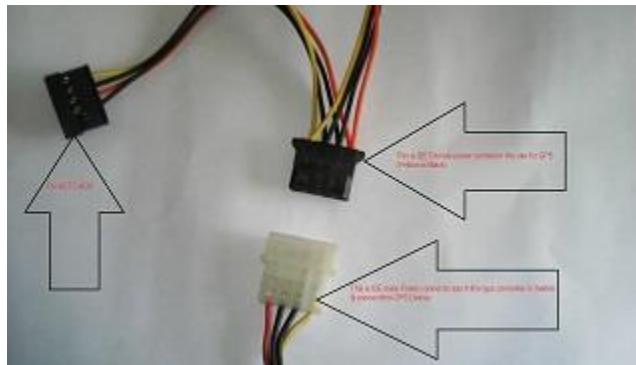# USER MANUAL

How to connect –

Software Provides Information about---

- ➢ Status:
  - Green indicates the device is moving at the mentioned speed.
  - Yellow indicates that device is stationary. Our intelligent algorithm also specifies the time for which the device is stationary at that location.
  - Orange bubble indicates that device is having issue with GPS reception.
  - Red indicates that device is either out of coverage area or there is some issue with the device.
- ➢ Violations:
  - Battery Cut off violation, Geofence Violations, Over stoppage Violations, Place mark violations
- ➢ Google Maps: Satellite and Map mode
- ➢ Device history: In tabular format as well as on Google Map
- ➢ Selection provided for device, start time and end time.
- ➢ Trigger Configuration is the most important part of Tracker. Every GPS data is analyzed on the parameters set via Trigger Configuration. Different triggers those can be assigned to the device are
  - Inside Geofence
  - Outside Geofence
  - Exiting Geofence
  - Entering Geofence
  - Power Cutoff
  - GPS Cutoff

Alert Configuration--

This is the configuration module for setting SMS and Email alerts. Here against the violation of Triggers (explained above), mobile number and email ids are mapped. On violation of the set riggers, alerts are sent to the pre-defined numbers.

Type of Alerts:

- SMS

- Email

Reports-

1. History report
2. Summary report
3. Geo-fence in/out report
4. Distance Report
5. Alert Report

Features-

1. Built-in Quad-band modem
2. High-end Si RF star IV™ chip set based
3. GPS module for advanced performance & accuracy
4. Event Memory: ~5Kfull time stamped events.
5. Built-in Motion Sensor for movement & towing detection
6. 1-wireinterface
7. Ignition input, 2 programmable GPIOs and 2outputs
8. Small size for quick and easy installation
9. Current in-sleep mode: as low as 2Ma
10. IP40
11. GPRS /SMS communication types
12. Roaming management
13. Online event-driven reporting
14. Geo-Fence management
15. Cellocator + TM maintenance server support

TECHNICAL SPECIFICATIONS

Communication	
GSM	GPRS class10, PDUSMS
Bands	Quad-band: 850, 950,1800, 1900MHz
Power	2W,1W
SIM	Internal, replaceable
Antenna	Internal, quad band GSM antenna
Packet	TCP/IP,UDP/IP
SMS	PDU
GPS	
Technology	Chipset:SiRFstarIVGSD4echipset
Sensitivity(Tracking)	-163dBm
Acquisition(normal)	Cold<35Sec,Warm<35Sec,Hot<1Sec
Antenna	Onboard, internal patch antenna
Inputs and Outputs	
Inputs	1internally pulled down input dedicated for ignition switch
Outputs	2general purpose open drain outputs (250mAmax) with assignable functionality
Motion sensor	For movement and towing detection
Interfaces	Select able baud rate (9600or115000bps) TTL levels (external TTL-USB adaptor)
COM-port	8bit;1StopBit;NoParity Configuration Firm ware upgrade

1-Wire™(Dallas port)	DS1990A,DS1971compliant Driver management Car Alarm Authorization
Power	
Input	9-32VDC
Average	Normal: 40mA Economic: 23mA Hibernation: <2mA
InternalBattery(CR-300B)	Li-Ion Polymer, 3.7V, 440mAh, rechargeable Embedded NTC for temperature controlled charging Operating Temperature:-20(65%charge)÷60°C Battery Monitoring: Temperature (NTC) & voltage Autonomy: Upto 40Tx @ 1Msg/min@25°C Protections: over current, over charge and over discharge
Vehicle Environment Immunity	
Immunity	CompliantwithISO7637testlevel #4(in accordance with e-mark directive)
Environment	
Temp, operating	-30°Cto+70°Cfullperformance -40°Cto+85°C–degradedcommunication
Temp,	-40°Cto+85° C
Humidity	95%non-condensing
Protection	IP40
Vibration, Impact	ISO16750
Mounting	Tie-wraps and/or two sided adhesive
Certifications	
FCC	Part15SubpartB, part 22/24 compliant
CE	CE EMC&R&TTEaccordingto89/336/EECor1999/5/EC CE SafetyEN60950-1:2006+A11:2009, AutomotiveDirective2004/104/EC(E-Mark)
IC	Industrial Canada
PTCRB	TRP,TIS,Spuriousandharmonicsemission
Dimensions & Weight	
Dimension	91x69x23mm
Weight	~100gr(approximately)