An ISO 9001:2008 Certified Company

Complete Power packed Telematics solution for Sand Mining and Transportation

All Vehicle Tracking Solutions Under One Roof

www.itriangle.in
Executive Summary

Geography
A Bangalore, India, based Company.

Company Inception
Commenced operations in February 2009...

Core Competence
Engaged in Design, Development in the domains of GPS, GIS, Mobile Applications, RFID, Web Based Enterprise Applications.

Research
A Full Fledged R & D wing with a dedicated team of qualified professionals.

Manufacturing
Manufacturing of GPS-GSM-RFID-Sensor based Tracking and Monitoring Systems.

Services
End to End Solution Providers in the field of Telematics that includes hardware, software and cloud/mobile based applications for various domains, Technology Consulting Services.
OUR VISION
To be a vibrant company, providing quality and efficient service to customers and a rewarding experience to its employees.

OUR MISSION
We will develop products and provide services that will have a Strong Social Impact and would improve the quality of Human Life. From a business perspective, our products/services will help our clients get a better control over their business and make a positive impact to their bottom-line.
Market Information

Economy
The Transportation and the Logistics industry play a critical role in shaping and improving a Country’s economy. Efficient Operations will lead to higher productivity and higher revenues.

Productivity
GPS-GSM-RFID based solutions will help Companies to effectively track and monitor the movement and the status of their fleet on a real time basis and thereby reduce malpractices, wastage, and thus improve productivity and security.

Benefit
The ability to provide Safety, Security and Productivity has made the GPS-GSM-RFID based products and services an integral part of the managing process of the Fleet in any organisation which intends to derive maximum benefit from their assets.

Recommended
We are moving to a situation where it is going to be mandatory for all the Vehicles that are being used for a commercial purpose should have a GPS based tracking device fitted into them.
**Existing Products**

- Fleet Management Systems
- Connected Car (OBD II)
- Taxi Rental Aggregator App
- Analytics and Modelling
- Usage Based Insurance

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**Automotive ($300M**)**

- Connected Car (OBD II)
- Taxi Rental Aggregator App
- Analytics and Modelling
- Usage Based Insurance

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**Global IoT Healthcare ($162B***)**

- Personal Tracking and Safety
- Wearable Health Monitoring
- Mobile Data Terminal

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**Upcoming Products (next 3-6 months)**

- Fleet Management Systems
- Connected Car (OBD II)
- Taxi Rental Aggregator App
- Analytics and Modelling
- Usage Based Insurance

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**Roadmap**

- **Total Addressable Market (TAM): $6 Trillion**
- **Geographies Served**
- **Customers**

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We have developed a next generation GPS tracking platform on which, a variety of products for different markets like transportation, asset tracking, geographical data acquisition, fleet management etc can be developed. The technology involves GPS, GSM, RFID and various sensors with web based control, tracking, and monitoring facilities on a Google map interface. It’s even possible to acquire data pertaining to the remote entities to which the tracker device is attached.

By extending the platform, we have developed a complete vehicle and fleet management solution in the brand name of aQuila Track, loaded with a complete range of applications and features that increases the business efficiency, productivity and the bottom-line of our Customers.
Software Solution Offerings

- Interactive Dashboard
- Device Status
- Live Tracking and Monitoring
- Current Summary
- History Tracking
- Travel Replay
- Geo Tagging & Geo Fencing
- Driver Management
- Locating Vehicles
- Alert Settings
- MIS Reports
- Trip Management

