# Specification:

### **GSM Specifications**

Frequency	Quad band: 850/900/1800/1900 MHz Compliant to GSM phase 2/2+ -Class 4 (2W @ 850/900 MHz) -Class 1 (1W @ 1800/1900 MHz)
GPRS	GPRS multi-slot class 12 GPRS mobile station class B
<b>RMS Phase Error</b>	5 deg
Max RF Output Power	GSM850/GSM900: 33.0±2 dBm DCS1800/PCS1900: 30.0±2 dBm
Dynamic Input Range	-15 ~ -108 dBm
Receiver Sensitivity	Class II RBER 2% (-107 dBm)
Stability of Frequency	< 2.5 ppm
Max Frequency Error	±0.1 ppm

## **GNSS Specifications**

GNSS Type	u-blox All-In-One GNSS receiver
Sensitivity	Autonomous: -147 dBm Hot start: -156 dBm Tracking & navigation: -162 dBm Reacquisition: -160 dBm
Position Accuracy (CEP)	Autonomous: < 2.5m
TTFF (Open Sky)	Cold start: 27s average Warm start: 27s average Hot start: 1s average

#### Interfaces

Digital Inputs	1 positive trigger input for ignition detection 1 negative trigger input for normal use
<b>Power Button</b>	Power on and power off, can be disabled via air interface protocol
Function Button with Vibration Feedback	Emergency alert or instant geo-fences setting

GSM/GNSS	Internal only
Antennas	
LED Indicators	CEL, GNSS, PWR
Mini USB Interface	Used for external power and configuration

#### **General Specifications**

Dimensions	38.5mm(L) x 23.5mm(W) x 68.5mm(H)
Weight	60g
Internal Battery	Li-Polymer, 1300 mAh
Standby Time	Without reporting: 280 hours 5 minutes' reporting: 120 hours 10 minutes' reporting: 190 hours
Water Resistance	IPX5 compliant
Charging Voltage	5V DC
Charging Voltage External Battery Voltage	ľ

#### Air Interface Protocol

Transmit Protocol	TCP, UDP, SMS
Scheduled Report	Report position and status based on preset time intervals, distance, mileage or a combination of these settings
Geo-fences	Support up to 5 geo-fence regions
Low Power Alarm	Alarm when battery is low
Power On/Off Report	Report when the device is powered on and off
SOS/Emergency Alarm	SOS alarm via pressing function button
Special Alarm	Special alarm based on digital inputs
Motion Detection	Motion alarm based on internal 3-axis accelerometer