Jimi IoT

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)
TTFF (open sky)	Avg. hot start ≤ 2sec; Avg. cold start ≤ 38sec

Cellular

Technology	4G Cat 1, 2G (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	9-33VDC
Power consumption	Standby: ≤ 5mA

Operating environment

Operating temperature	−20℃ to +70℃
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	0–33V (±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
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(29 bit ID, 250 kbaud)
	SAE J1939 CAN(29 bit ID, 500 kbaud)

Feature

Voice monitoring range	N/A
Sensors	Accelerometer
Scenarios	Car Fault, Over-Speed, Ignition detection, 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.