



# 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
Track sensitivity	-165dBm
Acquisition sensitivity	-148dBm
TTF (open sky)	Avg. hot start ≤ 1sec Avg. cold start ≤ 32sec

## Cellular

Communication network	LTE CAT1 /GSM
Frequency	<b>VL103D (L):</b> LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28 GSM: B2/B3/B5/B8 <b>VL103D (E):</b> 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