

# K7800P Multifunctional BLE Sensor with Door Detection

## User Manual Version:V1.2

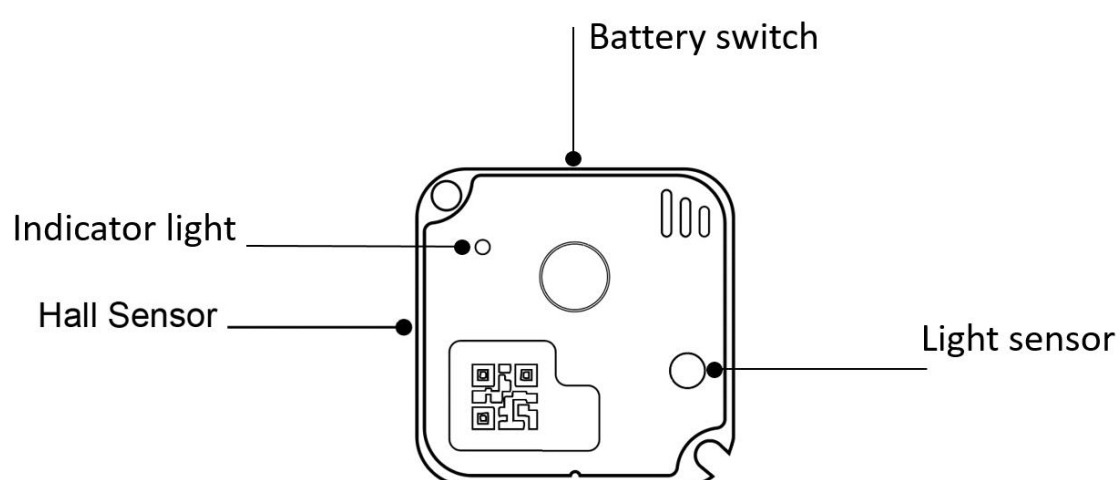
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# 1. Overview

The KB700P is a multifunctional sensor that uses Bluetooth communication technology to connect to a host computer (cell phone or Tracker). It has a built-in temperature and humidity sensor, Hall door magnetic sensor and light sensor. Easy installation makes it easy to use in a variety of application scenarios.

## 1.1 Schematic Diagram



## 2. Introduction

### 2.1 Packing List

|                         |   |     |          |
|-------------------------|---|-----|----------|
| K7800P                  | 1 | PCS | —        |
| Hall Effect door sensor | 1 | PCS | Optional |

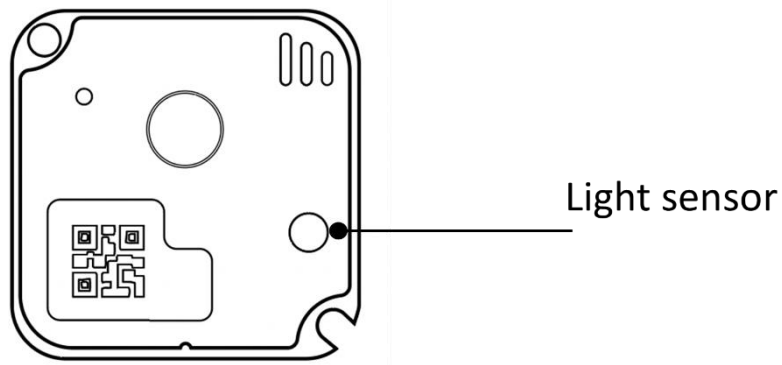
### 2.2 Specification

|                       |                                                                            |
|-----------------------|----------------------------------------------------------------------------|
| Size                  | 40*40*15 mm                                                                |
| Operating Temperature | -20°C to 70°C                                                              |
| Storage Temperature   | -40°C to 60°C                                                              |
| Protection Rating     | IP65                                                                       |
| Transmission Distance | 50m (Open area)                                                            |
| Frequency             | 2.4 GHz, supports BLE 4.2                                                  |
| LED                   | Indicates working status                                                   |
| Side Button           | Switches operating mode                                                    |
| Front Button          | Not available                                                              |
| Operating Time        | 3 years (3000ms broadcast interval)<br>2 years (2000ms broadcast interval) |

