

## **GSM/GPS BASED VEHICLE TRACKING SYSTEM**



### **FEATURES**

- 32 Bit Cortex M3 Microcontroller
  - External Flash for storage of data when GPRS is not available
  - Multi Slot Class 12 GSM / GPRS Module
  - 48 Channel GPS Receiver with -161 dBm gain
  - Local and Over The Air (OTA)\* Software Download
  - Local and Over The Air (OTA) Configuration
  - Secured Over The Air (OTA) Configuration
  - Supports SMS; TCP; UDP and HTTP Communication Protocols
  - Built in Geo-Fence Feature (10 Zones)
  - Configurable Geo-Fence zones locally and Over The Air (OTA)
  - GPS Odometer
  - Wide DC Input Operating Voltage (9V to 36V)
  - Main Power Reverse connection protection
  - Main Power Over Voltage protection
  - Built-In 7.4V / 900 mA Li-Ion Battery.
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- Alert for low internal battery
  - On demand vehicle location on GPRS enabled phones
  - Remote device status monitoring
  - Alert for GPS Antenna Tampering
  - Alert for Main Power tampering
  - Alerts for Over Speed, Harsh Acceleration\* & Harsh Breaking\*
  - Alert for Ignition and Engine On & Off \*
  - Alerts for IO Ports status
  - GPS Odometer
  - SOS Switch supporting configurable message and 3 numbers
  - Buzzer indication for SOS switch\*
  - Buzzer indication for over speed\*
  - Default IOs: 2 Digital Inputs; 1 Digital Output & 1 Analog Input
  - RS232 Serial Port
  - Configurable GSM & GPS intervals for Main Power, Internal Battery and Roaming
  - Dynamic Data Sending Mode
  - Configurable history data sending methods
  - User Configurable Alerts (SMS / GPRS)
  - LED Indication for Main Power; Internal Battery; GSM & GPS Status
  - Provision for 2 server IPs and Ports
  - Provision for 2 server mobile numbers
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## **TECHNICAL SPECIFICATIONS**

### **Operating Voltage**

- 9 to 36V DC
  - 7.4V / 900 mA Li-Ion Internal Battery
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### **MCU & Memory**

- ARM Cortex-M3; 32 Bit; 64K SRAM; 256K Flash
  - External Data Flash Storage
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### **GSM / GPRS Communication**

- Dual Band GSM 900 / 1800 MHz
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- Sensitivity: -107 dBm
  - GPRS Class 12 (Max. 85.6 kbps - Uplink & Downlink)
  - Protocols: TCP/ UDP/ HTTP
  - SMS: Point to Point MO & MT; Text & PDU Mode
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## **GPS Communication**

- L1 Frequency; 1575.42 MHz
  - 48 Channels
  - -160 dBm gain
  - Horizontal Position Accuracy of <2.5 meters
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## **LED Indications**

- LED for Main Power
  - LED for Internal battery
  - LED for GSM Network
  - LED for GPS Network
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## **External Interfaces**

- Power Cable with IOs
  - RS-232 Serial Port
  - SOS Switch
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## **Mechanical**

- IP65 ABS Plastic Enclosure
  - Dimensions: 99 x 70 x 32 mm
  - Wall / Table Mounting
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## **Environmental**

- Operating Temperature: -20° to +65° C
  - Storage Temperature: -25° to +75° C
  - Humidity: 95% ROH Non Condensing
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## **BENEFITS**

- Provides real time vehicle location
  - Improves response time
  - Information about status of various parameters like Ignition, Engine, AC, Over Speed... etc
  - Better control on fleet Efficiency, which reduces the fleet operating cost
  - Improve Vehicle routing and make it more efficient and productive
  - Avoids unauthorized use of Vehicle
  - Monitors vehicle driving conditions which helps to control fuel costs
  - Extends fleet life
  - Prevent loss of goods and services
  - Avoidance of fraudulent claims
  - Theft recovery
  - Monitor the health of Vehicle battery
  - Integration Of third party accessories like RF Readers, Temperature sensors and Fuel level sensors
  - GPS Odometer to cross check vehicle odometer
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