PRODUCT SPECIFICATION
Motorcycle/ Vehicle Tracker
GTR-388C1
(4G LTE Cat.1)

VER: 1.1

General Description

GTR-388C1 is designed as durable and multi-functional highly efficient 4G LTE Cat 1 LTE connectivity GPS tracker offering seamless fall back to 2G and 3G. Compact, robust and waterproof design for motorcycle, electric scooter and vehicle small size for easy installation.

Features

- Dual-Band UMTS/ HSDPA WCDMA system
- Dual-Band GSM/ GPRS/ EDGE system
- 820mAh rechargeable battery
- High sensitivity GPS receiver
- Compact size and waterproof IPX7 design
- Built-in high sensitivity GPS/ Cellular antennas
- Built-in motion sensor
- AGPS support
- Support communication protocols- SMS/ TCP/ UDP/ HTTP
- Multiple I/Os support：
  - 1 Digital Input for custom function
  - 1 Digital Input for optional emergency button
  - 1 Analog Input
  - 1 Digital Output for relay
  - 1 Digital Input for ACC detection
- Firmware update via Over-The-Air
- Small size for easy installation
- Perfect power management control
- Thermal solution with IPX7 design and waterproof cable connector

System Specification

Electrical and Mechanical Parameters General	
CPU	High performance line ARM-base 32-bit MCU
Operating Temperature	-30°C ~ +60°C (0°C ~ +45°C for charging)
Storage Temperature	-40°C ~ + 60°C
GPS Antenna	Built-in patch ceramics antenna
Cellular Antenna	Built-in Pi-Fa antenna
Communication	**Europe SKU: (ELS61-E)** Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz), Dual-Band GSM 900 and 1800 MHz **US SKU: (ELS61-US)** Quad-Band LTE: Bands 2, 4, 5, 12 (700, 850, 1700/2100 (AWS) and 1900 MHz), Tri-Band UMTS: Bands 5, 4, 2 (WCDMA/FDD 850, 1700/2100 (AWS) and 1900 MHz) **AUS SKU: (ELS61-AUS)** Quad-Band LTE: Bands 3, 5, 8, 28 (1800, 850, 900, 700 MHz), Tri-Band UMTS: Bands 1, 5, 8 (WCDMA/FDD 2100, 850, 900 MHz)
Protocol	SMS/ TCP/ UDP/ HTTP
Built-in Memory	32 Mb
Power Input	+12V ~ +30V
Emergency button Input	Negative trigger x 1
Ignition (ACC) Input	Positive trigger x 1
Digital Input Port	Negative trigger x 1
Digital Output Port	Negative trigger x 1 (300mA)
Analog Input Port	Analog input x 1 (0 ~ +28V)
Indicator LED	1. **Normal mode:** Red blinking: Device is being boot and SIM card not ready Red solid: SIM card ready, but network not registered Yellow solid: Network registered, but server not connected Green solid: Network registered, and server connected 2. **Hiding mode:** Red blinking: Device is under booting After complete the boot, turn off all LEDs

Electrical and Mechanical Parameters General	
Back-up Battery	820mAh rechargeable
Sensor	Motion detect (G sensor)
SIM type	Micro SIM & co-lay chip SIM
Reset Button	Yes
Unit Weight	66.5 g
Unit Size	(L)107.5 x (W)38.7 x (H)22.8 mm
Humidity	5% ~ 95% Non-condensing
Certification	CE, FCC, NCC, PTCRB

GPS Parameters

GPS Parameters General	
Chipset	High Performance
Frequency	L1, 1575.42 MHz
Sensitivity	-146 dBm (Tracking) -158 dBm (Autonomous acquisition)
Channels	66 channels, each is capable to receive any supported signal
Support SBAS	WASS, EGNOS, MSAS, RTCM
Accuracy	Position: 3 meters (2D RMS) 1-5 meters 2D RMS, WAAS corrected. Velocity: 0.1 m/s Time: 1ms RMS
Update Rate	10 Hz
Default Datum	WGS-84
Reacquisition	<1 second, average
Hot Start	< 1 second, average
Warm Start	33 seconds, average
	< 15 seconds (with AGPS)
Cold Start	33 seconds, average (typical) without AGPS
	< 15 seconds (with AGPS)
Maximum Altitude	< 18,000 meters
Maximum Velocity	< 500 meters/ second
Acceleration	< 4 g

WARNING:

In a confined space of the car, there is a big different temperature between inside and outside of the car. In addition, it is also considerable temperature difference between tracker's interior and exterior. Therefore, if you put a tracker in the car, please make sure to place it with good ventilation.

Features of on-line development platform

- A web-based platform for developer’s use
- Receive and show error detection and tracking reports
- Ability to configure device and update firmware via OTA
- Receive and show error detection and tracking reports
- Ability to monitor device status

Accessories

- 8-Pin Hard Wire Power & I/O Cable
- Velcro Tape
- Magnetic Mount & Double-side Tape
- External Emergency Button (Optional)
- 12V/ 24V Relay (Optional)
- OBDII Power Cable (Optional)
- Firmware Update & Debug Cable (Optional)
- Cigar Lighter Power Cable (Optional)
- Test Box (Optional)