

GT-421, Sensitive Tracker with Easy Server Access from Smart Phone, Tablet, PC etc.

RoHS
Compliant



Overview

GT-421 is a very sensitive GPS/GSM/GPRS tracker. It is equipped with SiRFstarIV (SS4) GPS, exhibiting unprecedented sensitive performance than its renowned SiRFstarIII (SS3) one.

Simple to use makes tracking an easy job.

Applications

- Personal tracking
- Fleet/group tracking
- Asset tracking

Features⁺

- SS4 GPS - fix position in difficult environment
- Quad-band GSM/GPRS
- Flexible external power supply via RCY connector
 - Battery of different capacities
 - Power cable from vehicle battery
- Report data buffering as there is no GPRS signal
 - Up to 100 thousands report buffer capacity
- Smart power saving as there is no moves
- Low battery alert[#] (1.5 days* working remains)
- Long standby time[#] – 180 days (10 days* working remains)
- Long working time[#] – 30 days*
- 1 month free server access
- 1 month history data stored in the server
- OTA (Over The Air) configuration setting
 - Report interval/distance
 - Sleep/Hibernate power saving mode
 - Geo-Fence: IN, OUT or IN and OUT
 - SMS alert on events

- Powerful history browse/playback function
 - Easy geo-fence setting – click & drag on map
 - Fence size from 1m to 65km
 - OTA firmware upgrade (for maintenance use)
 - Smart phone, tablet, PC support
- ⁺: MOQ-based feature customization is welcome.
[#]: 12000mAh new battery; hibernate mode; 25°C
^{*}: Continuous working 3 hours a day

Technical Specifications

GSM/GPRS Characteristic Data

Quad-band	900/1800, 850/1900 MHz GSM phase 2/2+ compliant
GPRS connectivity	GPRS multi-slot Class 10 (default) GPRS multi-slot Class 8 (optional) GPRS mobile station class B
Coding scheme	CS-1, CS-2, CS-3, CS-4
Data transfer rate	Downlink 85.6kbps max. Uplink 42.8kbps max.

GPS Receiver Performance Data

Receiver type	L1 frequency, C/A code
Horizontal Position Accuracy	< 2.5m (Autonomous) < 2.0m (WAAS) (CEP, 50%, 24-hour static, -130dBm, SEP < 3.5m)
Velocity Accuracy	<0.1 m/s (speed) <0.5° (heading) (50% @ 30 m/s)
Time To First Fix	Autonomous (All at -130dBm)
Hot start	1sec
Warm start	32sec

Cold start	32sec
Sensitivity (Autonomous)	-147dBm (acquisition) -163dBm (tracking)
Max. Update Rate	5Hz
Max. Altitude	< 18,000 m
Max. Velocity	< 1,852 km/hr
Protocol Support	NMEA V3.00, OSP UART: 4800~115200bps N,8,1; GGA, GSA, GSV, RMC, VTG
SBAS Support	WAAS, EGNOS, MSAS, QZSS, GAGAN
Dynamics	< 4g

	* GPS fix indication (2 taps)
LED (Blue)	Normally OFF w/o button tapping * LED ON 0.5s as button tapped GPS fix indication period: 10s * GPS unfixed: ON for 10s * GPS fixed: 0.5s ON 1.5s OFF
SIM connector	Push-push type SIM card holder

Electrical Data

Power supply	3.5~4.2 VDC via RCY port only
Power consumption	1.6~270mA depending on usage

Environmental Data

Operating temperature	-20 ~ 70°C
Storage temperature	-20 ~ 35°C (long-term storage)

Mechanical Data – 45 x 62 x 14 (mm)



Weight – 39g

I/O Interfaces

Power port	JST RCY connector - SYR-02T
Console port	Mini-USB, female (for factory use)
Button	* Power status indication (1 tap)

Standard Accessories

- ✧ Velcro pads x 2 (for tracker fixation)

Optional Accessories

- ✧ Li-ion battery/Charger
- ✧ Strong magnet with adhesive tape
- ✧ Vehicle battery cable

Server Access

- ✧ Each tracker is shipped with
 - A URL address
 - One pair of Login ID and password
- ✧ Web access from a PC/NB, tablet, smartphone:



- ✧ APP access from a smartphone
- ✧ **Ordering Information, GT-421X, X=**

A	Antenna optimized for American 850MHz/1900MHz
E	Antenna optimized for European 900MHz/1800MHz

*This document is subject to change without notice.