

## SPECIFICATIONS

<b>Surveying Performance</b>	
Channel	220 Channels
Signal Tracking	BDS B1, B2, B3 GPS L1C/A, L1C, L2C, L2E, L5 GLONASS L1C/A, L1P, L2C/A, L2P, L3 SBAS L1C/A, L5 (Just for the satellites supporting L5) Galileo GIOVE-A, GIOVE-B, E1, E5A, E5B QZSS, WAAS, MSAS, EGNOS, GAGAN, SBAS
GNSS Features	Positioning output rate: 1Hz~50Hz Initialization time: < 10s Initialization reliability: >99.99%
<b>Positioning Precision</b>	
Code Differential GNSS Positioning	Horizontal: ±0.25 m + 1 ppm Vertical: ±0.50 m + 1 ppm SBAS positioning accuracy: typically<5m 3DRMS
Static GNSS Surveying	Horizontal: ±2.5 mm + 0.5 ppm Vertical: ±5 mm + 0.5 ppm
Real-Time Kinematic Surveying (Baseline<30km)	Horizontal: ±8 mm + 1 ppm Vertical: ±15 mm + 1 ppm
Network RTK	Horizontal: ±8 mm + 0.5 ppm Vertical: ±15 mm + 0.5 ppm RTK initialization time: 2~8s
<b>Physical</b>	
Dimension	12.9 cm×11.2cm
Weight	970g (including installed battery)
Material	Magnesium aluminum alloy shell
<b>Environmental</b>	
Operating	-45°C ~ +60°C
Storage	-55°C ~ +85°C
Humidity	Non-condensing
Waterproof/Dustproof	IP67 standard, protected from long time immersion to depth of 1m IP67 standard, fully protected against blowing dust
Shock and Vibration	Not operating: Withstand 2 meters pole drop onto the cement ground naturally While: Withstand 40G 10 milliseconds sawtooth wave impact test
<b>Electrical</b>	
Power Consumption	2W
Battery	Rechargeable, removable Lithium-ion battery
Battery Life	Single battery: 7h (static mode) 5h (internal UHF base mode) 6h (rover mode)
<b>Communications and Data Storage</b>	
I/O Port	5PIN LEMO external power port + RS232 7PIN LEMO RS232 + USB 1 network/radio data link antenna port SIM card slot
Wireless Modem	Integrated internal radio receiver and transmitter 0.5W/2W External radio transmitter 5W/25W
Working frequency	410-470MHz
Communication protocol	TrimTalk450s, TrimMark3, PCC EOT, SOUTH
Cellular Mobile Network	WCDMA3.5G network communication module, GPRS/EDGE compatible, CDMA2000/EVDO 3G optional
Double Module Bluetooth	BLEBluetooth 4.0 standard, support for android, ios cellphone connection Bluetooth 2.1 + EDR standard
NFC Communication (Optional)	Realizing close range (shorter than 10cm) automatic pair between Galaxy G1 and controller (controller equipped NFC wireless communication module needed)
Data Storage/Transmission	8GB internal storage, more than 3 years raw observation data (about 1.4M/day), based on recording from 14 satellites Plug and play mode of USB data transmission
Data Format	Differential data format: CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 GPS output data format: NMEA 0183, PJK plane coordinates, binary code Network model support: VRS, FKP, MAC, supporting NTRIP protocol
<b>User Interaction</b>	
Buttons	One-button operation, visual operation, convenient and efficient

**SOUTH**  
Target your success

**GALAXY G1 S**

*Cost-effective, versatile, portable*



- GPS|GLONASS|BEIDOU|GALILEO
- 4GB MASS STORAGE
- SOUTH, TRIMTALK PROTOCOLS
- BLUETOOTH 4.0|NFC CHIP

**SOUTH**  
Target your success

**SOUTH SURVEYING & MAPPING INSTRUMENT CO.,LTD.**

Add: 2/F, Surveying Building (He Tian Building), NO.26, Ke Yun Road, Guangzhou 510665, China  
Tel: +86-20-23380891/85524990/23380888 Fax: +86-20-85524889/85529089/23380800  
E-mail: mail@southsurvey.com export@southsurvey.com impexp@southsurvey.com gnss@southsurvey.com  
http://www.southinstrument.com http://www.southsurvey.com

G1 s inherits almost all of advanced features from G1, except tilt sensor, so it's more cost-effective, power-saving. G1 s is also equipped with Trimble BD970 mainboard. Along with GNSS technology development, G1 s now supports GPS, Glonass, Beidou, also Galileo constellation.

## STRUCTURE



- 1. Bluetooth indicator
- 2. DATA interaction
- 3. Satellite indicator

- 4. Power key
- 5. Battery housing
- 6. Loudspeaker

- 7. UHF/GSM antenna interface
- 8. Standard LEMO(5 pins)
- 9. USB/RS232

## KEY FEATURES



### Powerful new bluetooth module

Equipped with bluetooth 4.0 module, which supports receiver to work well with smartphone and tablet etc, also making bluetooth communication faster and more stable.



### Full satellite constellations support

Equipped with most advanced GNSS boards, SOUTH Galaxy G1 s system can track most signal from all kinds of running satellite constellation, especially support B1, B2 and B3 signal from BeiDou, also is able to get position result with only BeiDou signal.



### NFC function

The internal NFC module can make the complicated bluetooth communication more simple and easier.



### Advanced data-link module

Integrated with new and excellent datalink system, SOUTH Galaxy G1 is compatible with current radio protocols in the market, also supports all kinds of network types to access CORS seamlessly.

## CONTROLLERS



### X11 Pro

- 72 channels all-in-view tracking, L1 C/A
- Windows Mobile 6.5
- AM335X 1GHz CPU
- 5MP integrated camera
- 3.5G network module
- 8G mass storage



### X11 Lite

- Windows Mobile 6.5
- AM335X 1GHz CPU
- 512M RAM
- 8G mass storage
- IP67



### X3 Pro

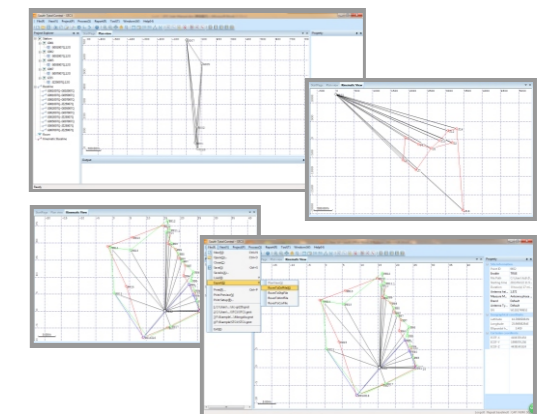
- Windows Mobile 6.5
- A8 1GHz CPU
- 1G RAM
- 5MP camera
- 3G network module
- 8G mass storage expandable

## SOFTWARE

STC is a new post-processing software that integrates static data processing and kinematic adjustment

- Antenna manager with popular receiver types
- Compatible with numerous data format
- Update online
- Abundant report exporting
- Fast processing and clear display
- Transformable to RINEX format
- Full options for result Export
- Powerful baseline settings
- Manually edit and filter satellite data for best result

### SOUTH Total Control Software



### Field Software



Field Genius is a powerful survey data collection software from Canada. Advanced Roadway, Surfacing, Slope Staking, Code Free Linework, Smart Points and GPS support and Live Graphics make FieldGenius the choice of organizations that value productivity. Multi-language is available, which already supported all of South GPS models. (Need to purchase individually)