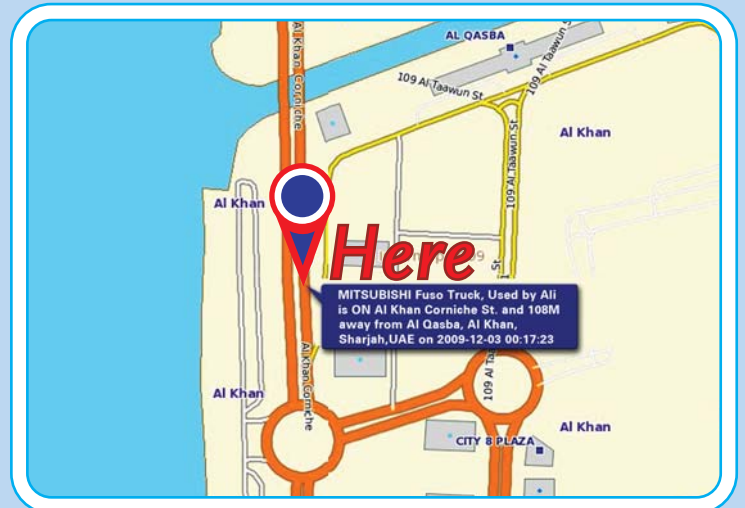


# Vehicle Tracking Solution



## Functional Overview

Informap Vehicle Tracker is a smart and reliable tracking system that allows you to track your vehicles and monitor its usage in real-time from anywhere in the world through the internet.

Using our web application interface, you can visualize the exact location of your vehicle on our high quality maps. The status table shows operational status of all your vehicles together with speed, location, and distance travelled. You can use reporting functionality to generate asset usage, speed, moving, idling, parking and distance reports. You can also check your vehicle location and status by SMS or by making a miss call.

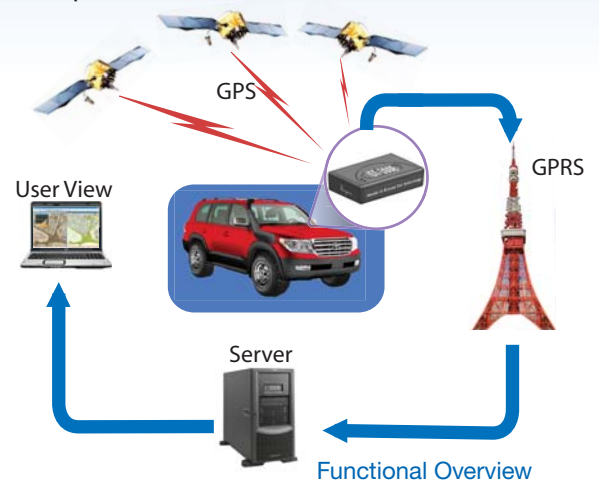
In addition, we offer custom reports depending on your specific company's business requirements. You can also use our advanced functionality to receive alerts when your vehicle enter pre-defined zones like border posts and immobilize them safely by disabling the engine when vehicle is parked.

## How does it work?

We install tracking device securely hidden under your vehicle's dashboard, powering it from the car battery. The device has a GPS module and a GPRS enabled SIM card that can transfer the data to a predefined server. We recommend using Etisalat SIM card with a pre-defined data package of 10MB for 2 minute polling interval.

The tracking device, upon activation, obtains vehicle's GPS position from the GPS satellites and other pre-set events from the vehicle such as engine status, date, time, speed etc and sends it to our Communication Server using GPRS data transfer method. The polling interval is normally set to 2 minutes when engine is ON and 30 minutes when engine is OFF. This means that the device is programmed to send location and vehicle data every 2 minutes when vehicle's engine is TURNED ON and every 30 minutes when engine is OFF i.e. when vehicle remains parked.

Upon receiving data from the device to our communication server, we process the data and enter them in a relational database system. Each vehicles data is kept online for your use upto one year. After that, your vehicle data is copied to a DVD and delivered to you for your archive. We treat your vehicle data secure and strictly confidential and is made available to your company's authorized personnel only. In order to monitor your vehicle, you login to web application [www.wherereyou.ae](http://www.wherereyou.ae). It allows you to see vehicle on map and produce current and historical reports.



## Key Features

- GPS-Tracking device is installed in the vehicle, concealed and tamper proof
- Our up-front cost and monthly costs are significantly lower and cost effective
- Your Fleet coordinator can view vehicle location & its detailed usage online
- Our map is fresh, accurate and very detailed up to building and street level
- You can register the handset for SMS tracking and receive date, time, location and distance of vehicle to the nearest landmark by making a miss call.

