

ES478S

1. General Description

ES478S is a 4G&D2C (LTE Cat.1) personal GPS tracker based on Starlink Direct-to-Cell (D2C) satellite technology, which allows the device to connect directly to the satellite in remote areas where terrestrial networks are unavailable or unreliable. Yet, in areas with terrestrial network coverage, the device can still communicate via ground-based cell towers. It is suitable for people who like outdoor activities such as hiking, climbing, skiing, camping and traveling etc. ES478S also supports voice call for emergency situations.



2. Main Functions

- **D2C Real-time Tracking:** High-speed, low-latency, track people in remote areas such as deserts, forests, mountains and sea where there is no terrestrial network coverage
- **SOS Button:** Make an SOS call to pre-figured phone number or send alarm message to server
- **Voice Call:** Support two-way communications
- **Long Standby Time:** 10 hours in real-time tracking mode
- **Trip Start and Trip End:** Report trip start and trip end
- **Power Saving Mode:** Report location information only when moving is detected
- **Low Battery Alarm:** Send alarm when battery voltage is low
- **Storing Messages:** Store messages if out of cellular coverage
- **Geofence:** Supports circle and polygon setting
- **OTA (Over the Air):** 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: 1500mAh

Power Consumption:

- Active mode:<129mA@4VDC
- Power Saving mode:<3.4mA@4VDC

Operation temperature: -20°C to 65°C

Storage temperature: -20°C to 65°C

LED Indicators: 3 for GPS, cellular and charging status

Charging Method: magnetic charging

Antenna: Built-in cellular and GPS antenna

Sim Card: Micro SIM(3FF)

GPS Specification

Sensitivity Tracking: -157dBm

Position Accuracy (CEP50): <2.5m(Open Sky)

Cellular Communication

CAT.1

LTE FDD: B1/2/3/4/5/7/8/12/13/18/

19/20/25/26/28/66

LTE TDD: B38/B39/B40/B41

UMTS: B1/B2/B4/B5/B6/B8/B19

GSM: B2/3/5/8

Protocol

HTTP/TCP/UDP/SMS