



# JM-VG01U

INS-aided Vehicle GNSS Tracker

The JM-VG01U is an advanced vehicle tracking device with great analytical capacity. With a 3-axis accelerometer and 3-axis gyroscope, it can detect 8 types of improper driving behaviors. Automatic computing based on an algorithm ensures the vehicle location even in non-GPS area. Its flexible and improved alert system increases safety and security while effectively reducing false alerts ratio.



### INS-aided GPS Tracking

Ensures constant tracking in the area with poor GPS signal or even without it.



### Driving Behavior Analysis (Advanced)

Acceleration, braking, cornering, sudden lane change, collision, skidding, rollover, roll & pitch.



### Mileage Accuracy $\geq 98\%$

Precise mileage calculation based on a unique algorithm, the mileage error can be less than 2%.



### 6-axis Accelerometer & Gyroscope

Sensitive detection of linear acceleration and angular velocity.



### Ignition Detection

Always keeps you informed of the ACC status of your vehicle.



### Panic Button

A button close to driver allowing him to ask for immediate help with just a single press.



### Remote Cut-off (Fuel/Power)

Immobilize a vehicle by cutting off its power source/fuel supply through an installed relay.



### IP65 Dust & Water Resistance

Rugged and reliable design ensures stable operation in tough conditions.

Usage-based Insurance



Auto Finance



Fleet management



## GNSS

Positioning system	GPS, GLONASS, GALILEO
Frequency	L1
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	GSM
Frequency	Quad-band 850/900/1800/1900 MHz

## Power

Battery	450mAh/3.7V industrial-grade Li-Polymer battery
Input voltage	9-36VDC

## Interface

LED indication	GNSS (Blue), Cellular (Green), Power (Red)
SIM	Micro-SIM
Data storage	32+32Mb
Digital inputs	ACC, SOS
Digital outputs	Relay

## Physical specification

Dimensions	80.0 x 67.0 x 16.0 mm
Weight	63g

## Operating environment

Operating temperature	-20 C to +70 C
Operating humidity	5%~95%, non-condensing
IP rating	IP65

## Feature

Voice monitoring range	≤ 5 meters
Sensors	Accelerometer and gyroscope
Scenarios	Vibration alert, Vehicle movement alert, Over-speed alert, Geo-fence, SOS call, Power supply disconnection
Driving behavior analysis	Harsh acceleration, Harsh braking, Harsh cornering, Sudden lane change, Collision, Skidding, Rollover, Roll & pitch