

# BLE Module User Manual

## **Feature :**

Support Bluetooth 4.0 Low Energy wireless communication.

Support Android and iOS System

Support Bluetooth 4.0 LE auto-Pairing.

3-axis G-Sensor Data operation.

Use Primary Li Polymer Battery.

Support Firmware wireless upgrade.

Use AES-128 Encryption method for packet and verification

FCC/CE/SRRC compliant

# HW規格

**Bluetooth 4.0 Low Energy Standard :**

IEEE802.15.4

**Frequency Band :**

2.402 GHz ~ 2.480 GHz

CH: 0~39

Frequency Spacing : 2 MHz

**Data Speed :**

802.15.4 : GFSK 1Mbps

**Transmit power :**

IEEE802.15.4 : +0 dBm

**Receiver Sensitivity :**

-93 dBm @ 802.15.4

**ANTENNA :**

Patch metal mesh antenna

**CPU :**

Cortex M0

# Hardware Spec.

**POWER :**

**Primary Li-polymer battery :** 3V ( 150 mAh)

**Working Temperature :**

-20 °C ~ 60 °C

**Storage Humidity :**

10% ~ 90% ( non-condensing)

**3-axis sensor :**

one ( for motion detection )

**Vibrator :**

one( for notification )

# Software Spec.

## **Working Mode :**

Sleeping mode: BLE OFF, sensor Low power

Low power mode: BLE OFF, sensor partial ON.

Normal mode: BLE ON, sensor ON.

## **SW function :**

3-axis G-sensor Control.

Battery Capacity Measurement

## **APP Function :**

⇒PedoMeter function

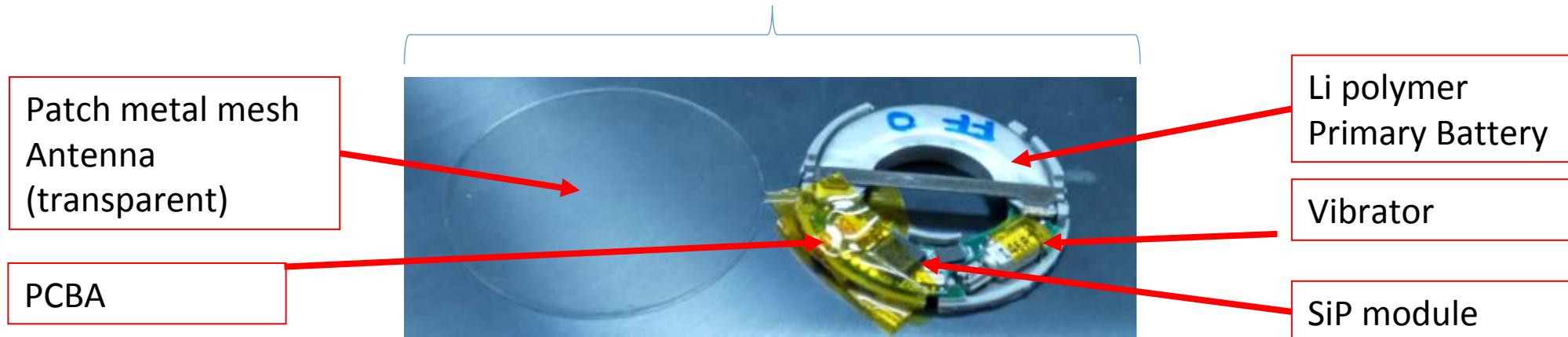
⇒Call Alert Vibration

⇒Gesture recognition

# Specification Table

Item	Description
Type	BLE Module
Synchronize	BlueTooth
Size ( mm )	35 mm (Dia.) * 8mm
Weight ( g )	10 g
Control Port	Vibrator
Transducer	3-Axis G-sensor
BlueTooth Port	Bluetooth 4.0 Low Energy
Charge Port	N/A
Battery Capacity ( mAh )	150 mAh
Working Temperature	-20 C ~ 60 C
Model	PR001A

## BLE Module ( with antenna)



BLE Module ( with antenna)  
and  
Final Product Sample



Final Product  
Sample

BLE Module with  
antenna ( transparent)

### **Federal Communication Commission Interference Statement**

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 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 Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

### **End Product Labeling**

The final end product must be labeled in visible area with the following: "Contains FCC ID: 2AJPKPR001A"

"

### **End Product Manual Information**

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.

**IMPORTANT NOTE:** In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances,

the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

This device is intended only for OEM integrators under the following conditions:

As long as a condition above is met, further transmitter test will not be required. However,

the OEM integrator is still responsible for testing their end product for any

additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).