



## Waterproof Vehicle Tracker



### Features

- IP67 dust tight and waterproof rating
- AGPS support to improve GPS fixing time
- Driver ID (optional)
- Immobilizer (optional)
- Activated by motion/ignition
- Over the air (OTA) firmware/configuration upload
- Built-in antennas, compact size
- 4G LTE with 2G or 3G fallback
- Dual processor, multi-thread system
- Fast and stable application performance
- Modular architecture and multiple watchdogs
- Up to +65 volt power surge protection
- Driver behavior and collision detection

### Specifications

Mechanical and Environmental		
Dimension (L x W x H)	100 x 70 x 32 mm ( $\pm 2$ mm)	
Weight	230 g	
Material	PC-ABS thermoplastic, heat and impact resistant	
IP Rating	IP67	
Operation Temperature	-20°C ~ +60°C	
Storage Temperature	-40°C ~ +85°C	
Electrical		
Battery	Battery Cell	1000 mAh prismatic Li-Ion
	Operation Temperature	-20°C ~ +60°C
	Storage Condition	-20°C ~ +35°C, low humidity and no corrosive gas
	Capacity	1,000 mAh
Power Supply Input	6 ~ 36 V <sub>dc</sub> (Current 2A, Ripple < 300mV <sub>p-p</sub> )	
Power Consumption	Transmit	150 mAh
	Stand-by	70 mAh

## Waterproof Vehicle Tracker

IO Interface and Other		
Input	12 bit (0 ~ 30 V <sub>dc</sub> ) analog input	
	Active high input	
	Active low input	
1-Wire®	iButton®	
	Digital thermometer (maximum 8 thermometers)	
Output	Immobilizer	
	Buzzer	
Power Supply Output	On-board 3.3V 100 mA output (for 1-Wire® digital thermometer)	
RS-232	3-wire RS-232 interface	
SIM Slot	Full size SIM	
USB	USB 2.0 high speed compatible slave interface	
3-Axes Accelerometer	± 16G (default)	
Memory Backup	31 MB flash memory	
Antenna	Built-in GPS and UMTS antennas	
LED	Amber	LTE/UMTS/GPRS
	Red	Power
	Green	GPS
GPS		
Receiver Type	56-channel, GPS L1 C/A, SBAS: WAAS, EGNOS, MSAS	
Acquisition	Cold starts 29 secs, aided starts 5 secs, reacquisition 1 sec	
Sensitivity	Tracking & Nav. -162 dBm, cold starts -148 dBm, warm starts -148 dBm	
Accuracy	Autonomous 2.5 m, SBAS 2.0 m	
Operation Limits	Altitude 50,000 m, velocity 500 m/s, dynamics ≤ 4 g	

## Waterproof Vehicle Tracker

Cellular Communication	
Regional Variants	<p>EU: Penta-Band LTE: Bands 1, 3, 8, 20, 28* (700*, 800, 900, 1800, 2100 MHz), Dual-Band GSM: 900 and 1800 MHz</p> <p>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)</p> <p>AU: 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)</p>
LTE	Cat.1, downlink: max. 10.2 Mbps, uplink: max. 5.2 Mbps
HSPA+	Cat.8 (ELS61-US), downlink: max. 7.2 Mbps, uplink: max. 5.76 Mbps
GPRS	Class 12 (ELS61-E), downlink: max. 85.6 kbps, uplink: max 85.6 kbps
SMS	PDU / Text mode
Key Features	LTE (FDD) 3GPP Rel.9 compliant protocol stack, RX-diversity
	Embedded TCP/IP, UDP/IP, HTTP/FTP protocols
	Secure connection with TLS
	RLS monitoring (Jamming detection)

## Accessories

Standard
Warranty seals
Optional
USB cable (for configuration use)
ISO-7637 power surge protection box
Immobilizer relay
iButton® probe
iButton® tag & key fob
Buzzer
1-Wire® digital thermometer

### NOT E:

- Datasheets are updated as needed and as such, specifications are subject to change without notice.
- All specifications are measured at an ambient temperature of 25°C, humidity<75%, and nominal input voltage.