GPS - GSM - Based Vehicle Tracking Device

aQuiLa S101

aQuiLa TS101
# Technical Specifications

## Vehicle Tracking and Monitoring System

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>ARM CORTEX /M3</td>
</tr>
<tr>
<td>Memory</td>
<td>10000 Tracking Records on Solid State Flash, 100K Erase and Program Cycle, 10 year data retention.</td>
</tr>
<tr>
<td>GSM Module</td>
<td>Quad Band GSM 850/900/1800/1900Mhz, DCS GPRS: class10 Coding Scheme CS1 to CS4.</td>
</tr>
<tr>
<td>GPS Module</td>
<td>GPS: 66 acquisition/- 22 tracking channels, Ultra high tracking/navigation sensitivity: - 165dBm1, Inbuilt patch antenna, 5 Meters Accuracy.</td>
</tr>
<tr>
<td>Antennas</td>
<td>Internal Antenna</td>
</tr>
<tr>
<td>Communication Interface</td>
<td>TCP/IP on GPRS.</td>
</tr>
<tr>
<td>Record Storage/buffer</td>
<td>10000 Tracking Records.</td>
</tr>
<tr>
<td>Ports</td>
<td>1-USB Device type, 1 Analog I/O(fuel) and 2 Digital I/O, 1 Ignition Input</td>
</tr>
<tr>
<td>Configuration</td>
<td>Recording delay, transmission delay.</td>
</tr>
</tbody>
</table>

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Sensor</td>
<td>GPS(default)</td>
</tr>
<tr>
<td>SIM Interface</td>
<td>Supports SIM card: 1.8V &amp; 3V Micro SIM</td>
</tr>
<tr>
<td>SMS</td>
<td>Supports Text</td>
</tr>
<tr>
<td>GPRS Packet Data</td>
<td>Class 10 ; Class 8 (Optional), Coding Scheme CS1 to CS4</td>
</tr>
<tr>
<td>LED Indication</td>
<td>Processing, GSM, GPS, USB Detection</td>
</tr>
<tr>
<td>Connectors</td>
<td>6 Pin power mate connector</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Wide DC input voltage range (9V - 32V),</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>300mA during tracking and 150mA during standby</td>
</tr>
<tr>
<td>Internal Battery</td>
<td>700mAh, 5 to 6 Hr backup.</td>
</tr>
<tr>
<td>Enclosure</td>
<td>ABS plastic casing with IP67* rating</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: -10° C to +60° C, Storage: -10° C to +85° C (Without Battery)</td>
</tr>
<tr>
<td>Dimension</td>
<td>60 x 85 x 34</td>
</tr>
<tr>
<td>Weight</td>
<td>100g</td>
</tr>
<tr>
<td>FOTA</td>
<td>Firmware upgrade over the air available</td>
</tr>
<tr>
<td>Other Interfaces</td>
<td>Tamper Alert Switch</td>
</tr>
</tbody>
</table>
Vehicle Tracking and Monitoring Software Application Features

www.aquilatrack.com
# Vehicle Tracking and Monitoring System

<table>
<thead>
<tr>
<th>Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive Dashboard</td>
<td>Account Management</td>
</tr>
<tr>
<td>View Vehicle on Map</td>
<td>Group Vehicles</td>
</tr>
<tr>
<td>Current Summary</td>
<td>Driver Registration &amp; Management</td>
</tr>
<tr>
<td>Live Tracking</td>
<td>Over Speed Limit</td>
</tr>
<tr>
<td>Locate Vehicles</td>
<td>Geo-Fence settings</td>
</tr>
<tr>
<td>Travel Replay</td>
<td>Alert Management</td>
</tr>
<tr>
<td>History Tracking</td>
<td>Configure Email/SMS alerts for Panic button, A/c status, Halt &amp; Stop, Geo-fence violation and Over speed alerts</td>
</tr>
<tr>
<td>MIS Reports</td>
<td>Route &amp; Trip Management</td>
</tr>
</tbody>
</table>
View Vehicles on Map

Total Tracking Vehicles: 25
- Running: 15
- MALT: 9
- NO GPS: 0
- Secondary: 1
- Offline: 1

Total Non-Tracking Vehicles: 2
- No Data: 0
- Idle: 0
- NO GPS: 0
- Device Dead: 1

Select All
<table>
<thead>
<tr>
<th>VLPN</th>
<th>Last Tracked Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA 25 F 8959</td>
<td>2016-11-02 18:06:40</td>
</tr>
<tr>
<td>KA 25 F 9300</td>
<td>2016-11-02 17:35:06</td>
</tr>
<tr>
<td>KA 26 F 934</td>
<td>2016-11-02 18:06:15</td>
</tr>
<tr>
<td>KA 22 F1839</td>
<td>2016-11-02 17:35:57</td>
</tr>
<tr>
<td>KA 22 F2034</td>
<td>2016-11-02 18:08:53</td>
</tr>
<tr>
<td>KA 22 F2070</td>
<td>2016-11-02 18:08:19</td>
</tr>
<tr>
<td>KA 23 F568</td>
<td>2016-11-02 18:08:13</td>
</tr>
<tr>
<td>KA 23 F0791</td>
<td>2016-11-02 18:06:15</td>
</tr>
<tr>
<td>KA 23 F3223</td>
<td>2016-11-02 18:08:43</td>
</tr>
</tbody>
</table>
Current Summary (Vehicle Snapshot)
Tracking History

