

# Real-time Vehicle Tracking Unit

## Overview

---

This sophisticated real-time Vehicle Tracking Unit provides worldwide data transmit / receive capabilities for vehicle and asset tracking in industrial remote communications application. It operates both over the GSM cellular quad-band network, providing global coverage almost with no blockage. By efficiently using this VTU it can significantly improve asset utilization by allowing fleet clients to monitor, track, and manage their fixed and mobile assets in around their geographical operation across the world.

## Application Areas

---

- Fleet Management: Secure to tracks, manage, and monitor all movable vehicles or assets for commercial/industrial application around the globe by using GSM/GPRS and GPS
- Onboard computing for fleet management - processes data and passes the information via the Internet or other secure connection
- Monitoring and Control services – for public Transport Systems, commercial/private vehicles monitoring, emergency and Security vehicles
- Comprehensive Vehicle diagnostic and emergency alert
- Toll collection application -using RF Wireless interface
- Logistics Management and industrial automation for monitoring, supervision and control

## Features

---

- Quad-band 850/900/1800/1900 MHz GSM / GPRS
- 50 Channels GPS receiver
- RS-232 Serial Port for Host PC interface
- Automotive CAN-bus serial interface
- SMS / GPRS Communication
- Configuring incoming call Numbers
- Locations storage in non-volatile memory. .
- Real Time Clock (RTC)
- LED indication for POWER ON,
- Small form factors enough to fit into any Vehicle and easy to install.
- General-purpose Input/outputs (can be used for alarm sirens etc)

## Key Benefits

---

- **Status Requests:** Ability to request for the latest status of the vehicle, and receives the entire information about all the inputs, outputs, and location information.
- **Automated Tracking** -Automatic or on-request acquiring , monitor and transmit the vehicle position at specified time, without sending additional commands to the vehicle
- **CAN bus connection:** Direct connection to the vehicle's computer using the CAN bus protocol.
- **High and Low Speed restrictions:** Programmable alerts whenever the vehicle goes above/below a pre-defined speed and unauthorized stops.
- **Geo-fencing alerts:** When a vehicle is entering/leaving and not entering/not leaving a specified a designated area at a specified time.
- **Text Messaging:** Send a text message directly to the vehicle's text terminal.
- **Driver Identification:** By using different wireless remote controls, or keypad codes, the unit sends the code of the current vehicle driver to the center.
- **Internal Logging:** Whenever a transmission was failed to be sent, the entire message is saved to the memory for later transmission.
- **Last Location Saving:** Saving of the vehicle's last position, in case of going out of GPS coverage.
- **RF wireless interface** - support connecting to sensor over RF, and transmitting of packets to data collector stations without the use of the cellular network.

## Technical Specifications

---

<b>GPS System</b>	50 channel GPS receiver, L1 Frequency 50 Channels Horizontal Position Accuracy: <2.5m TTFF: Hot and Aided Starts <1sec, Cold start < 30sec High immunity to jamming NEMA Protocol
<b>GSM/GPRS Radio System</b>	850/900/1800/1900 MHZ Quad band, built in antenna Maximum Sensitivity - dBm, -110@900
<b>SIM Interface</b>	External SIM 3V and 5V SIM
<b>Network Interface</b>	Data /Voice and GSM, GPRS and SMS
<b>Message support</b>	SMS - text and GPRS - Encrypted Protocol
<b>Multi-Processor CPU Capacity</b>	32 bit- ARM7, Memory - 512 Kbyte – Static/Nonvolatile/ Flash

---

## General Specifications

---

<b>Communication Interface</b>	RS-232 Serial – Programmable for PC Utility Software CAN-bus serial interface for Vehicle Electronics RF wireless interface (100 m range)
<b>Input/ Output Connectors</b>	Five- Digital Outputs drives actuators or other loads – for Lock, Unlock, Siren, Immobilizer etc Two - Isolated Input for Pulse Counter /Tactile switch Four - Analog Inputs, SMA antenna connector, GSM and GPS
<b>Power Supply</b>	Wide DC input voltage range (9V - 27V)
<b>LED Indication</b>	Power, GSM, GPS
<b>Enclosure</b>	Aluminum – Black Anodized Standard (or Customized)
<b>Temperature</b>	Operating: -10°C to +55°C , Storage: Temp- 40°C to +85°C
<b>Humidity</b>	5% - 85% RH
<b>Backup Battery</b>	Available in higher model

---