance type “Baton” receives and transmits to Exohome cloud. Exohome cloud shall send the corresponding UI and items to APP, including the most updated status of the appliance.