

# ES840

## 1. General Description

ES840 is a 4G (Cat.M1&NB) OBDII GPS Tracker for vehicle. ES840 supports CAN Bus and all kinds of Line. It can automatically detect Ignition On/Off status via reading RPM information. ES840 has three modes to locate by GPS+Bluetooth+LBS.



## 2. Main Functions

- **Tracking:** It sends GPS (Location, speed) information to your application server with configurable report interval.
- **Bluetooth-positioning:** It will support bluetooth feature for positioning.
- **Geofence:** It supports circle and polygon setting.
- **Backup Battery:** With a backup battery (110mAh), the device sends a tamper message if the power supply harness is disconnected.
- **Over Speed Limit:** Reports over-speed limit.
- **Mileage:** Reports trip start, trip end and the mileage.
- **3-Axis Accelerometer:** With a built-in 3-axis accelerometer, the device can detect trip start/trip end, and to report harsh braking, harsh acceleration, and impact.
- **Storing Message:** The device stores up to 100 messages if out of coverage and send the stored messages once the device regains coverage.
- **Power Saving Mode:** Device automatically switch to low-power mode when it detects engine is OFF.
- **CAN Communication:** It can read VIN, RPM and many other standard vehicle parameters via CAN BUS.
- **OTA (Over the Air):** The device's configuration, setting and firmware can be remotely upgraded.

## 3. Specification

### Physical and Electrical

Dimensions: 50.6mm \*49mm \*26mm

Weight: \*g

Input voltage range: 12-24VDC

Power Consumption:

-Active mode:< 45 mA @12 VDC

-Sleep mode:< 10 mA @12 VDC

Operation temperature: -20°C to +65°C

Storage temperature (Without battery): -40°C to +85°C

### GPS specification

-162dBm Tracking Sensitivity

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

### Comprehensive IOs

OBDII interface

J Line: J1850 PWM VPW

K Line: ISO9141, ISO14230 (KWP2000)

CAN-BUS:ISO15765 (11/29Bit 250/500K)

3 LEDs for GPS,Cellular status and charger  
3 antennas for Built-in Cellular, Bluetooth and GPS

### Cellular Communication

Cat.M1/Cat.NB1:

LTE FDD:

B1/B2/B3/B4/B5/B8/B12/B13/B18/  
B19/B20/B25/B26/B28

LTE TDD:

B39 (only Cat.M1 support)

Output Power: 23dBm ± 2.7dBm

GSM:

GSM850/GSM900/DCS1800/PCS1900

Output Power:

GSM850/900: 33dBm ± 2dBm

DCS1800/PCS1900: 30dBm ± 2dBm

Protocol: HTTP/TCP/UDP/SMS