ES320

1.General Description

ES320 is a 3G (W-CDMA) waterproof GPS Tracker with an internal battery (1000mAh). Embedded with u-Blox7, it has superior GPS performance. The device standby time is 100 days if one report per day. It supports TCP/UDP and HTTP for reporting location information. Also ES320 has voice communication capability. It can call or send message to a pre-configured phone number. ES320 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.
- **SOS Button:** Makes an SOS call or SMS message to a pre-configured phone.
- **Over Speed Limit:** Reports over-speed limit.
- **Mileage:** Reports trip start, trip end and the mileage.
- **3-Axis Accelerometer:** Using embedded accelerometer and carefully designed algorithm to detect the vehicle/asset trip start/stop with accuracy.
- **Storing Message:** The device stores up to 300 messages if out of coverage and sends the stored message once the device regains coverage.
- **Power Saving Mode：** By optimizing GPS acquisition timer and using super low-power CPU to achieve super-low power consumption and super-long battery life.
- **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: 74mm*42mm*20mm

Weight: 70g

Supply Voltage: 3.3V~4.5V (3.8V best)

Battery capacity: 1000 mAh

Power Consumption:

   - Active mode:<77mA @3.8VDC

   - Sleep mode:<3mA @3.8VDC

   - Deep Sleep Mode:<0.27mA @3.8VDC

Operation temperature: -20℃ to 65℃

Storage temperature(Without battery):
-40℃ to 85℃

3 LEDs for charging, GPS and Cellular status; USB2.0

Built-in Cellular and GPS antenna

GPS Specification

-162dBm Tracking Sensitivity

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

Cellular Communication

W-CDMA

  ES320A(USA): 850/1900 MHz

  ES320JE(Japan/Softbank): 900/2100 MHz

  ES320J(Japan/Docomo): 850/2100 MHz

  ES320E(Other Countries): 900/2100 MHz

  Output Power: 0.25W

GSM/GPRS: 850/900/1800/1900 MHz

  Output Power:

     GSM850/900: 2W

     DCS1800/PCS1900: 1W

Protocol: HTTP/TCP/UDP/SMS