## 2.3 Build-in Sensors

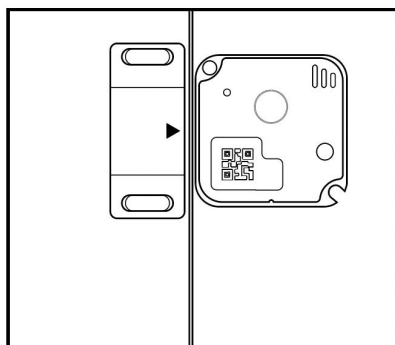
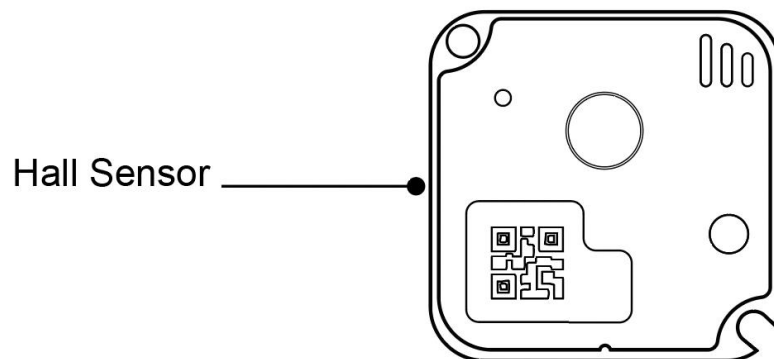
### ➤ Light sensor

On the front side of the sensor for detecting changes in ambient light. Can be used as an open box test for opaque containers.

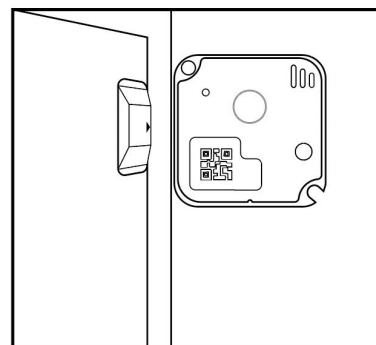


### ➤ Hall Sensor

Determine door opening and closing status by detecting the approach and departure of magnetic fittings on the door. This function must be used with door magnet accessories, please make sure you have purchased door magnet accessories.



Door's closed.



Door's Open

## ➤ **Environment sensor**

Temperature and humidity in the environment can be detected.

### **Temperature performance**

Range:  $-20^{\circ}\text{C}\sim+70^{\circ}\text{C}$

Accuracy:  $10^{\circ}\text{C}\sim50^{\circ}\text{C}$ , error:  $\pm 0.5^{\circ}\text{C}$ ;  $-20^{\circ}\text{C}\sim+70^{\circ}\text{C}$ , error:  $\pm 2^{\circ}\text{C}$

Accuracy:  $10^{\circ}\text{C}\sim50^{\circ}\text{C}$ , error:  $\pm 0.5^{\circ}\text{C}$ ;  $\leq 10^{\circ}\text{C}$  or  $\geq 50^{\circ}\text{C}$ , error:  $\pm 2^{\circ}\text{C}$

### **Humidity performance**

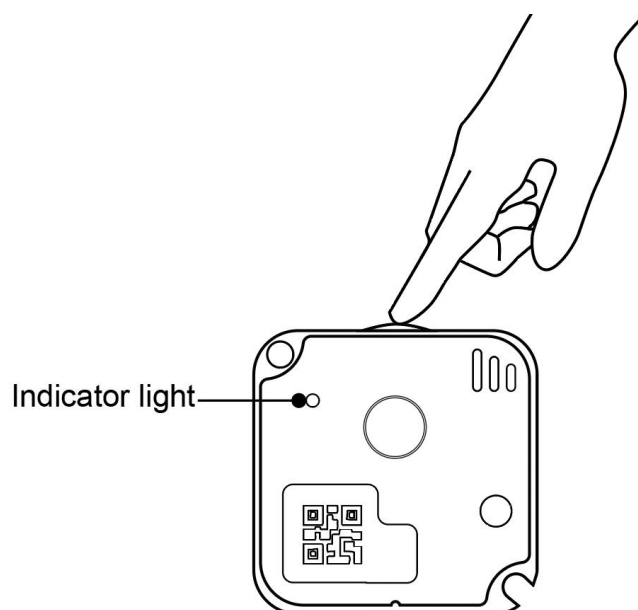
Range: 0%RH~100%RH

Accuracy: 0%RH~90%RH, error:  $\pm 2.5\%\text{RH}$ ;  $\geq 90\%\text{RH}$ , error:  $\pm 3.5\%\text{RH}$

