



VL501

LTE Vehicle Terminal

The VL501 is a plug-and-play tracker with GNSS, LTE, and Bluetooth connectivity. With a cigar lighter power connector, it is easy to install on virtually any vehicle. It is an ideal choice for individuals as well as fleet managers who would like to track their vehicles in applications such as courier delivery, car rental and leasing, insurance telematics (UBI), and more. The considerate design of the USB-A and Type-C ports make the charge of other devices like cellphone much more convenient; while the OTA makes firmware upgrade easier.



Usage-based Insurance



Fleet Management



Auto Dealers



Plug and Play

Easy to install via the cigarette lighter power connector.



Driving Behavior Analysis (Basic)

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



Remote Listen-in (NA only)

Inconspicuous mic allows for remote audio monitoring of the environment around the device.



Fast Charging Design

Fast charge other devices via the USB or Type-C port using advanced technologies or protocols.



Panic Button

Contact dispatch or emergency support with a discreet, in-cabin SOS button.



Multiple Alerts

Alert drivers on the very first position fix, speeding, driver fatigue, or entering or leaving a geofence via a buzzer.

Standard Configuration

Positioning & Location

Technology	GPS, GLONASS, BDS, AGPS, QZSS
Accuracy	<2,5m CEP (open sky)
Tracking sensitivity	-165 dBm
Acquisition sensitivity	-148 dBm (cold) / -157 dBm (hot)
TTF (open sky)	Avg. hot start ≤ 1sec; Avg. cold start ≤ 32sec

Cellular

Technology	4G Cat 1, LTE M1 & NB2
	VL501-N: LTE-FDD (Cat 1): B2/B4/B5/B12/B13
Frequency	VL501-J: LTE-FDD (Cat M1 & NB2): B1/B3/B8/B18/B19/B26

Power

Battery	50 mAh/3.7V
Input voltage	9-36VDC
Power consumption	Sleep: typ. ≤12V/15mA GPS and cell enabled: typ. ≤12V/120mA

Operating environment

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

Physical specification

Dimensions	70.0 x 52.0 x 82.5 mm
Weight	60g

Interface

LED indication	Power (Red); SOS (Blue)
SIM	Nano-SIM
Digital I/Os	N/A
Analog I/Os	N/A
Memory capacity	1000 GPS data entries 1*USB-A (for quick charge)
USB	1*Type-C (for quick charge, upgrade, and debugging)
GNSS antenna	Internal
Bluetooth antenna	Internal
Serial ports	N/A

Feature

Voice monitoring range	≤5 meters
Sensors	Accelerometer and gyroscope
Microphone	Internal
Firmware update	OTA Collision alert, Low external power alert, Vibrating alert, Unplug alert, Installation alert,
Scenarios	Speeding alert, Fatigue driving alert, Geo-fence entry/exit alert
Bluetooth	BLE 4.0
Configuration support	SMS, Tracksolid Pro, PC Tools
Certification	CE, FCC

Optional Configuration*

N/A

*Optional Configuration required to be customized or purchased separately.