# Benefits of Using a Tracking System

Tracking System offers a number of benefits depending on your business needs. Some of the Key benefits are listed below:

- **Huge Saving on Telephone Bills:** There is no need for you to call driver/sales person to know where he/she is. You can simply see their position on the map, refreshed every 2 minutes
- **Make Detailed Vehicle Usage Report:** This report shows the moved time, stopped time, parked time, number of km travelled, maximum speed, minimum speed etc.
- **Saving on Fuel usage:** Since you can find out exactly the daily mileage from our vehicle usage reports, the petrol bills can be monitored against usage. By stopping idling time during loading & unloading, you can help reduce the fuel usage too!
- **Avoid Vehicle Abuse:** Make company vehicles used only for business purpose. By monitoring them, you can avoid company vehicle used for non-business use after office hours and during holidays
- **Overtime Claims:** You do not be at the mercy of the claimant. You have a ready report that tells where vehicle was parked during the overtime claim. No more invalid claims!
- **Ability to immobilize vehicle if stolen:** In the event your vehicle is being stolen, you are first able to monitor your vehicle as it is driven and stop engine as it is stopped. In the event of reaching a border post, you can set a trigger to send SMS alert for your to take appropriate action by informing the police or immobilize when parked.
- **Advanced functionality:** Monitoring door open/close, fuel lid open, SOS alert from the vehicle and two-way communication with you and the driver.

## Product Specification IST-200E

### External Interface

Power & I/O Events	10pin wire connection
Serial communication	RS-232 connection (option)
Debugging	18 pin connector
Battery interface	3 pin connector (option)
LED Indicator	GSM & GPS operation indication
GSM & GPS Antenna	Internal Antenna type

### General & GPRS Specification

Power Supply	DC 8 ~ 30 V, * Main - power +/- inversion protection.
Surge Protection	Up to 3.000 watt peak pulsepower, Stronger protection as an option.
Power Consumption	Active mode Sleep mode (w/w battery) Sleep mode (w/o battery)
Frequency / Sensitivity	GSM 850 / 900MHz -104dBm DCS1800 / PCS1900MHz -102dBm
Temperature Range	-20°C ~ +80°C
AT Command	GSM 07.07 , 07.05
GPRS	Multi-slot Class 12 Support all 4 coding schemes (CS-1, CS-2, CS-3 and CS-4)
Back-up Battery (opt.)	Rechargeable 4.2V, Ni-MH Battery- 800mAh
Event Output	Siren, Blocking (Open collector-output of up to 500mA) * Output lines protection : Transient voltage suppressor.
Event Input	Ignition: 6 ~ 30V[ON], 0 ~ 5V[OFF] Door sensor, Panic: 0.8~30V[High], 0 ~ 0.7V [Low] *Input lines Protection: Inversion & ESD.
Dimension	87 x 57 x 19 mm (w/o battery)
Weight	87 x 57 x 23 mm (w/w battery) 70 g (w/o back up battery) 120 g (w/w back up battery)
Approval	CE, FCC, RoHS, GCF ( Option)

### GPS Receiver Specification

Receiver Type	50-channel U-Blox 5 engine GPS L1 C/A Code SBAS : WAAS, EGNOS, MASA, GAGAN
Update Rate	1Hz
Accuracy	Position        2.5m CEP SBAS            2.0m CEP

Acquisition	Cold starts    29 s Warm start    29 s Aided start    <1 s Hot start       <1 s
Sensitivity	Tracking       -160dBm Reacquisition -160dBm Cold start      -144dBm Single voltage supply : 2.8V or 3.0V
Supply Voltage	: 2.8V or 3.0V
Digital I/O Voltage Level	64mW [Tracking]
Power Consumption	Voltage range : 3.2 to 4.2V
Back-up Supply	Patch Antenna
Antenna type	-40 ~ +85°C
Operating Temp.	

### Available Operation / Features

Configuration	either by SMS or PC
Parameter Change	either by SMS or GPRS
Command /Control	either by SMS or GPRS
Reporting	either by GPRS or SMS (as a back up)
GPRS Communication	TCP
GPRS Connection	either always connected or upon needed
Reporting Interval	Geo-fencing/ parking lock, Low back up battery, Low main battery, Route deviation, Over speed, Panic button, Specific sensors triggered.
Basic Data reported	NMEA location, Speed, Course, GPS signal status, Events, GSM Cell ID, Message No.
Data Storage	up to 2,000 locations, in case of transmission failure or cost issue
Security Alarm	adjustable, either at pre-set time interval or at pre-set distance interval or by automatic adjustment depending upon vehicle speed or making possible only when command comes
IP Back up	possible (dual IP reporting)
Back up Battery	optional
Voltage check	main battery
Power down	sleep (less than 10mA) and / or stopping unsuccessful communication trial
Geo-fencing	Rectangular or circular up to 50 points
Firmware Upgrade	by OTA (Over The Air )
SIM Management	by IMSI No or Phone No

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