[Map showing vehicle tracking history with location markers and date 11/05/2015]
# MIS Reports

<table>
<thead>
<tr>
<th>Basic Reports</th>
<th>Advanced Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Daily Report</td>
<td>1. Fuel Graph and Fuel Report *</td>
</tr>
<tr>
<td>7. Geo fence violation Report</td>
<td></td>
</tr>
<tr>
<td>8. Panic Alert Report **</td>
<td></td>
</tr>
</tbody>
</table>

- **Available with fuel probe sensor**
- **Optional at extra cost**
Vehicle Management

- Total Tracking Vehicles: 23
- Total Non-Tracking Vehicles: 4
- Running: 12
- Malt: 10
- NOSGPS: 0
- Secondary: 1
- Offline: 3

Additional options:
- Track Vehicles
- Reports
- Account Management
- Vehicle Management
- Group / Route Vehicle(s)
- Driver Management
- Over Speed Limit
- Geofence Settings
- Add VLAN
- Alert Settings
- Trip Setting

Map view shows tracking details for various vehicles with last tracked times.
## Driver Management

### Fleet Management System

- **ISO 9001 : 2008 Certified**

### Track Vehicle(s)

- Reports
- Account Management
- Vehicle Management
- Alert Settings

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A monthly maintenance and service charge has to be paid on time, before the due date. Failure to do so will result in disconnection of tracking services. Please contact us for more details.

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Now, get your vehicle’s location by sending a simple SMS for more details. [Click here.]

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![Download Aqua Android App from Google play store](image)

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### Register Driver

Records 1-7 of 7

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Contact No</th>
<th>Licence No</th>
<th>Start Time</th>
<th>End Time</th>
<th>VLPN</th>
<th>Shift</th>
<th>Edit Driver Info</th>
<th>Associate to Veh</th>
<th>Latest Asset Time</th>
<th>Latest Asset Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B A Sudev</td>
<td>9164008539</td>
<td>045</td>
<td>09:00:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>2</td>
<td>C S Nayakar</td>
<td>8970086184</td>
<td>487/69</td>
<td>09:00:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>3</td>
<td>H A Mallavar</td>
<td>8970063988</td>
<td>046</td>
<td>08:00:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>4</td>
<td>K M Badakar</td>
<td>9649838708</td>
<td>808</td>
<td>08:40:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>5</td>
<td>K L Doodman/ K Khandre</td>
<td>9164008345</td>
<td>123</td>
<td>09:00:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>6</td>
<td>R R Mungekar</td>
<td>9480464949</td>
<td>010</td>
<td>08:35:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
<tr>
<td>7</td>
<td>S B Pillar</td>
<td>7894250447</td>
<td>568</td>
<td>10:00:00</td>
<td>21:35:00</td>
<td>KA25F322</td>
<td>1</td>
<td>Edit Driver Info</td>
<td>Associate</td>
<td>2016-04-20</td>
<td>13:23:01</td>
</tr>
</tbody>
</table>
## Over Speed Limit

<table>
<thead>
<tr>
<th>No</th>
<th>VLPN</th>
<th>OVER SPEED LIMIT</th>
<th>EDIT SPEED LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>KA 25 F 9059</td>
<td>80</td>
<td>Edit</td>
</tr>
<tr>
<td>2</td>
<td>KA 25 F 9060</td>
<td>60</td>
<td>Edit</td>
</tr>
<tr>
<td>11</td>
<td>KA 20 F 934</td>
<td>82</td>
<td>Edit</td>
</tr>
<tr>
<td>18</td>
<td>KA22P1830</td>
<td></td>
<td>Edit</td>
</tr>
<tr>
<td>25</td>
<td>KA22P2024</td>
<td></td>
<td>Edit</td>
</tr>
<tr>
<td>9</td>
<td>KA22P2070</td>
<td></td>
<td>Edit</td>
</tr>
<tr>
<td>13</td>
<td>KA29P8668</td>
<td></td>
<td>Edit</td>
</tr>
</tbody>
</table>
Geo-fence Settings
Alert Settings

