

SPT-100 GPS/GSM/GPRS tracking unit



Features

- Latest SiRFstarIII GPS module
- Real-time time and distance tracking
- SMS mode/ SMS+GPRS mode
- TCP/IP connection
- Alarm/alert notification
- Wide range power supply (6-37 Volt)
- Back-up battery (4-8 hrs)

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