

## Advanced Vehicle Tracker



### Introduction:

GPS Vehicle Tracker has designed with SoC (System On Chip) solution to bring more reliability and stability to the over whole performance. Indeed, GPS Vehicle Tracker has been ranking as premium car alarm system by insurance companies across the world.

### Firmware Feature:

- SOC solutions
- SMS mode/GPRS mode/SMS+GPRS mode
- Upload/download settings, locations, and OS via GPRS.
- Open platform for two-way communication between control center and MDT
- Special protocol for GPRS with hand shaking. Minimize communication cost and data package lost.
- MCU dead lock protection

### 1. GPS Specifications :

	SiRF STAR III chipset version	Nemerix chipset version
<b>A) General</b>		
1) Frequency	L1, 1575.42 MHz.	L1, 1575.42 MHz
2) C/A code	1.023 MHz chip rate	1.023 MHz chip rate
3) Channels	20	16
<b>B) Accuracy (Open Sky)</b>		
1) Position	10 meters, 2D RMS.	7 meters CEP (90%) horizontal, SA off.
2) Time	1 microsec synchronized to GPS time.	1 microsec synchronized to GPS time.
3) Velocity		0.1 meters/second
<b>C) Datum</b>		
1) Default	WGS-84.	WGS-84.
2) Other	Support different datum by request.	Support different datum by request.
<b>D) Acquisition Rate (Open sky, stationary requirements)</b>		
1) Reacquisition	0.1 sec., average.	0.1 sec., average.
2) Hot start	1 sec., average.	10 sec, average
3) Warm start	38 sec., average.	38 sec, average
4) Cold start	42 sec., average.	45 sec, average
5) Snap start		2 sec, average
<b>E) Dynamic Conditions</b>		
1) Altitude	18,000 meters (<60,000 feet) Max	18,000 meters (60,000 feet) max
2) Velocity	736 m/s (<1,000 knots) max	515 m/s (1000 knots) max
3) Acceleration	4 G, max	4g, max
4) Jerk	20 meters/second, max	20 meters/second, max
<b>F) RF interface</b>		
1) RF interface	Minimum signal tracked: -159dBm	

## 2. GSM Modem Specifications :

- |                    |  |
|--------------------|--|
| 1) Power Supply    | Power supply Single supply voltage 3.4V – 4.5V<br>Power saving Typical power consumption in SLEEP mode to 3mA  |
| 2) Frequency bands | Tri-band: EGSM 900, DCS 1800, PCS 1900 or<br>Tri-band: EGSM 850, DCS 1800, PCS 1900<br>Compliant to GSM Phase 2/2+<br>GSM class Small MS                       |
| 3) Class           | Transmit power Class 4 (2W) at EGSM900<br>Class 1 (1W) at DCS1800 and PCS 1900<br>GPRS connectivity<br>GPRS multi-slot class 10<br>GPRS mobile station class B |
| 4) Temp. range     | Operating temp. : -25°C to +70°C<br>Storage temp. : -40°C to +80°C   |

## 3. Electrical Characteristics :

- |                      |  |
|----------------------|--|
| 1) Input Voltage     | +9~37 Volt DC regulated / 2A-MAX (GSM Transmit)  |
| 2) Power Consumption | 12 Volt – 100~320 mA (GPS On Line, GSM/GPRS On Line)<br>12 Volt – 60 mA (GPS on line, GSM standby)<br>12 Volt – <20 mA (GPS in Power Down Mode, GSM Standby) |
| 3) Backup Power      | Nickel Metal Hydride Battery – 700 mA  |
| 4) Memory Backup     | Flash Memory – Data retention – 200 Years.<br>64 Kbyte (64000 * 8 Bits data)   |

## 4. Case Environmental Characteristics :

- |                   |  |
|-------------------|--|
| 1) Op. Temp.      | -25°C to +70°C (board temperature)   |
| 2) Output         | 4 digital outputs (200mA max)  |
| 3) Digital Inputs | 5  |
| 4) Analog Inputs  | 1  |
| 5) RJ Ports       | a) 1 RJ11 port for serial RS232 (low speed 9600 Baud) and Direct GPS output RS232 (4800 or 9600 Baud – depending on GPS module)<br>b) 1 RJ11 port for voice I/O<br>c) 1 RJ45 MULTI port for HS (115200) Direct modem access (TTL- CMOS). |

## 5. Physical Characteristics :

- |              |                    |
|--------------|--------------------|
| 1) Dimension | 95mm * 77mm * 30mm |
| 2) Weight    | 220 g              |
| 3) Case      | Aluminum case      |

### Applications:

1. Security & fleet management
2. Car Navigation
3. Marine Navigation
4. Vehicle Tracing & Location Base Services

### Packaging List

1. GPS Vehicle Tracker Unit
2. GSM Antenna
3. GPS Antenna
4. RS232 Cable
5. I/O Cable
6. CD including User's Manual, Software program and driver etc.

For Single Point Solution from Designing to After Sales & Service. Please contact



# COMPTRONIC SOLUTIONS

14/2, Old China Bazar Street, 3rd Floor, Suite No. 202, Kolkata - 700 001, INDIA

Phone : 91-33-2242-4094 / 2231-8007 • Telefax : 91-33-2242-0492

E-mail : [info@comptronicsolutions.com](mailto:info@comptronicsolutions.com) • Website : [www.comptronicsolutions.com](http://www.comptronicsolutions.com)

CS # 30

*Our Partner*