



VT801

Vehicle Tracking Device

FEATURES

Supports GPS,
GLONASS, BeiDou,
Galileo

Supports 2G/3G

I/O Interfaces

Geo-Fencing

Notification Alerts

SOS or Tamper

Immobiliser

Motion Sensor

IP67 Rated Protection

Over the air
configuration
and upgrade

COMPETITIVE PRICE WITH CUTTING EDGE TECHNOLOGY

The VT801 is an affordable compact size vehicle tracking device with an IP67 fully-sealed waterproof enclosure and wide voltage input range with power surge suppressor allowing the device to be installed on any 12/24V vehicles including motorcycles.

The 72-channel high sensitivity GPS receiver with concurrent reception of up to 3 GNSS system (GPS/Galileo with GLONASS or Beidou) provides better accuracy using multiple constellation simultaneously. The AssistNow Offline allows the device to predict the satellites in orbit above and reduce the time-to-first-fix which improves overall performance of the GPS especially coming out from covered or basement car parks and in urban canyons.

The superior internal antennas for both cellular and GPS including the low noise amplifier (LNA) for GPS signals eliminates the need for external wired antennas and makes the device easy to install virtually anywhere in the vehicle. The emulated ignition mode allows the device to determine the engine running status without physical wiring to the vehicle ignition and the optional OBD connector allows the device to be easily connected to the vehicle OBD2 port without any physical wiring to the vehicle battery for power source.

INTELLIGENT AND FLEXIBLE TRACKER WITH EFFICIENT PROTOCOL

The VT801 is built with an intelligent adaptive location tracking algorithm that minimizes the number of location updates without compromising on the accuracy of the location tracking. With a compact and efficient communication protocol, the device utilizes minimal data well suited for our Global M2M Data SIM making it cost effective to operate anywhere in the world.

With 2 digital inputs, 1 analog input, 2 outputs, 1-Wire® and RS232 interface, the device caters for flexible connectivity with various external sensors. The on-board edge processing engine continuously monitors for power-cut, low battery, over-speed, shock, geo-fencing and inputs and triggers immediate alerts.



EMBEDDED SIM WITH WORLDWIDE COVERAGE

The VT801 is built with an embedded SIM (eSIM) for higher reliability and security. The eSIMs have a longer lifespan and can withstand high temperatures, shocks and vibrations. As the eSIMs are soldered directly on the device, it is impossible to remove the eSIMs for misuse and protects our partners from their competitors taking control of the devices and thus their customer accounts. The eSIMs also provide for easy over-the-air switching of the SIM profiles to other operators.

The M2M SIM provides worldwide coverage using more than 450 network operators in over 190 countries. Multiple operators in certain countries ensure full network coverage within the country. The low data usage on the M2M SIM enables the device to operate at a lower cost compared with most local SIMs within the country and even lower for cross border operations.

DEVICE MANAGEMENT PLATFORM

The devices are integrated with our Device Management Platform within a virtual private cloud for secured 2-way communications. The platform provides activation and deactivation of the devices, over-the-air configuration parameters, remote commands and firmware upgrades. The platform also provides integration to 3rd party telematics applications. The platform allows our partners to easily manage and configure their fleet of devices and monitor the connectivity status of the devices.

SPECIFICATION

PHYSICAL

Dimensions	100 x 48 x 20mm
Weight	75g
Built-in Memory	4 MB
SIM	MFF2 embedded
Protocol Support	TCP, UDP, SMS, USSD

INPUT/OUTPUT

Digital Input	2
Analog Input	1
1-Wire® Interface	1
RS232 Interface	1
Digital Output	2
Status LED	Power, GPS, Cellular

ENVIRONMENTAL

Temperature	-20° to +75°C (operating) -40° to +85°C (storage)
Humidity	5% to 95% non-condensing
Enclosure	Waterproof IP67 compliant

ELECTRICAL

Input Voltage	9-50 V DC with surge suppressor
Backup Battery	Li-Polymer 105mAh

	VT801-3G	VT801-3GA	VT801-3GW
GSM Specification			
Network	2G and 3G	3G Only	2G and 3G
Operating Frequencies	GSM 900/1800 MHz UMTS 900/2100 MHz	UMTS 850/1900 MHz	GSM 850/900/1800/1900 MHz UMTS 800/850/900/1900/2100 MHz
Transmitter Power	GSM: 900 Class 4 @ 33 dBm ± 2dB GSM: 1800 Class 1 @ 30 dBm ± 2dB UMTS: Class 3 @ 24 dBm +1.7 / -3.7dB	UMTS Class 3 @ 24 dBm +1.7 / -3.7 dB	GSM 850/900 Class 4 @ 33 dBm ± 2dB GSM 1800/1900 Class 1 @ 30 dBm ± 2dB GSM 850 / EGSM 900 Class E2 @ 27dBm ± 3dB DCS 1800 / PCS 1900 Class E2 @ 26 dBm ± 3dB UMTS Class 3 @ 24 dBm +1.7 / -3.7dB
Data Rate	HSPA: 7.2 Mbps (DL) / 5.76 Mbps (UL) GPRS Class 12: 85.6 Kbps UMTS: 384 Kbps	HSPA: 7.2 Mbps (DL) / 5.76 Mbps (UL) UMTS: 384 Kbps	HSPA: 7.2 Mbps (DL) / 5.76 Mbps (UL) Edge Class 33: 296 Kbps (DL) / 236.8 Kbps (UL) GPRS Class 33: 107 Kbps (DL) / 85.6 Kbps (UL) UMTS: 384 Kbps
Cellular Antenna	Built-in	Built-in	Built-in
GPS Specification			
GPS Receiver	72 Channels GPS/QZSS L1 C/A, GLONASS L10F BeiDou B1, Galileo E1B/C SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN		
Time to First Fix	Cold start: 26 s Aided start: 2 s Hot start: 1 s		
Sensitivity	Tracking & Navigation: -167 dBm Reacquisition: -160 dBm Cold start: -148 dBm Hot start: -157 dBm		
Location Update Rate	Single GNSS: up to 18 Hz 2 Concurrent GNSS: up to 10 Hz		
Horizontal Accuracy	2.0 m CEP		
GPS Antenna with LNA	Built-in		
Anti-Jamming	Active CW detection and removal		