Overspeed Alert SMS / Email Settings

Note: It is under Text

Records 1-7 of 27
Geo Tagging (Point of Interest)
Route Creation
Trip Creation

Create Trip

Select Vehicle
Select Vehicle No

Select Route
Select Route Name

Start Location
Enter a location

End Location
Enter a location

Start Time
2016-12-27 16:12:22

End Time
2016-12-27 16:42:22

Route Fencing
Enable

ETA (Estimated Time Of Arrival)
Enable

Trip Name/ID

Create Trip

Map
### Trip History

#### Trip Creation History

<table>
<thead>
<tr>
<th>Route Name</th>
<th>Trip Name/ID</th>
<th>Assigned VLPN</th>
<th>Group</th>
<th>Trip Created Date/Time</th>
<th>From Date/Time</th>
<th>To Date/Time</th>
<th>Start Location</th>
<th>End Location</th>
<th>Route Fencing</th>
<th>ETA</th>
<th>Edit Trip</th>
</tr>
</thead>
</table>

No data available in table

Showing 0 to 0 of 0 entries
Each vehicle engaged in sand mining has to be issued with a permit. The vehicle which are authorized and registered with the department will only be allowed to issue with the permit. Vehicle Permit should only be processed if there is sufficient advance royalty and mineral quantity in the account of the Mining license holder.

**Permit issuing Module**

1. Mineral Type Master
2. Mineral Loading Type
3. Stock Yard Creation
Mineral Type Master and Mineral Loading Type

The type of the mineral can be added through this module.
The department can locate and mark the stockyards on the map, each of the yard can be geo fenced. With this feature it is possible to generate list of vehicles which have visited the yard and the frequency. This is very useful information to the department to understand the vehicle movement in and out of the yard.
Every time when a Mineral transporter request for a Mineral permit, he/she shall deposit the amount in bank and get the challan details and give it to the authority for issuing the online permit. The authorized person shall enter the challan details in the application and can issue an online trip sheet (permit) as shown below.
Permit History

The system keeps track of the list of permits issued. This will enable the system to generate various reports based on yard wise, vehicle wise, Mineral type wise etc.

<table>
<thead>
<tr>
<th>S. No</th>
<th>VHC</th>
<th>TRIP ID</th>
<th>DD Date</th>
<th>DD no</th>
<th>Bank Name</th>
<th>Trip</th>
<th>Date</th>
<th>Vehicle Type</th>
<th>Village</th>
<th>Tonlak</th>
<th>Sand Perm</th>
<th>Load Type</th>
<th>Quantity</th>
<th>Amount</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KA35 A 3301</td>
<td>21</td>
<td>2013-04-08</td>
<td>465403</td>
<td>S.M (PNF)</td>
<td>TIPPER</td>
<td>21</td>
<td>2013-04-08</td>
<td>RADDIEMADGI</td>
<td>JEWARGI</td>
<td>2</td>
<td>ORDINARY SAND</td>
<td>SELF</td>
<td>6</td>
<td>450</td>
</tr>
<tr>
<td>2</td>
<td>KA35 A 3301</td>
<td>22</td>
<td>2013-04-08</td>
<td>465403</td>
<td>S.M (PNF)</td>
<td>TIPPER</td>
<td>21</td>
<td>2013-04-08</td>
<td>RADDIEMADGI</td>
<td>JEWARGI</td>
<td>2</td>
<td>ORDINARY SAND</td>
<td>SELF</td>
<td>6000</td>
<td>450/000</td>
</tr>
<tr>
<td>3</td>
<td>KA35 A 3301</td>
<td>23</td>
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<td>001465403</td>
<td>S.M (PNF)</td>
<td>TIPPER</td>
<td>22</td>
<td>2013-04-08</td>
<td>RADDIEMADGI</td>
<td>JEWARGI</td>
<td>2</td>
<td>ORDINARY SAND</td>
<td>SELF</td>
<td>6000</td>
<td>450/000</td>
</tr>
<tr>
<td>4</td>
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<td>24</td>
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<td>S.M (PNF)</td>
<td>TIPPER</td>
<td>24</td>
<td>2013-04-08</td>
<td>RADDIEMADGI</td>
<td>JEWARGI</td>
<td>2</td>
<td>ORDINARY SAND</td>
<td>SELF</td>
<td>6000</td>
<td>450/000</td>
</tr>
</tbody>
</table>
## Permit History

