



# ES820

## 1. General Description

ES820 is a 4G waterproof GPS Tracker with an internal battery.

Embedded with Quectel module, it has superior GPS performance. ES820 also has voice communication capability, so it can call or send message to a pre-configured phone number.



## 2. Main Functions

- **Tracking:** It sends GPS (Location, speed) information to your application server with configurable report interval (moving or stationary).
- **Geofence:** It supports circle and polygon setting.
- **SOS Button:** Makes an SOS call or SMS message to a pre-configured phone.
- **Mileage:** Reports trip start, trip end and the mileage.
- **3-Axis Accelerometer:** Using embedded accelerometer and carefully designed algorithm to detect the trip start/stop with accuracy.
- **Battery Low Warning:** When battery level is low, it will send low-battery alarm message.
- **Cell-ID Based Location:** Device reports cell-ID based location information if GPS signal is not available.
- **Waterproof Case:** IP65 waterproof.
- **OTA (Over the Air):** The device's configuration, setting and firmware can be remotely upgraded.

## 3. Specification

### Physical and Electrical

Dimensions: 75mm\*46mm\*17mm

Weight: 60g

Supply Voltage: 3.4V~4.2V (3.8V best)

Battery capacity: 1400 mAh

Power Consumption:

- Active mode: <129mA@3.8VDC

- Power Saving mode: <3.4mA@3.8VDC

Operation temperature: -20°C to 65°C

Storage temperature(Without battery):

-40°C to 85°C

3 LEDs for charging, GPS, Network signal

Charging mode: magnetic & USB charging

Built-in Cellular and GPS antenna

### GPS Specification

-162dBm Tracking Sensitivity

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

ES820 (J) LTE FDD:

B1/B3/B8/B18/B19/B26

LTE TDD: B41 WCDMA: B1/B6/B8/B19

ES820 (A) LTE FDD: B2/B4/B12

WCDMA: B2/B4/B5

ES820 (AU)

LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28

LTE TDD: B40 WCDMA: B1/B2/B5/B8

GSM: B2/B3/B5/B8

ES820 (AUT) LTE FDD: B1/B3/B5/B7/B28

WCDMA: B1/B5

ES820 (E)

LTE FDD: B1/B3/B5/B7/B8/B20

LTE TDD: B38/B40/B41

WCDMA: B1/B5/B8 GSM: B3/B8

Protocol: HTTP/TCP/UDP/SMS

### Cellular Communication

Dual Band:

ES820 (V) LTE FDD: B4/B13