



VL502 (A)

LTE OBDII GNSS Tracker



The VL502 (A) is a new generation of 4G Cat M1 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 (A) can accurately analyze any of 4 kinds of dangerous driving behavior and support the all-round monitoring of vehicles' real-time status.



LTE Cat M1 Network

Stable communication via IoT-specific 4G LTE network.



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.



BLE4.0 Supported

Through bluetooth connection you can configure parameters, upgrade software, and debug.



Multiple Alerts

Instant alerts for atypical events such as vehicle movement, speeding, 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

Fleet Management



Usage-based Insurance



Auto Dealers



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	LTE Cat M1 & NB
Frequency	Cat M1: B2/B4/B5/B12/B13 Cat NB2: B2/B4/B5/B12/B13

Power

Battery	160mAh/3,7V
Input voltage	9-36VDC

Interface

LED indication	3 status indicator
SIM	Nano-SIM
Data storage	4+4MB

OBD port

Connection	OBDII port
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) SAE J1939 CAN (29bit ID, 250kbaud) SAE J1939 CAN (29bit ID, 500kbaud)

Physical specification

Dimensions	65 x 50 x 25mm
Weight	65g

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, Ignition detection, Speeding, Collision, Geo-fence entry/exit, Vehicle battery detection, Power supply disconnection
Driving behavior analysis	Harsh acceleration, Harsh braking, Harsh cornering, Collision