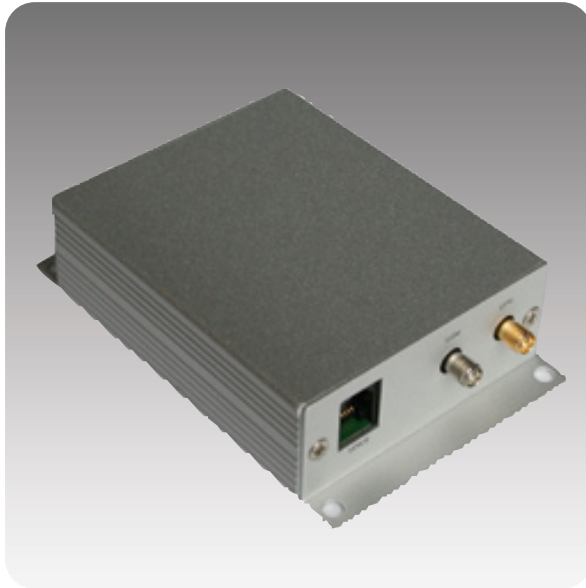


R-9 Vehicle Tracking Unit



Features

- Latest SiRFstarIII GPS module
- Real-time time and distance tracking
- SMS mode/ SMS+GPRS mode
- TCP/IP connection
- Alarm/alert notification
- Auto GEO-fencing
- Vehicle Immobilizer via phone or browser
- Remote configuration/updating over air
- Sleep mode for GPRS cost/power saving
- Wide range power supply (6-37 Volt)
- Panic input/automatic emergency dial-out
- Speeding report
- Analog input for temp/fuel/pressure monitoring
- Driver ID checking
- Hands-free voice communication
- Back-up battery (4-8 hrs)
- Door release output

Specifications

Mechanical & Environmental	
Dimensions (L x W x H)	95 x 77 x 30 mm
Weight	220 g
Housing	Aluminum case
Operational Temperature	- 25 ~ + 70° C (board temperature)
Storage temperature	-40° C to +80° C
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	EE prom
Unleaded version modules	(RoHS compliant)
GPS Specifications - SiRF STAR III chipset	
Frequency	1575.42 MHz.
C/A code	1.023 MHz chip rate.
Channels	20

Accuracy (Open Sky)	
Position	10 meters, 2D RMS
7 meters 2D RMS, WAAS corrected	
Time	1 microsecond synchronized to GPS time.
Datum	
Default	WGS-84
Supports different datum by request	
Acquisition Rate (Open sky, stationary requirements)	
Re-acquisition	0.1 sec., average
Hot start	1 sec., average
Warm start	38 sec., average
Cold start	42 sec., average
(Note : Unit will go into diagnostic mode 1 minute after power up.)	
Dynamic Conditions	
Altitude	18,000 meters (<60,000 feet) Max
Velocity	736 m/s (<1,000 knots) Max
Acceleration	4 G, Max
Vibration	20 meters/second max
Sensitivity	
Minimum signal tracked	-159dBm

GSM Specifications: SIM340DZ	
Frequency bands	SIM340DZ Quad-band: GSM 850, EGSM 900, DCS 1800, PCS 1900. The SIM340DZ can search the 4 frequency bands automatically. The frequency bands also can be set by AT command. Compliant to GSM Phase 2/2+
GSM class	Small MS
Transmit power	Class 4 (2W) at EGSM 900 Class 1 (1W) at DCS1800 and PCS 1900
GPRS connectivity	GPRS multi-slot class 8 (optional) GPRS multi-slot class 10 (default) GPRS mobile station class B
DATA GPRS CSD	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 SIM340DZ supports the protocols PAP (Password Authentication Protocol) usually used for PPP connections. The SIM340DZ integrates the 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
FAX	Group 3 Class 1
SIM interface	Supports SIM card: 1.8V ,3V
External antenna	Connected via 50 Ohm antenna connector or antenna pad
Audio features	Speech codec modes: Half Rate (ETS 06.20) Full Rate (ETS 06.10) Enhanced Full Rate (ETS 06.50 / 06.60 / 06.80) Echo suppression

Serial interface and Debug interface	Serial Port: Seven lines on Serial Port Interface Serial Port can be used for CSD FAX, GPRS service and sending AT command of controlling module. Autobauding supports baud rates from 1200 bps to 115200bps. Debug port: provide two lines on Serial Port Interface /TXD and /RXD Debug port is only used for transmitting AT command.
Phonebook management	Supports phonebook types: SM, FD, LD, MC, RC, ON, ME,BN,VM,LA,DC,SD
SIM Application Toolkit	Supports SAT class 3, GSM 11.14 Release 99
Real time clock	Implemented
Timer function	Programmable via AT command
Firmware upgrade	Firmware upgrade over serial interface

Ordering Information