



ES430

1. General Description

ES430 is a 4G (Cat.M1&NB-IOT) waterproof GPS asset tracker. Carefully designed for long battery life, it can last 2 year under one report per day mode with 2500mAh battery. Embedded with magnets, it can easily attach to vehicle, trailer, container for asset tracking ES430 will automatically switch to cell-ID based location reporting whenever GPS is not available.



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.
- **Moving Wakeup:** Device will automatically wakeup when it senses moving of the asset and power down itself when it is stationary.
- **Battery Low Warning:** When battery level is low, it will send low-battery alarm message.
- **Storing Message:** The device stores up to 50 messages if out of coverage and send the stored messages once the device regains coverage.
- **Flexible Battery Selection:** Two kinds of choices: 1000mAh or 2500mAh.
- **Drop Alarm:** Using embedded light sensor to detect the drop/detach from the tracking object.
- **Cell-ID Based Location:** Device reports cell-ID based location information where GPS cannot be positioned.
- **OTA (Over the Air):** The device's configuration, setting and firmware can be remotely upgraded.
- **Waterproof Case:** IP65 waterproof.

3. Specification

Physical and Electrical

Dimensions: 80mm*50mm*23mm

Weight: <130g

Rechargeable Battery capacity:

1000/2500 mAh

Power Consumption:

-Active mode:< 78 mA @3.8VDC

-Sleep mode:<4 mA @3.8VDC

-Deep Sleep Mode:< 60 uA @3.8VDC

Operation temperature: -20°C to 65°C

Storage temperature (Without battery):

-40°C to 85°C

Charging mode: USB charging

Built-in Cellular and GPS antenna

Module: BG95 from Quectel

Chipset Type: MDM9206 from Qualcomm

GPS Specification

-162 dBm Tracking Sensitivity

Accuracy (Open Sky): <2 m (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±2.7dBm

GSM:

GSM850/GSM900/DCS1800/PCS1900

Output Power:

GSM850/900: 33dBm±2dBm

DCS1800/PCS1900: 30dBm±2dBm

Protocol: TCP/UDP/SMS