



PRODUCT OVERVIEW

## Vehicle Security & Surveillance System

Securing your Employees with an innovative use of GPS Tracking & Fleet Management



- Vehicle occupants' authorization
- Check vehicle movement against
  - Allocated Route
  - Pick up Sequence
- Vehicle immobilization on alerts
- Real time monitoring of vehicle's cabin
- Replay event history
- Route planning & trip charting
- Comprehensive fleet management
- Manage multiple suppliers
- Panic/SOS alerts/alarms
- Back-office integration
- 24x7 support/command center

*Care for your employees' secure travel. Make them feel special.*

Agnicient's Vehicle Security Surveillance System (VS-3) is an integrated vehicle tracking, dispatch & fleet management system combined with unique security features to secure the travel of your employees. It is based on the simple principle of raising an alarm and immobilizing the vehicle in various situations of alerts.

It leverages commonly used technologies like Global Positioning Systems, GPRS & Satellite communications and GSM Short Messaging Service to combine components that build a robust vehicle surveillance system integrated with GPS tracking,

The integrated environment of Agnicient's VS-3 offers an easy-to-use graphical interface to the clients, similar to that

of an easy-to-use self-service portal like an internet banking site, allowing businesses to manage their fleet of vehicles. Businesses can allocate trips, plan routes, allocate drivers and passengers, monitor & report usage, diversions, malice intentions and violations. Alerts triggered during a pre-defined incident occurrence are routed through SMS, emails, Web and phone to authorized personnel for a quick action.

## PRODUCT HIGHLIGHTS

Agnicient's VS-3 enables companies to implement an efficient solution that provides security for the employee travelling in company provided cabs and vehicles. The solution seamlessly integrates online tracking, dispatch and fleet management component to provide companies with an end-to-end vehicle management system.

The system comprises of an in-vehicle intelligent processing unit (IPU) with a 7-inch display. The unit is monitored by a web-based console that can be used to plan, allocate, monitor and report vehicle resources and trip routes. The backend command center is a 24x7 monitoring station that can view and monitor various aspects of the fleet in operation – trips made, current vehicle position, current pick up statuses, violations and alarms.

The system provides interactive two-way communication between the web-based console/command center and the vehicle's IPU. The robustness of the device allows it to operate from 10°C to 60°C and in humid and dusty conditions.

The VS-3 can be used in diverse industries for managing moving assets – Logistics & Distribution, BPOs, Call Centers, ITeS,

Warehousing, Transportation, Public Transports, Schools & Colleges, and Defence etc.

## MANAGE YOUR FLEET EFFECTIVELY & IN REAL TIME

Empower your Logistics or Administration users to create, publish, and manage trip routes dynamically and publish this information in real-time to the vehicles IPU for display inside the vehicle. You can-

1. Create suppliers and fleet
2. Choose employees for travel
3. Create trip routes and allocate routes to chosen vehicle
4. Create authorized drivers for each vehicle/route
5. Define travel times, stop times and wait times
6. Monitor vehicle usage
7. Plan daily, weekly or monthly trip charts based on vehicle availability, breakdown or maintenance schedules
8. Create custom alert actions to any number of company employees, managers and policing

authorities triggered on alarm/SOS situations.

9. Verify authenticity of the driver and passengers

The fleet management component along with real-time GPS-based tracking system, allows for advanced dispatch functionalities to be implemented. Taking advantage of the one-time communication link between the vehicle and the command center, that is activated before the vehicle starts its' trip, you can upload all trip related information to the IPU of the vehicle. The IPU uses this information to display authorized drivers, passengers and the routes along with various times, which is used by the occupants of the vehicle to verify their safety. You can upload the following information at the start of each trip remotely from the web-based console provided or the command center-

1. Detailed driver information – Driver's Photo, License No., Height, Name etc.
2. Individual passenger information – Name, Employee No., Pick-up point, Drop-off point.
3. Trip Route – Start Point, pick-up sequence, estimated trip time, start time and end time

Once the driver starts his vehicle and authenticates himself using the swipe card reader provided inside the vehicle, the IPU synchronizes with the command server/message server to get the latest trip information. The information is then used by the drivers and the passengers to ensure that their safety is being monitored and that the occupants in the vehicle are authorized persons.

## SECURITY IS THE PRIMARY CONCERN

The VS-3 provides various components that secure the occupants in the vehicle. The most important security check is verifying the authenticity of the driver and this is done by ensuring that the driver's photograph is always displayed on the display. This can be used by the passengers to verify the authenticity of the driver.

