ES460

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.

- **Pet Activity Report:** Report a pet's burned calories and its activity such as moving, eating, or sleeping.

- **Health Monitoring:** An alert will be sent if abnormalities are found.

- **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

Operation temperature: -20℃ to 65℃

Storage temperature: -20℃ to 65℃

LTE Module: Quectel BG77

Wi-Fi and BLE Module: Espressif ESP8685

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