

SPECIFICATIONS

| Satellite Signals Tracked Simultaneously | |
|--|--|
| Signal tracking | 336 channels, 965 channels (optional) |
| | 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 |
| | L-band |
| GNSS features | Positioning output rate:1Hz~50Hz |
| | Initialization time:<10s |
| | Initialization reliability:>99.99% |
| Positioning precision | |
| Code differential GNSS positioning | Horizontal: ±0.25m+1ppm Vertical: ±0.50m+1ppm |
| | SBAS positioning accuracy:typically<5m 3DRMS |
| Static GNSS surveying | Horizontal: ±3mm+0.1ppm Vertical: ±3.5mm+0.4ppm |
| Fast static | Horizontal: ±3mm+0.3ppm Vertical: ±5mm+0.5ppm |
| Real-time kinematic surveying | Horizontal: ±8mm+1ppm Vertical: ±15mm+1ppm |
| SLink | Horizontal: 3-10cm (5-30min) Vertical: 8-20cm (5-30min) |
| RTK initialization time | 2~8s |
| User interaction | |
| Operating system | Linux |
| Buttons | Two buttons operation |
| Indicators | Five indicate lights |
| Web UI | Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB |
| Voice guide | iVoice intelligent voice technology provides status and voice guide |
| | Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define |
| Secondary development | Providing secondary development package |
| Hardware performance | |
| Dimension | 135mm(Diameter)x125mm(Height) |
| Weight | 1.29kg (with two batteries) |
| Material | Magnesium aluminum alloy shell |
| Operating | -40°C~-65°C |
| Storag | -40°C~+80°C |
| Humidity | 95% 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 | Withstand 2 meters pole drop onto the cement ground naturally |
| Power Supply | 9-25V DC, overvoltage protection |
| Battery | Rechargeable, removable Lithium-ion battery, 7.4V 3400mAh/per; standard four batteries power package(optional) |
| Battery solution | Supporting one or two batteries installed; supporting power pole connection |
| Battery life | Single battery: >8h (static mode).And two installed hot swappable batteries works for more than 16 hours. |
| Communications | |
| I/O port | 5PIN LEMO external power port + RS232, 7PIN external USB(OTG)+Ethernet |
| | 1 radio antenna interface, SIM card slot |
| Wireless modem | Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM |
| | Radio and internet repeater switchable |
| Frequency Range | 410-470MHz |
| Communication Protocol | TrimTalk450s, TrimMark3, PCC EOT, SOUTH |
| Cellular Mobile Network | WCDMA/CDMA2000/TDD-LTE/FDD-LTE 4G network modem, downward compatible with 3G GPRS/EDGE |
| Double Module Bluetooth | BLEBluetooth 4.0 standard, support for android, ios cellphone connection |
| | Bluetooth 2.1 + EDR standard |
| NFC Communication | Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed) |
| External Devices | Optional external GPRS/EDGE dual-mode communication module, switchable; allow to connect external WLAN card |
| WIFI | |
| Standard | 802.11 b/g standard |
| WIFI Hotspot | The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver |
| WIFI data link | To work as the datalink that receiver is able to broadcast and receive differential data via WIFI |
| Data storage/ Transmission | |
| Data Storage | 8GB SSD internal storage |
| | Support external USB storage and automatical cycle storage |
| | Changeable record interval, up to 50Hz raw data collection |
| Data Transmission | USB data transmission, supporting FTP/HTTP data download |
| Data Format | Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.2, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 |
| | GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOE Network model |
| | support: VRS, FKP, MAC, fully support NTRIP protocol |
| Inertial sensing system | |
| Tilt survey | Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle of the centering rod |
| Electronic bubble | Controller software display electronic bubble, checking leveling status of the centering rod real time |
| Thermometer | Built-in thermomter sensors, adopting intelligent temperature control technology which can mornitor and adjust the temperature of receiver in real time |

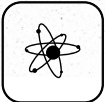


GALAXY G1 Plus

— Innovative GNSS Receiver —



Linux OS



All constellations



Tilt survey



AP hot spot



NFC



Radio Router



Bimodule
bluetooth



Industrial
3-proofings



Cloud service



8G SSD storage



RINEX support



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Behind every significant epoch-making change in human society, always accompanied by the birth of an important technology.

Computer and electronics make surveying and mapping industry achieve a span from the analog age to the digital age.

And the development of Internet technology further opens the prelude of surveying and mapping information age.

In the form of the ubiquitous, internet is penetrating and fusion in all corners of the surveying technology, and setting off an unprecedented reconstruction and transformation.

In the dawn of a new era, south is walking in front of it to craft Galaxy 1plus which opening a '+' era of high-precision positioning applications.



KEY FEATURES

Intelligent platform

Linux OS
New generation of embedded Linux operating system platform improves RTK performance and work efficiency. Its operating efficiency is higher; a unique core processing mechanism which can respond to more than one command at one time; it starts faster and more responsive in real time. While the stability of system is much higher, it can be adapt to the job of longer uninterrupted power.

Web UI management platform

Embedded Web UI management platform supports WIFI and USB mode connection. Users can monitor the receiver status and configure it via the internal Web UI management platform.

Wireless data communications

Wi-Fi
New Wi-Fi module, not only can be used as data link to access to internet, but also can be as a hotspot which can be accessed by any other smart devices to configure the receiver.

Bluetooth

Equipped with dual-mode Bluetooth v4.0 standard which is able to connect the other smart devices and compatible with Bluetooth v2.1 standard. It not only enlarges the work range but also makes the data communication become more stable.

NFC

A light touch can be successfully paired which makes the connection become faster and more convenient.



Data Link

Built-in functional digital radio

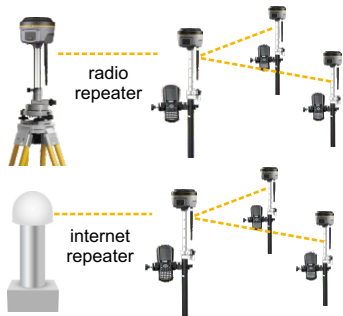
SOUTH self-developed digital radio which can fully support the communications with the mainstream radio protocols: Trimtalk450S, TrimMark3, PCC EOT, and SOUTH. Realize the random switching of the radio range 410MHZ-470MHZ and the power level as well.

Radio repeater: The rover can broadcast the corrections via internal radio to other rovers after received the radio differential signal.

Internet repeater: The rover can broadcast the corrections via internet to other rovers after received the network differential signal.

Built-in network module

Standard 4G module which supports WCDMA/CDMA2000/TDD-LTE/FDD-LTE 4G network and downward compatible with 3G GPRS/EDGE. Smart PPP dialing technology can auto dial which makes the G1 PLUS keeping online continuously during the survey.



Intelligent technology

Storage technology

Internal 8GB SSD and it supports external USB storage. Supports STH, RINEX raw data storage and the sample rate can reach to 50Hz. Supports automatic data storage cycle, the data will be automatically deleted when the space is not enough. Disk-On-key which can easily copy the data to external U disk.



Dual-battery system

The new design for battery house can support 2 batteries installed, that is able to last longer time for common field work!

iVoice

Intelligent iVoice can voice broadcast the current receiver status and operation guide in real time, it supports multiple languages.

Smart power pole supply technology

External power pole can provide up to 10 hours of power. It also can display the remaining power in real time.