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Challan No.</th>
<th>Challan Date</th>
<th>Challan Amount</th>
<th>Challan ID</th>
<th>Challan Amount</th>
<th>Challan ID</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>KA-05 AA-9441</td>
<td>2012-04-17</td>
<td>725181</td>
<td>KARNATAK BANK SHAMALUR</td>
<td>View</td>
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<tr>
<td>2</td>
<td>KA-05 AA-9441</td>
<td>2013-04-17</td>
<td>726181</td>
<td>KARNATAK BANK SHAHAPURA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>KA-32 B 8521</td>
<td>2015-04-24</td>
<td>097342</td>
<td>V.S.B.N GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>KA-32 B 8521</td>
<td>2015-04-24</td>
<td>097342</td>
<td>V.S.B.N GULBARGA</td>
<td>View</td>
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</tr>
<tr>
<td>5</td>
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<td>097338</td>
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</tr>
<tr>
<td>6</td>
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<td>2015-04-27</td>
<td>097338</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>7</td>
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<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>KA-32 B 8521</td>
<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>KA-32 B 8521</td>
<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
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</tr>
<tr>
<td>10</td>
<td>KA-32 B 8521</td>
<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>KA-32 B 8521</td>
<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>KA-32 B 8521</td>
<td>2015-04-27</td>
<td>097322</td>
<td>IDBI GULBARGA</td>
<td>View</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table above represents a partial view of the Permit History as of the date of the document. The full dataset includes 110 records.
District border mapping

District borders shall be fenced and suitable alerts either though via e-mail or SMS shall be generated if the vehicle crosses the district boundary to facilitate immediate action.
Setting up of Control Center

A control center is proposed as a part of the solution. The control center shall consist of LED/LCD display units to track and monitor the vehicles in the real time. The control center has to alert the concerned official in case of any geo-fence violation, speed violation etc. The control center shall the incident management system.
Key functionalities of Control Center

• The Central Security System (CSS) holds the user credentials for all users. The authentication and authorization is done for all services, like Website access, content publishing, content management access, database access etc.

• The geographical information system (GIS) applications shall enable display of the position of vehicles on a detailed digitized road map and linked with the communication control and reporting applications.

• The Command and Control Centre applications that will be web-enabled, shall provide for appropriate user access and security controls

• The application software shall support facilities to zoom-in to enable close-up view of the vehicle of interest or to zoom-out to view all the vehicles on the screen.

• The application shall support dynamic monitoring of vehicles moving out of their defined routes and be able to raise alerts to be sent across to the driver of such vehicles.

• The interface of the application shall support multiple window views for an overview with capabilities to close up and enlarge a screen of interest.

• The application shall be able to receive emergency messages from the vehicles by generating alarms at the control centre to attract the operator’s attention and with provision for sending an acknowledgement to ensure that the message has been received and read.
MIS Reports and alerts

1. Vehicle wise Number of trips to yards
2. Yard wise list of vehicles visited the yard
3. Numbers of permits -vehicle wise
4. Amount of Mineral taken vehicle wise and yard wise
5. Entry and exit alerts of vehicle in to the yard during unauthorized working hours.
6. Alert for excessive trips.
7. Unauthorized stoppage report and alert
8. Route deviation report and alerts
9. Geo-fence violation report and alert
10. Daily Reports
11. Monthly reports
12. Any other customized reports as per requirement
Advantage…….
Features may vary depending on the model and the variant

- **Small Form Factor**
  - Small form factor of 115L x 100 W x 30 H in mm
  - Enables easy installation
  - Can be installed even in two wheelers
  - Completely concealed installation to protect from tampering.

