



# VG502

2G OBDII GNSS Tracker

The VG502 is an easy-to-install OBDII GPS tracker designed for company/official cars, private cars, and usage-based insurance. Featuring the driving behavior analysis (DBA) leveraging the UBI-based algorithm, this device can accurately analyze any of 4 kinds of dangerous driving behavior and support the all-around monitoring of vehicles' real-time status. With on-board diagnostics, multiple positioning systems, bluetooth connectivity, and the suite of event-triggered alerts, the VG502 is an ideal solution for both fleet management and private use.



### On Board Diagnostics

Obtain accurate data on vehicles (mileage, fault code, ACC status, fuel consumption, battery voltage, engine speed, etc.)



### GPS & BDS Positioning

Two complementary positioning systems ensure that locations are accurately displayed on the cloud platform.



### Driving Behavior Analysis

Get instant alerts for 4 or 8 kinds of dangerous driving behavior depending on your needs.



### Multiple Alerts

Instant alerts for atypical events such as car fault, collision, speeding, device pull-out, geo-fence entry/exit, etc.



### Effortless Installation

Simply plug this device into the OBDII socket, you don't have to turn to professionals.



### BLE4.0 Supported

Configure parameters, upgrade software, and debug through Bluetooth connection.

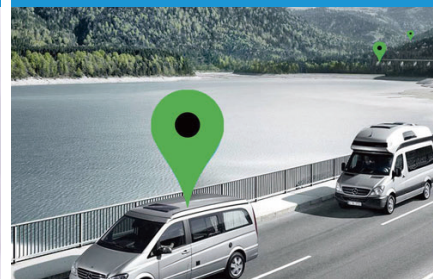
Fleet Management



Usage-based Insurance



Vehicle Tracking



## GNSS

Positioning system	GPS/BDS
Positioning accuracy	< 2,5m CEP
Tracking sensitivity	-162 dBm
Acquisition sensitivity	-148 dBm (cold) /-156 dBm (hot)
TTF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

## Cellular

Communication network	GSM
Frequency	B2/B3/B5/B8

## Power

Battery	50mAh/3.7V
Input voltage	9-36VDC

## Interface

LED indication	1 status indicator (Blue)
SIM	Nano-SIM
Data storage	4+4MB

## OBD port

Connection	OBD II
Data	K-Line, CAN Bus
OBD protocols	ISO 9141-2 (5 baud init, 10,4 kbaud)      ISO 14230-4 KWP (5 baud init, 10,4 kbaud) ISO 14230-4 KWP (fast init, 10,4 kbaud)      ISO 15765-4 CAN (11 bit ID, 250 kbaud) ISO 15765-4 CAN (11 bit ID, 500 kbaud)      ISO 15765-4 CAN (29 bit ID, 250 kbaud) ISO 15765-4 CAN (29 bit ID, 500 kbaud)

## Physical specification

Dimensions	61 x 52 x 26mm
Weight	55g

## Operating environment

Operating temperature	-20°C to 70°C
Operating humidity	5%~95%, non-condensing

## Feature

Sensors	Accelerometer
Bluetooth	Support BLE 4.0 protocol
Ignition detection	External power voltage
Scenarios	Vehicle movement alert, Overspeed alert, Geo-fence, Vehicle battery detection, Power supply disconnection
Driving behavior analysis	Harsh acceleration, Harsh braking, Harsh cornering, Collision