

LW004–PB Datasheet

Version	Description	Editor	Date
1.0	Initial version create	Iris	2020/5/6
1.1	Add new frequency AU915/AS923/IN865	Iris	2020/6/4

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1 Product Introduction

LW004–PB is LoRaWAN based panic button with positioning function. With a compact and smart outlook, and easy to use. It integrates BLE and GPS that is specially designed for indoor and outdoor positioning of object or person. Either through the Bluetooth scan the surrounding Beacons to obtain the location to track objects or people, or using the GPS to track the location of objects or people. In an emergency, you can trigger a alarm to send location information. Usually, you can set the reporting interval to report the location information regularly. The panic button adopts an independent button with a granular feeling, which is separated from the switch button to avoid false triggering. While, the product has a built-in vibration and 3-axis sensor, which can sense the alarm status and data sending status through vibration in the case of an alarm, and detect the dynamic state of objects or personnel through the 3-axis sensor data.

The product has been equipped with a rechargeable battery, which can last for one month if the reporting interval is every 5 minutes once and the GPS is turned off.



2 Application

- Hospital
- The nursing home
- School
- Asset and personal tracking

3 Features

- Based on LoRaWAN protocol V1.0.2
- Support indoor and outdoor positioning with GPS and BLE
- Built-in vibration sensor for alarm reminder
- Built-in 3-axis sensor for motion detect
- Low battery indicator
- OTA firmware update
- Support APP and server configure device parameter

4 Technical Parameter

4.1 Wireless Parameter

Type	Parameter
LoRa Protocol	LoRaWAN V1.0.2
LoRa Frequency	EU868/US915/AU915/AS923/IN865
TX Power	Max 20dBm
Sensitivity	-140dBm @SF12 300bps
LoRa Communication Distance	>=5000 @ open area
BLE Communication Distance	>=50m @ open area

4.2 Hardware specification

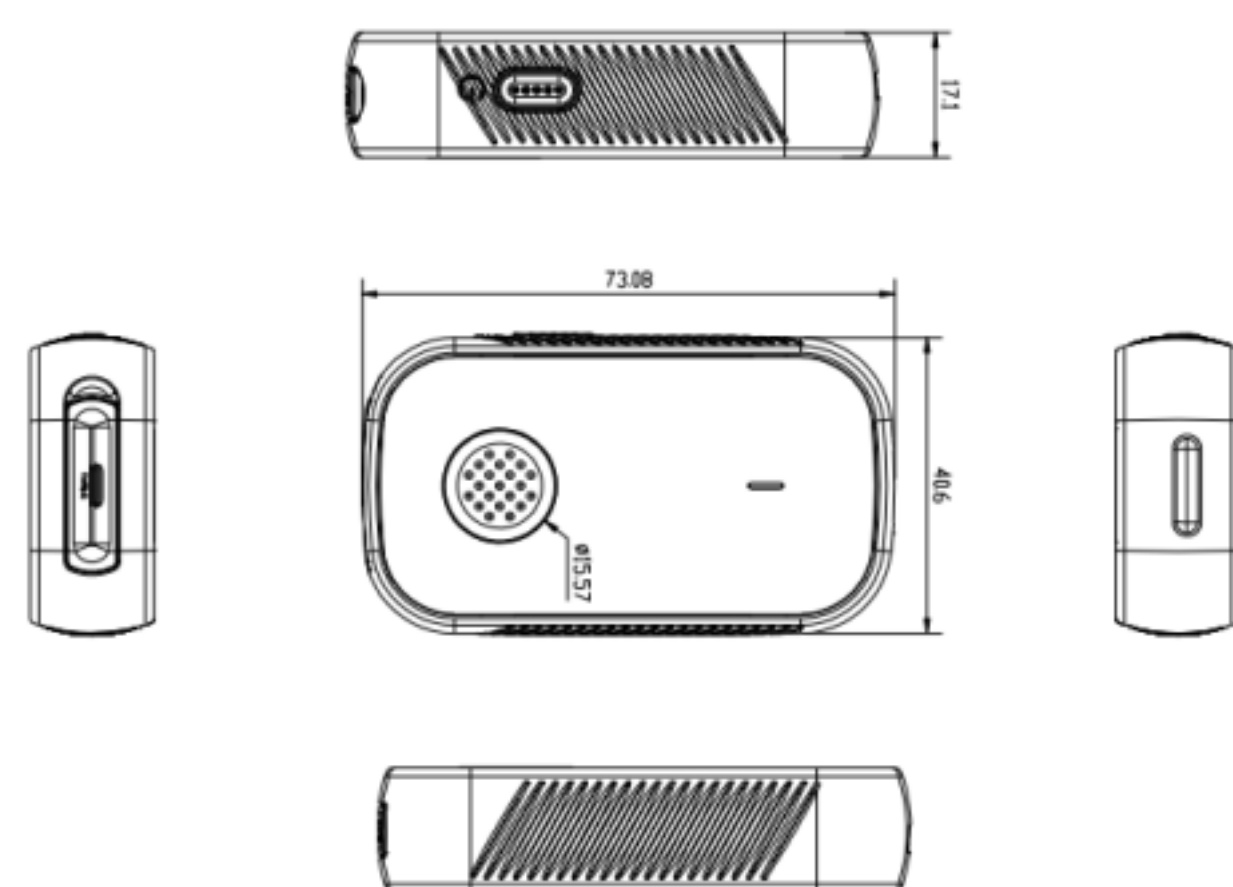
Type	Parameter
MCU	Nordic NRF52832
LoRa Chipset	SX1262
Power Supply	500mA rechargeable battery
Operating Current	< 120mA
Charging Port	Type C
Charging Time	2.5 hours@5V/1A

4.3 Operating Environment

Type	Parameter
Operating Temperature	Charing: 0~45°C, Discharge: -10~60°C
IP Rating	IP65

4.4 Dimension

Type	Parameter
Dimension	73mm x 40mm x 17mm



5 Ordering Information

Product Type	Product Description
LW004–PB–US915	915Mhz LoRaWAN panic button with BLE and GPS–North America
LW004–PB–EU868	868MHz LoRaWAN panic button with BLE and GPS–Europe