- **High Accuracy GPS**
  - Location accuracy of 2.5 M @ 50% CEP.
  - Can track even in GPS shadow areas (under bridges, indoor environment near windows etc)
  - Best in class time to position fix: cold start duration of 39 Sec.
  - Dead reckoning support

- **Power Optimization**
  - Power optimization based on ignition status.
  - The tracking interval is automatically increased if the vehicle ignition is found to be OFF for more than 10 minutes. Reduces the load on the Vehicle battery and Server when the vehicle is in parked state.
  - Sleep mode and Deep sleep mode available for battery optimization on small battery systems such as mopeds and bikes.

- **Internal Antenna**
  - GPS high gain internal antenna with -165dBi gain enables accurate tracking even with internal antenna and device hidden inside the dash board
  - Internal high gain GSM antenna
  - Completely hidden inside the dashboard.
Features may vary depending on the model and the variant

**Internal Battery**
- 700 mAh, Lion battery.
- 6 to 8 hour tracking on battery when fully charged.
- Parameter Configuration through USB interface.
- Rugged Cylindrical battery with high MTBF.
- Over Charging and Deep discharge protection.
- Smart battery management enables long battery life.

**Storage and forward**
- The tracking information is first stored on the internal flash storage and then forwarded to server.
- 10000-30000 records space available on board.
- Recorded data can be extracted offline through USB (special firmware required) if required.
- Ensures zero data loss during GSM no coverage and communication failure, server downtime etc.

**Parameter Configuration**
- All parameters can be configured through USB or through SMS remotely.
- IP address, Port number, domain name, tracking interval, admin phone number, alert phone number.
- In-built validation logic for type checking and correctness of configuration parameters ensures wrong parameters are rejected during configuration.
- Pre-configuration option available on request during manufacturing. Parameter specified by customers (such as IP, Port, Tracking interval etc) can be pre-configured during manufacturing using bulk configuration process, so that effort configuration in the field can be avoided.

**Server Connectivity**
- Connect, transfer and disconnect type of communication, reduces the resources on the server per connection.
- Connection interval can be separately configurable apart from tracking interval to balance the load on server.
- Dual IP support (if required by customer, firmware upgrade required) for high availability.
- Storage and forward architecture of data communication ensures that no data is lost during server failure, communication failure, or data congestion.
- DNS support for seamless IP portability. Device can be configured with a domain name instead of an IP of the server for easy porting of devices from one server to another.
Features may vary depending on the model and the variant

Communication and Data usage

- Binary/ASCII communication protocol ensures high packaging of data per session to reduce the size of data usage.
- Option for Text based protocol available on request, if required by system integrators/customers. (firmware upgrade needed).
- Works on TCP communication.
- Encrypted communication support (on request, firmware upgrade required) for high secure communication requirements.

Integration & Customization support

- To enable faster integration with client system, we provide a SDK with a multithreaded client server and protocol parser.
- SDK is available for both Windows and Linux server.
- Provides a socket to HTTP bridge for quick integration.
- Protocol documentation provided for low level integration if required by the system integrator/customer.
- Customization support could be provided for large scale requirements.
Accessories

Features may vary depending on the model and the variant

- Speakers with in built Amplifier
- Microphone
- Fuel Sensor
- Panic Button
- Immobilization Relay
- RFID Reader with Tags
WARRANTY

- iTriangle will provide One Year Limited Warranty, the scope of which is as follows:
- Accessories like Internal Battery and Wiring Kit and other related accessories will carry a Six Months’ replacement warranty.
- All Components and spares will either be serviced or replaced, during the warranty period.
- On field support will not be provided. The devices have to be sent to our Bangalore Office for services and repairs.
- All types of physical damage, damage due to extreme working conditions (Vehicle Battery Voltage range above 32 volts, Temperature above 70 degrees C and below – 20 degrees C), water logging will not be covered under warranty service terms.
- iTriangle shall provide training to the Client’s authorized personnel to handle L1 and L2 service.
- Any type of physical damage, sabotage or damage due to water log etc. (induced defects) shall not be considered under warranty, and customer shall bear the cost of the device and servicing.
- AMC options for L3 service are available.
Our Major Clients & Projects

- Bosch
- MapmyIndia
- UTOO
- Ola
- Uber
- Infosys
- Trimax
- Nissan
- Mysore Minerals Limited
- InfoTrack
- t4u telematics4u
Our Major Clients & Projects

