



# 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

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

### Cellular

<b>Technology</b>	4G Cat 1, 2G (GSM) VL502 (L): LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66
<b>Frequency</b>	GSM: B2/B3/B5/B8 VL502 (E): LTE-FDD: B1/B3/B5/B7/B8/B20/B28 GSM: B2/B3/B5/B8

### Power

<b>Battery</b>	50mAh/3.7V
<b>Input voltage</b>	9-36VDC
<b>Power consumption</b>	Standby: ≤ 5mA

### Operating environment

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

### Physical specification

<b>Dimensions</b>	61 x 52 x 26mm
<b>Weight</b>	55g

### Interface

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

### OBD Port

<b>Connection</b>	OBDII port
<b>Data</b>	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)
<b>OBD protocols</b>	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

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

## Optional Configuration\*

### Inertial Measurement Unit (IMU)

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