The driver can also verify the passengers, as each passenger is required to swipe their cards on the magnetic swipe card reader. The VS-3's IPU matches the information stored on the card with its database and authorizes the passenger by highlighting his name on the screen.

Subsequent passengers can hence be assured that their co-passengers are indeed employees of the organizations as they can easily correlate the number of occupants with the highlighted names on the screen.

The VS-3 also comes with a webcam inside the vehicle that sends snapshots of the cabin every 5 seconds to the backend. These pictures are monitored real time by the 24X7 command center and on spotting any mischief an instant alarm can be raised. The images can also be used to check the cabin details historically for information related to a particular time.

Using a cleverly placed SOS press-switch button inside the cabin, any of the occupants of the vehicle can trigger an alert and raise an alarm, if they feel a sense of insecurity. The button, when pressed, sounds the car alarm to alert passersby. It also triggers an alert sequence that would send an SMS, Email or a phone call to pre-defined authorized personnel. The command center of VS-3 would be able to observe the alert in real-time and take preventive steps immediately.

Most importantly the vehicle is fitted with a remote

disabling device with would disable the mobility of the vehicle as soon as an alert is sounded off to the command center. So, either on deviation of the vehicle from an authorized route or on pressing of the emergency switch by a passenger, the command center would disable the vehicle bringing it to a standstill.

## EFFECTIVE ROUTE MANAGEMENT AND VEHICLE DISPATCH

The in-vehicle GPS system records routes taken by the vehicle and also scores of other telemetric data available from the vehicle, which can be all later used for historic analysis and route planning. The on-board memory allows for storage of up to 30 days of data recorded from the vehicle. The route can then be planned accordingly and the same is programmed onto the IPU inside the vehicle.

After the route has been programmed and the vehicle has been dispatched, the GPS device inside the vehicle uses digitized vector mapping for

tracking its own position on the digital maps. The accuracy of this tracking is up to +/- 10 feet. Using a steady GPRS connection, the GPS position of the vehicle is also transmitted to the command center and the control room thereby enabling a near real-time tracking of the vehicles position from a remote position.

If the vehicle deviates from the programmed route, the command center is instantly alerted, following which an appropriate action can be considered by the authorized personnel and if the need arises, the same action can be taken remotely.

The stored information relating to both the vehicle and the routes taken can also be used to effectively plan optimum utilization of Fleet and Driver resources. Using the available data, the system can plan the best utilization of the available free vehicles. The system also supports multiple modes of vehicle dispatch such as scheduled dispatch, ad-hoc automated dispatch and manual dispatch.

The two way communication between the vehicle (driver) and the command center ensures that all dispatches are properly managed and the best

utilization of fleet is done at all times.

## **FLEET OPERATIONS – IN TOTAL CONTROL**

The VS-3 solution comes with extensive reporting and MIS capabilities thus ensuring that the fleet manager is in total control of all aspects of his fleet resources.

Some of the available reports on the VS-3 system are –

- › Real-time / scheduled fleet reporting
- › Stop Report, Mileage-by-shift/route report
- › Daily tracking with event report
- › Violations report – Speed, Stops, Route diversions etc
- › Supports Ad-hoc reporting capabilities
- › Customized Reports & More....

Apart from these, the system also can be used as an information management system, handling diverse information such as Employees / Drivers / Vehicles / Suppliers information.

The system is also capable of

data recording. The data recorded thus can be used for various processes such as vehicle performance management, driver performance rating and vehicle maintenance scheduling.

## **PREMIUM OFFERINGS FOR ENHANCED EXPERIENCE**

The VS-3 solution also comes up with add-on premium features all of which ensures an enhanced experience. Some of the available premium features are –

- › High Resolution display units enabling GPS based navigation facility
- › Access to road maps
- › Virtual Storage of data
- › ASP model access to base station
- › In-vehicle Internet browsing facility
- › On board advertising display
- › Automatic wireless downloads



## ***Ordering Information***

Please contact [sales@agnicient.com](mailto:sales@agnicient.com) for customized part ordering information.

## ***System Requirements***

*Any Internet Connected PC*

*Agnicient is a business technology consulting and services company, headquartered at New Jersey, USA. Incepted in 1999, Agnicient has since delivered innovative business solutions to its' worldwide clients. Other similar solutions from Agnicient include Fleet Management, Vehicle Tracking & Dispatch, Innovation Management Portals, Resource Management Portals, and Workflow Management & Document Management Systems.*

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