



ROVER

Vehicle Tracking Unit

Product Features

- Unit size: 95(L) * 77(W) * 30(H)mm
- Weight: 220 g
- Aluminum case
- Case Environmental Characteristics:
 - Operational Temperature: - 25 ~ + 70 °C (board temperature)
- 4 digital outputs (200mA max)
- 6 digital inputs (5 negative inputs, 1 positive input)
- 1 analog input (0 to +3.3 volt)
- 1 RJ11 port for voice I/O
- 1 RJ45 MULTI port for serial RS232 (low speed 9600 Baud) and Direct GPS output RS232 (9600 Baud - depending on GPS module).
- Electrical Characteristics: Input Voltage: + 6~37 Volt DC regulated / 2A-MAX (GSM Transmit)
- Power Consumption:
 - 12 Volt - 100~320 mA (GPS On Line, GSM/GPRS On Line)
 - 12 Volt - 60 mA (GPS on line, GSM standby)
 - 12 Volt - <20 mA (GPS in Power Down Mode, GSM Standby)
- Backup Power: - 1100 mAh Li-ION battery
- Memory Backup: Flash Memory - Data retention - 200 Years.
- Unleaded version modules (RoHS compliant)
- 64 Kbyte (64000 * 8 Bits data)

Firmware features

- SMS mode/ SMS+GPRS mode
- Upload/download settings, locations, and update firmware 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
- Main power lost detection or input power below or above set value.
- Multiple location memory requests .
- Battery back-up in case main battery is CUT-OFF .
- Auto GEO-Fencing (Geo fencing input activated when drivers remove vehicle keys)
- Un-lock Doors : Allow owner to un-lock vehicle door from his mobile phone using simple SMS commands .
- SOS panic button : In demand alarm SMS emergency data and activates the vehicle external hazard warning system .
- Disable vehicle : Immobilize remotely using mobile phone or WEB browser in responded to an alarm .
- Alarm Alert : Integrated with vehicle alarm system to trigger current status of the vehicle in case of tampering .

Technical specification

GPS Specifications:

SiRF STAR III chipset

General

- 1). Frequency;GL1, 1575.42 MHz.
- 2). C/A code;G1.023 MHz chip rate.
- 3). Channels 20

Accuracy (Open Sky)

- 1). Position;G10 meters, 2D RMS.
- 2). 7 meters 2D RMS, WAAS corrected.
- 3). 1-5 meters, DGPS corrected.
- 4). Time 1 microsecond synchronized to GPS time.

Datum

- 1). Default;GWGS-84.
- 2). Other Support different datum by request.

Acquisition Rate (Open sky, stationary requirements)

- 1). Reacquisition;G0.1 sec., average.
 - 2). Hot start;G1 sec., average.
 - 3). Warm start;G38 sec., average.
 - 4). Cold start;G42 sec., average.
- (Note : Unit will go into diagnostic mode 1 minute after power up.)

Dynamic Conditions

- 1). Altitude : 18,000 meters (<60,000 feet) Max
- 2). Velocity;G736 m/s (<1,000 knots) Max
- 3). Acceleration;G4 G, Max
- 4). Jerk;G20 meters/second, Max

RF interface

- 1). Minimum signal tracked: -159dBm

GSM Modem Specifications:

Frequency bands

Tri-band: EGSM 900, DCS 1800, PCS 1900 or
Quad-band : EGSM 850 ,900 ,1800 , 1900 (option)
Compliant to GSM Phase 2/2+
GSM class Small MS
Transmit power Class 4 (2W) at EGSM900
Class 1 (1W) at DCS1800 and PCS 1900
GPRS connectivity
GPRS multi-slot class 10
GPRS mobile station class B

Temperature range

Operation: -25°C to +70°C
Storage temperature -40°C to +80°C
GPRS data downlink transfer: max. 85.6 kbps

GPRS data uplink transfer: max. 42.8 kbps

Coding scheme: CS-1, CS-2, CS-3 and CS-4

Supports the protocols PAP (Password Authentication Protocol) usually used for PPP connections.

Integrated TCP/IP protocol.

Support Packet Switched Broadcast Control Channel (PBCCH)

CSD transmission rates: 2.4, 4.8, 9.6, 14.4 kbps, non-transparent

Unstructured Supplementary Services Data (USSD) support

SMS, MT, MO, CB, Text and PDU mode

SMS storage: SIM card

Support transmission of SMS alternatively over CSD or GPRS.

User can choose preferred mode.

FAX Group 3 Class 1

SIM interface Supported SIM card: 1.8V, 3V

Certificates

CE, FCC, E-mark

Standard Kit



Optional Accessories



Bluetooth Dongle



Speaker & Microphone



Relay Box