Schools & Educational Institutions

- VDRIT, Haliyal
- Cambridge Primary School, Lingasugur, Raichur
- R T Nagar School, Bangalore
- Malagudi Vidya Niketan, Bangalore
- Kauvaly Vidyalaya, Mysore
- Gnyanodaya Public School, Mysore
- SLU School, Bangalore
- CN National Public School, Bangalore
- East Point, Bangalore
- Puma Pramathi School, Bangalore
- Euro kids, Davangere
- BVM School, Bangalore

Govt. & Public Sector

- Bangalore Metropolitan Transport Corporation
- Bhubaneswar City Transport, Bhubaneswar
- Central Coalfields Limited, Piparwar, Ranchi
- Ordnance Factory, Ministry of Defence, Chanda
- Ordnance Factory, Bhandara
- 2rajrifles, MEG Bangalore
- Dept. of Horticulture, Karnataka
- Krishna Jala Bhagya Nigam Ltd.
- Municipal Corporation, Chintamani
- Krushi Vigyanan Kendra, University of Agricultural Sciences, Bangalore
- City Municipal Corporation, Chikkaballapur
- City Municipal Corporation, Davangere
- Canara Bank
- Air Force Station, Yelahanka
- TMC, Bannur
- Mysore Minerals Ltd. Bangalore
- Gadag-Betageri City Municipal Council, Karnataka
- Bangalore Metropolitan Transport Corporation
- North Western Karnataka Road Transport Corporation

Corporates & Others

- Bosch India Limited
- Infosys Limited
- OLA Cabs, Bangalore
- Uber Cabs, Mumbai
- Nandi Infrastructure Corridor Enterprises Pvt Ltd, Bangalore
- Radiant Distributors, Bangalore
- Goyal Sales Corporation, Hubli
- Sonim Technologies, Bangalore
- Mobily Infotech India Pvt. Ltd., Bangalore
- Anuvarth Apparels, Bangalore
- Medwings Bioscience Pvt Ltd, Bangalore
- MaitriSand Manpower Pvt Ltd, Bangalore
- Honda Transport, Hubli
- Unitex Apparels Pvt Ltd, Bangalore
- Gia Corp Care, Bangalore
- Neem IT, Hubli
- Udupi Tours & Travels, Bangalore
- Go Go International Pvt Ltd, Bangalore
- Sun Multiple Enterprises, Bangalore
- Nav Bharat Crane Service Pune
- Unity Travels Bangalore, Sys Cabs Bangalore
- K.Rajkamal Bangalore
- G.S. Break Down Ahmedabad
- Power Tech Call Centre LLP, Bangalore
- Sys Cabs, Bangalore
- United Associate Engineers, Bangalore
- Creative Info Services, Bangalore
- GW Precision Tools Ltd, Bangalore
- Nisarga Leisure & Travels Pvt. Ltd., Bangalore
- Miles on Wheels, Bangalore
- Technoon Constructions & Infrastructure, Bangalore

OEM/System Integrators

- Wipro, Bangalore
- Trimax IT Infrastructures & Services Limited, Mumbai
- Tata Consultancy Services Ltd, Bangalore
- Escorts Ltd. Faridabad
- Bayonet, Kenya
- Argus Technologies LLP, UAE
- Colosseum Tech Solutions Pvt Ltd, Hyderabad
- Rolta India Ltd., Mumbai
- Himu Softech, Bangalore
- Infotrack Telematics, Bangalore
- Pulsar Electronics, Mumbai
- AC Tech Pvt Ltd. Ahmedabad(Deployed at IOCL)
- Altech Ltd, Pune
- Rayvik Technologies Pvt Ltd., Gauhati
- Telematics 4U, Bangalore
- Verve Compusoft Pvt Ltd, Mumbai

Wind World (India) Ltd., Bangalore
- Trawelday Tours & Travels Bangalore
- Rescue 24/7 Tow Services
- Manjushree Car Rentals, Bangalore
- Zen Power Technologies, Bangalore
- Ayoni Technologies LLP, Bangalore
- Charoen Pokphand Seeds Pvt Ltd, Bangalore
- Navant Motors(BMW), Bangalore
- Express Cargo, Bangalore
- Maruthi Cement and Steels Pvt Ltd., Bangalore
THANK YOU!
and we look forward to serve you

080-23180601