Product description

1. Circuit Descriptions of GPS Vehicle Tracker（For TK310）

1. MCU chip, real-time reads the latitude and longitude output of GPS module
2. MCU chip, real-time listens and reads the commands output the SIM340DZ.
3. Through the SIM340DZ, MCU chip sends out SMS, or connect to internet to send out data by GPRS.
4. Through the ULN2003, MCU realize 5-ways control output
5. MCU through the 10-bits AD converter IO-pin to achieve two-way analog inputs
6. Trough the 5 pieces of IO-pin, MCU realize the function of detecting 5-ways signal input
7. Low power consumption can be realized by the help of the BS0302 tiny vibration sensor.
8. The Mini USB interface is used for uploading data, read/write the memory of the device
9. MCU can make 26000 pieces of latitude and longitude data to be stored in the AT45DB321 8MB RAM
10. After receipt monitoring command, MCU connects monitoring circuit to carry out monitoring.

11, The MCU Frequency is : 8MHZ

2. Main function of device

Tracking via SMS or GPRS (TCP/UDP)
Current location report
Tracking by time interval
Position logging capacity up to 260,000+ waypoints
Built-in motion sensor for power saving
SOS panic button
Geo-fencing control
Low battery alert
Speeding alert
Engine Cut
Wiretapping (optional)
Alert when TK310 enters/exits GPS blind area
Alert when TK310 is turned on
I/O: 5 digital inputs, 3 negative and 2 positive triggering; 5 outputs.
Analog Input: 2 10 bits resolution analog inputs

3. Specifications

Size of the main unit:	104mm x 62mm x 24mm
Weight of the main unit:	150g
Working temperature:	-20° to 55° C
Humidity:	5% to 95% Non-condensing
Radio technology:	GSM/GPRS 850/900/1800/1900
Frequency:	GSM 850: 824.2MHz—848.8MHz

	GSM900:880.2MHz—914.8MHz GSM1800:1710.2MHz—1784.8MHz GSM1900:1850.2MHz—1909.8MHz
Modulation type:	GMSK
RF Power:	GSM850/900: 32dBm±2 GSM1800/1900: 29dBm±2
GPS chip:	Latest SiRF-Star III chipset
GPS Receive frequency	1575±5MHz
GSM antenna and Gain	External Patch Antenna, 3.5dBi Gain,SMA-B connector
GPS antenna's Gain	Antenna Gain: -3dBic at 10°; 3.5dBic at zenith; Amplified Gain: 27dB typ.
Working voltage:	DC 12V from battery
Internal Backup battery	Rechargeable 3.7V 750mAh Li-ion battery