

# **1. General Description**

ES460 is a mini waterproof LTE Cat-M1/NB2 Pet GPS tracker with long standby time. It supports intelligent mode and SOS mode to track pets and keep them safe.

# 2.Main Functions

#### • Intelligent Mode:

1. Device will automatically search for registered home Wi-Fi and enter safety mode without turning on GPS to save power consumption.

- 2. Device will enter power down mode when detect pets asleep.
- 3. Device will turn on GPS and start to track pet in real time when pets are moving outside from home.
- 4. Standby time of the device can last as long as 1 week.
- **SOS Mode:** The device can be commanded to SOS mode to track pets with short interval.
- Home Wi-Fi Mode: Turn off GPS if Home Wi-Fi is found and report location of home to save power consumption.
- **Buzzer and Flashlight:** Sound and light are useful for an owner to search for a pet.
- **Bluetooth:** BLE can be used to search for a pet within a short distance and also to be used to send command to the device.
- Low Battery Alarm: Send alarm when battery voltage is low.
- Storing Message: Store messages if out of cellular coverage.
- Waterproof Case: IP67 waterproof.
- **OTA (Over-the-air):** Firmware can be remotely upgraded.

### **3. Specification**

#### **Physical and Electrical**

Dimensions: 35mm\*55mm\*16mm Weight: 30g Battery capacity: 700mAh Supply Voltage: 3.3VDC ~ 4.2VDC Power Consumption:

- Active mode: <72mA @4VDC
- Power Saving mode:<4mA @4VDC

Deep sleep mode: <10μA @4VDC</li>
Operation temperature: -20°C to 65°C
Storage temperature: -20°C to 65°C
LTE Module: Quectel BG77
Antenna: Built-in Cellular and GPS antenna
Charging Method: Magnetic charging
LED Indicators: 3 for GPS, cellular and charging status
SIM Card: Nano SIM(4FF)

#### **GPS Specifications**

Sensitivity Tracking: -157dBm Position Accuracy (CEP50): <2.5m(Open Sky)

### **Cellular Communication**

Cat M1: LTE-FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18 B19/B20/B25/B26/B27/B28/B66/B85\* Cat NB2: LTE-FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18 B19/B20/B25/B28/B66/B71/B85\*

#### Protocol

TCP/UDP/SMS