## 3. Operating Guidelines

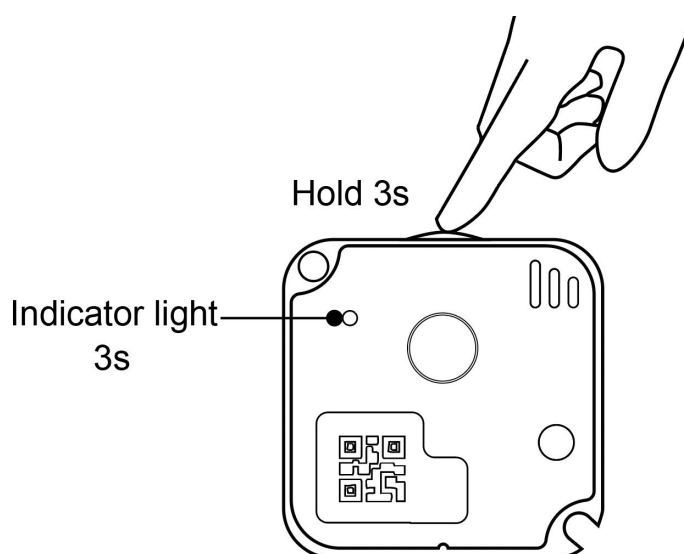
### 3.1 Checking the status of equipment

Short press the power button and observe the indicator light; if the indicator light is on for 1s and then off, it means the device is in the power-on state. If the indicator light is not on, the device is in the off state.



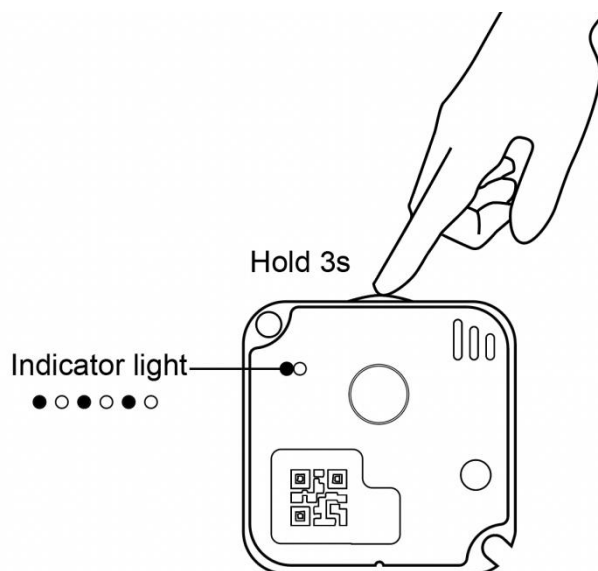
### 3.2 Power ON

Press and hold the power button for 3 seconds, the unit will switch on while the LED lights up for 3 seconds and then goes out.



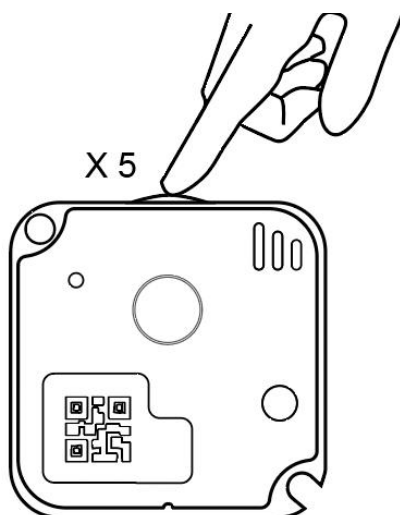
### 3.3 Power OFF

Press and hold the power button for 3 seconds while the unit is switched on, the unit shuts down while the LED blinks three times.



### 3.4 Activate Bluetooth connection

If you need to connect the device using the Bluetooth tool, press the button 5 times within 5s and the device will activate the Bluetooth connection.



## 4. Certification

### FCC Compliance Statements

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.

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 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.

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

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.