



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)

Receive alerts when any of 8 kinds of dangerous driving behavior is detected.



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

Constant, real-time ACC/ignition status from the vehicle.



Panic Button

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



Remote Cut-Off (Fuel/Power)

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



IP65 Dust & Water Resistance

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

Usage-based Insurance



Auto Finance



Fleet management



GNSS

Positioning system	GPS/GLONASS/GALILEO, LBS assisted INS (inertial navigation system)
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

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