



VL502

LTE OBDII GNSS Tracker

The VL502 is a new generation of 4G Cat 1 OBD II tracker for corporate cars, usage-based insurance, fleet management, and individual cars, which can obtain vehicle data such as VIN code, engine speed, water temperature, accumulated mileage, etc. With the UBI-based algorithm for driving behavior analysis, the VL502 can accurately analyze any of 4 kinds of dangerous driving behavior and support the all-round monitoring of vehicles' real-time status.



LTE & GSM Network

Communication via 4G LTE networks with 2G GSM fallback.



On Board Diagnostics

Obtains real data of vehicle (fault code, ACC status, fuel consumption statistics, battery voltage, engine speed, etc.)



GPS & BDS Positioning

Two complementary positioning systems ensure the locations to be accurately displayed on 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, overspeed, ignition detection, collision, geo-fence entry/exit, etc.



Effortless Installation

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

Fleet Management



Usage-based Insurance



Auto Dealers



GNSS

Positioning system	GPS/BDS
Frequency	L1
Positioning accuracy	<2.5m CEP
Track sensitivity	-162 dBm
Acquisition sensitivity	-148 dBm (cold) /-156 dBm (hot)
TTFF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

Cellular

Communication network	LTE + GSM
Frequency	VL502 (L): LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66 GSM: B2/B3/B5/B8 VL502 (E): LTE-FDD: B1/B3/B5/B7/B8/B20/B28 GSM: 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	8+16MB

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 (fast init, 10.4 kbaud) ISO 15765-4 CAN (11 bit ID, 500 kbaud) ISO 15765-4 CAN (29 bit ID, 500 kbaud) SAE J1939 CAN(29bit ID, 500kbaud)	ISO 14230-4 KWP (5 baud init, 10.4 kbaud) ISO 15765-4 CAN (11 bit ID, 250 kbaud) ISO 15765-4 CAN (29 bit ID, 250 kbaud) SAE J1939 CAN(29bit ID, 250kbaud)

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
Ignition detection	External Power Voltage
Scenarios	Car Fault, Over-Speed, Ignition detection, Collision, Geo-fence entry/exit, Power on, Device pull-out, Engine idling
Driving behavior analysis	Harsh acceleration, Harsh braking, Harsh cornering, Collision