



VL103D

LTE GNSS Terminal

Compact size with great power, the VL103D is a discreetly-installed, fully-featured tracker with LTE, GNSS, RS485 interface and the IP66 waterproof rating. LTE communication with GSM (2G) fallback ensures a solid connection in almost all cases, and the wide 9-90V input voltage range is compatible with virtually any vehicle. It is a perfect tracker for a wide range of use cases – stolen vehicle recovery and the management of motorcycles, passenger cars, and light commercial vehicles.



LTE & GSM Network

Communication via 4G LTE networks with 2G GSM fallback.



Configurable Input/Output

Set to alarm button status monitoring by default, also configurable as an extra digital output.



Car Battery Protection

Automatically stop drawing power from the car battery when it drops near the threshold.



IP66 Dust & Water Resistance

Rugged design ensures continued optimal performance, even in the toughest conditions.



RS485 Interface

RS485 interface extends more device usage scenarios.



Driving Behavior Analysis (Basic)

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

Fleet Management



Stolen Vehicle Recovery



Motorcycle Tracking



GNSS

Positioning system	GPS+BDS+LBS
Positioning accuracy	< 2,5m CEP
Tracking sensitivity	-165dBm
Acquisition sensitivity	-148dBm
TTF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

Cellular

Communication network	LTE Cat 1/GSM
Frequency	VL103D (L): LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28 GSM: B2/B3/B5/B8 VL103D (E): LTE-FDD: B1/B3/B7/B8/B20/B28 LTE-TDD: B34/B38/B39/B40/B41 GSM: B2/B3/B5/B8

Power

Battery	270mAh/3.7V industrial-grade Li-Polymer battery
Input voltage	9-90VDC

Interface

LED indication	GNSS (Blue), Cellular (Green), Power (Red)
SIM	Micro-SIM
Digital inputs	ACC
Digital outputs	Relay
Configurable I/O	SOS (configurable as an extra digital output)
ADC	0-5V ADC detection

Physical specification

Dimensions	92.0 x 40.0 x 20.0mm
Weight	55.0g

Operating environment

Operating temperature	-20 C to +70 C
IP rating	IP66

Feature

Sensors	Accelerometer
Scenarios	Vehicle movement alert, Speeding alert, Geo-fence entry/exit, Vehicle battery detection
Driving behavior analysis	Harsh acceleration, Harsh braking, Harsh cornering, Collision