

VEHICLE TRACKING SYSTEM

■ AVL - 500

AVL-500 is a vehicle-tracking device that is mounted in a vehicle and tracks the location and speed of the vehicle. Based on GPS, GSM, CDMA and GPRS technologies, the system wirelessly transmits the vehicle's absolute location with an accuracy of 5-10 meters in any part of the world, and publishes it on web-based maps. This information can be viewed online on the Internet.

The system detects harsh-braking, speed, fuel pilferage, mileage, vehicle temperature and a host of other real-time data essential for tracking your fleet of taxis and trucks. It also comes with remote immobilizer to remotely cut-off supply to the fuel tank in case of theft. The device has options for voice calling facilities, Fuel Monitoring System, RFID based attendance, SOS buttons for the driver and provisions for connecting FM-radio and Taxi-Fare Meter.



“AVL 500 has been successfully operational in the market for 6 years, with over 20,000 deployments, including OEM arrangements with Tata Motors (for their high-end trucks). Our devices also successfully tracked and Geo-fenced 1800 vehicles used for transporting Athletes for Commonwealth games 2010 over 250 permitted routes.”



Internal Battery

Handset

**Combo Antenna
(GSM, GPS)**

APPLICATIONS

1. Taxi-services (integrated with Taxi Meters)
2. Truck-fleet Mgmt (Fuel Monitoring, speed, harsh-braking detection)
3. Police Control Room Vans.
4. Vital Component of Intelligent Public Transport Systems (Buses).
5. Ambulance Tracking.
6. Tracking VIP vehicle movement.
7. Safety and Security solutions for transporting high-value consignments.
8. Transporting perishable goods (temperature sensor).
9. Call Centre Cabs (RFID for attendance, SOS Button).
10. Vehicle Security (Remote Immobilizer).
11. Schedule Adherence and Employee Attendance solutions for BPO's
12. Cargo Management.
13. Tracking of school buses, safety and security solutions for schools.

SALIENT FEATURES

Speed Alerts

Geo Fence Alert

Automated Tracking

Harsh Braking Detection

Mileage by GPS

Internal Battery

Internal Logging

Ignition Status Alert

HARDWARE SPECIFICATIONS

| | | |
|---------------------------|--|---|
| CPU | Type | Rabbit 2000 |
| | Memory | SRAM: 128KB, ROM: 256KB, Flash: 2MB |
| Power | Voltage Range | 9V-30V(Supported in same unit) |
| | Current Consumption with 12V Input | 40mA (Sleep mode) 100mA (Average Operational) 250mA (Operational with battery Charging) |
| Backup Battery (optional) | Type Power | Lithium-ion 7.4V /1150mAh |
| | Battery Backup Time | 5hrs with 1 minute tracking interval 3hrs with 10 second tracking interval |
| GSM/GPRS Modem | GSM Modem | Tri Band (900,1800, 1900 MHz) GPRS: Type B, Multi Slot Class 10 SMS |
| | Antenna Type | External |
| GPS | Antenna Type | External |
| | Receiver Type | L1 Frequency (1575.42 MHz 50 channels) |
| | Time-To –First-Fix (Sky View) Cold Start Hot Start, Aided Start and Reacquisition | 27s < 1s |
| | Sensitivity Tracking and Navigation Acquisition and Reacquisition Cold Start (Autonomous) | -162dBm -160dBm -147dBm |
| | Horizontal Position Accuracy Autonomous SBAS | < 2,5m <2.0m |
| | Operational Limits Velocity | 500 m/s |
| Comm Port | No. of Port | 02 (Config. Auxp) |
| | Type | RS232 |
| | Baudrate: Config Port Aux Port | 115200 9600 (optional) |
| I/Os | Digital Inputs | 4 |
| | Digital Outputs | 3 (Open collector, 200 mA sink) |
| | Analog Inputs | 2 (12bit, 0 to 24 volt) (optional) |
| | External Buzzer Output | 1 (Open collector, 200 mA sink) |
| Dimensions | Size and Weight | Compact small size 135mm(L)x 100mm(W)x55mm(H) 400Gms Easy to install and rugged |
| Environmental | Operating Temperature | 0°C to +60°C |
| | Storage Temperature | -20°C to +70°C |
| | Hum. Operate | 95% RH @ 40°C |
| Connector | Main Power & Config. Port | 10 Pin, 3mm, Micro-fit |
| | I/O & Aux. Port | 12 pin, 3mm, Micro-fit (optional) |
| Optional Peripherals | Handset for voice communication, RFID reader and RFID tag, Interface for connecting Taximeter, Fuel Monitoring Unit, External Buzzer, Temperature Sensor ($\pm 2^\circ\text{C}$ accuracy, -40°C to $+100^\circ\text{C}$ range) and Immobilizer. | |



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