



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.



Fleet Management



Usage-based Insurance



Auto Dealers



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.



Driving Behavior Analysis (Basic)

Receive alerts when any of 4 kinds of dangerous driving behavior is detected.



Multiple Alerts

Instant alerts for atypical events such as car fault, overspeed, ignition deflection, 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	-162 dBm
Acquisition sensitivity	-148 dBm (cold); -156 dBm (hot)
TTF (open sky)	Avg. hot start ≤ 1sec; Avg. cold start ≤ 32sec

Cellular

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

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)

Power

Battery	180mAh/3,7V
Input voltage	9-36VDC
Power consumption	Standby: ≤ 5mA

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	4000 GPS data entries
USB	Micro-USB
GNSS antenna	Internal
Bluetooth antenna	Internal
Serial ports	N/A

Feature

Voice monitoring range	N/A
Sensors	Accelerometer Vehicle movement alert, Ignition detection, Speeding, Collision, Geo-fence entry/exit,
Scenarios	Vehicle battery detection, Power supply disconnection
Driving behavior analysis (DBA)	Harsh acceleration, Harsh braking, Harsh cornering, Collision
Bluetooth	BLE 4.2
Configuration support	SMS, Tracksolid Pro, PC Tools
Certification	FCC

Operating environment

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

Physical specification

Dimensions	65,0 x 50,0 x 25,0mm
Weight	65g

Optional Configuration*

OBDII sensor

*Optional Configuration required to be customized or purchased separately.