



# VL502

## LTE OBDII GNSS Tracker

The VL502 is a new generation of 4G Cat 1 OBDII 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.



Fleet Management



Usage-based Insurance



Auto Dealers



### LTE & GSM Network

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



### On-Board Diagnostics

Obtain real data of vehicle (accurate mileage, 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 the OBDII socket, you don't have to turn to professionals.

## Standard Configuration

### Positioning & Location

Technology	GPS, GLONASS, BDS, GALILEO, AGPS, LBS
Accuracy	<2.5m CEP
Tracking sensitivity	-165 dBm
Acquisition sensitivity	-148 dBm (cold); -156 dBm (hot)
TTF (open sky)	Avg. hot start ≤ 2sec; Avg. cold start ≤ 38sec

### Cellular

Technology	4G Cat 1, 2G (GSM) VL502 (L): LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66
Frequency	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
Power consumption	Standby: ≤ 5mA

### Operating environment

Operating temperature	-20 °C to +70 °C
Operating humidity	5% to 95%, non-condensing
IP rating	N/A

### Physical specification

Dimensions	61 x 52 x 26mm
Weight	55g

### Interface

LED indication	Status (Blue)
SIM	Nano-SIM
Digital I/Os	N/A
Analog I/Os	N/A
Voltage detection	0-36V (±0.3V)
Memory capacity	1000 GPS data entries
USB	Micro USB
GNSS antenna	Internal
Bluetooth antenna	Internal
Serial ports	N/A

### OBD Port

Connection	OBDII port
Data	K-Line, CAN Bus 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)
OBD protocols	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) SAE J1939 CAN(29 bit ID, 250 kbaud) SAE J1939 CAN(29 bit ID, 500 kbaud)

### Feature

Voice monitoring range	N/A
Sensors	Accelerometer Car Fault, Over-Speed, Ignition detection,
Scenarios	Collision, Geo-fence entry/exit, Power on, Device pull-out, Engine idling
Driving behavior analysis (DBA)	Harsh acceleration, Harsh braking, Harsh cornering, Collision
Bluetooth	BLE 4.2
Configuration support	SMS, Tracksolid Pro, PC Tools
Certification	CE, FCC, RoHS

## Optional Configuration\*

### Inertial Measurement Unit (IMU)

\*Optional Configuration required to be customized or purchased separately.