

# ES825

## 1. General Description

ES825 is a 4G (Cat.M1&NB-IOT) mini waterproof GPS tracker for person and animals. It can be quickly set to real-time tracking mode when the animal is lost. ES825 has three modes to locate by GPS+WIFI+LBS.



## 2. Main Functions

- **Tracking:** It sends GPS (Location, speed) information to your application server with configurable report interval.
- **Geofence:** It supports circle and polygon setting.
- **Mixed-mode:** There are seven modes, you can choose any of them.
- **WiFi-positioning:** It will support WIFI feature for positioning.
- **Storing Message:** The device stores up to 50 messages if out of coverage and send the stored messages once the device regains coverage.
- **Battery Low Warning:** When battery level is low, it will send low-battery alarm message.
- **OTA (Over the Air):** The device's configuration, setting and firmware can be remotely upgraded.
- **Cell-ID Based Location:** Device reports cell-ID based location information if GPS signal is not available.
- **Waterproof Case:** IP65 waterproof.
- **Multi-Platform:** Customers can get device information through APP and web platform.

## 3. Specification

### Physical and Electrical

Dimensions: 40\*50\*16mm

Weight: 36g (44g with collar)

Battery capacity: 680 mAh

Power Consumption:

- Active mode: <72mA @3.8VDC
- Power Saving mode (special algorithm): <4mA @3.8VDC
- Deep-sleep mode: <10  $\mu$  A @3.8VDC

Operation temperature: -20°C to 65°C

Storage temperature (Without battery):

-40°C to 85°C

Charging mode: magnetic charging

Built-in Cellular and GPS antenna

### GPS Specification

-162 dBm Tracking Sensitivity

Accuracy (Open Sky): <2m (CEP50)

### Cellular Communication

Cat.M1 & NB1:

LTE-FDD: B1/B2/B3/B4/B5/B8/  
B12/B13/B18/B19/B20/B26/B28  
LTE-TDD: B39 (for Cat.M1 only)  
Output Power: 23dBm  $\pm$  2.7dBm

GSM

GSM850/GSM900/DCS1800/PCS1900  
Output Power:  
GSM850/900: 33dBm  $\pm$  2dBm  
DCS1800/PCS1900: 30dBm  $\pm$  2dBm

Protocol: TCP/UDP/SMS