

ES811-C4

1.General Description

ES811-C4 is an LTE Cat.4 Waterproof Hot-spot GPS Tracker for vehicle with waterproof. It reports location information via TCP/UDP with configurable intervals. It has max 4 inputs which can be used to detect sensors and max 4 outputs. It also has max 2 UARTs to connect an external device to transmit user data to a server.



2.Main Functions

- **Tracking:** Send GPS information to server with configurable report interval
- Power Saving Mode: Device enters sleep mode when vehicle engine is OFF
- Digital Inputs: Ignition detection, door on/off detection, flow meter
- Digital Outputs: Buzzer, relay, enable/disable engine starter
- Analog Input: Temperature sensor, fuel level, TDS meter, breathalyzer
- Uarts: Camera, RFID reader, iButton, temperature/humility sensor, driver license
- **RS232C:** Modbus, temperature sensor
- **Engine on/off Detection:** Detect engine on/off via ignition input or detecting method by vibration
- **Driving Behavior Detection:** Report harsh braking, harsh acceleration and impact
- Trip Start and Trip End Detection: Report trip start and trip end
- **Tamper Alert:** Send tamper alert if the power supply is disconnected
- Storing Messages: Store messages if out of cellular coverage
- **Hotspot:** Surf the Internet in the vehicle
- **Waterproof:** IP66 waterproof
- OTA (Over the Air): Firmware can be remotely upgraded

3. Specification

Physical and Electrical

Dimensions: 105mm*65mm*26mm

Weight: 333.8g

Battery Capacity: 4300mAh Supply Voltage: 6VDC ~ 42VDC

Power Consumption:

-Active Mode: < 40mA @12VDC
-Deep Sleep Mode: < 5mA @12VDC
Operation Temperature: -20 $^{\circ}$ C to 65 $^{\circ}$ C
Storage Temperature: -20 $^{\circ}$ C to 65 $^{\circ}$ C

LTE Module: Quectel EC25

Antenna: Built-in cellular and GPS antenna

LED Indicators: 2 for GPS and cellular

SIM Card: Micro SIM(3FF)

Comprehensive IOs

Max 4 inputs and 4 outputs
Max 2 A/D inputs and 3 UARTs

GPS Specifications

Sensitivity Tracking: -157dBm Position Accuracy (CEP 50): <2.5m

Cellular Communication

ES811-C4(V)

LTE FDD: B4/B13

ES811-C4 (J)

LTE FDD: B1/B3/B8/B18/B19/B26

LTE TDD: B41 ES811-C4 (A)

LTE FDD: B2/B4/B12

ES811-C4 (AU)

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

LTE TDD: B40 ES811-C4 (E)

> LTE FDD: B4/B13 LTE TDD: B38/B40/B41

Protocol

HTTP/TCP/UDP/SMS/MQTT/DNP3