



SOUTH GNSS PRODUCTS

2020

Authorized Dealer

SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.

Add: South Geo-information Industrial Park, No. 39 Si Cheng Road, Tian He IBD, Guangzhou 510663, China
Tel: +86-20-23380888 Fax: +86-20-23380800
E-mail: mail@southsurvey.com export@southsurvey.com impexp@southsurvey.com gnss@southsurvey.com
http://www.southinstrument.com

RTK Products



Insight V1



SOUTH brand-new image RTK V1 surveying system consists of Galaxy series RTK receiver and image acquisition system which combined with new point positioning technology--*Touch*. It crosses space obstacles and sweeps measurement blind area by taking pictures to obtain the target coordinate information.(unreached points with ordinary RTK system)

Perfect combination with GNSS receiver

Insight V1 perfectly combines with SOUTH Galaxy series RTK, establish association of images and RTK position seamlessly to generate high-precision geodetic spatial dataset, users can collect the position information by one-key operation.

Position presented in pictures

Through capturing 3 pictures for the surveying target from different position within 15m and uploading to cloud server in backstage, combines with powerful processing core program and point cloud calculation technology to calculate geodetic spatial coordinate, users can get real-time result on the site.

Avoid risk measurement

Rely on its keen senses of sight, V1 captures precision point coordinate away from that dangerous place, like the point locates at the middle of the road, or the point close to high-tension transformer, ensures the safety of surveyors while they are working.



Galaxy G6



GNSS Performance & Web UI management

Equipped with most advanced GNSS boards with latest Maxwell7 technology, Galaxy G6 is able to track triple frequency from GPS, GLONASS, BDS and GALILEO. In additional, it supports Trimble RTX service as well.

Functional digital radio

Inbuilt SOUTH self-developed digital radio module, Galaxy G6 fully supports the mainstream communication radio protocols such as Trimtalk, SOUTH, huace, ZHD, Satel, as well as to the SOUTH new protocol SOUTHx and SOUTH+, which can meet the different needs of users. Moreover, because of such a powerful radio module integrated, Galaxy G6 is able to work as a repeater to transfer corrections from radio Base station or even the CORS station. Powerful radio module, can support 8km long range work.

HD LCD

0.96 inch HD OLED colorful LCD supporting multiple language display and it is suitable to field work with high brightness and low power consumption.

IMU integrated (Optional)

Through uninterrupted studying and improving, SOUTH Galaxy G6 has become a revolutionary GNSS measurement system since it was implanted with Inertial Measurement Unit (IMU), which really makes perfect combination of inertial navigation and GNSS positioning come true.



Linux OS



All constellations



Tilt survey



AP hot spot



LCD



Radio Router

RTK Products

RTK Products

Galaxy G1Plus



Intelligent Web UI management

SOUTH G1Plus comes with advanced WiFi technology that users can access to the embedded Web UI management platform of G1Plus by using laptop or cellphone or the other terminals via WiFi connection, receiver's working status and parameters can be viewed, even more, users can implement some operations on the Web UI management.

GNSS Performance

Equipped with most advanced GNSS boards with Maxwell7 technology, SOUTH Galaxy G1 Plus system can track most signal from all kinds of running satellite constellations, especially support B3 signal from BDS and E6 from GALILEO.

Advanced 4G network module

With the rapidly development of internet, SOUTH G1Plus is integrated with standard 4G network module which supports TDD-LTE/FDD-LTE 4G network, and smart PPP dialing technology can auto dial which makes the G1Plus keep online continuously during the survey.

Smart power supply technology

G1Plus is designed for dual-battery power supply system that it can install 2 batteries with hot-swap function, it can make sure the power is enough to last longer time for common field work. In addition, G1Plus has a new design power contact inside screw socket for external power pole (optional).



New Galaxy G1



Supports different GNSS boards

The new Galaxy G1 comes back with update on GNSS board that more options of GNSS channels (220/692/555) for selection, each board is able to track most signals from all kinds of running satellite constellations, and owns ability of enable/disable constellation tracking.

Web UI & WiFi

Based on Linux platform and advanced WiFi technology, new G1 allows you to monitor and configure it easily by accessing its embedded Web UI platform via WiFi connection by cellphone or laptop. What's more, G1's WiFi is able to work as datalink which improves the variety of datalink communication.

Excellent network modem

The new G1 is equipped with the up-to-date 4G module which supports TDD-LTE/FDD-LTE 4G network, and downward compatible with 3G and 2G network, it brings high-speed of communication with reference station.

More optimizations

New G1 adopts a stable TNC interface for radio antenna to instead the flimsy SMA interface. And a new design of SIM card slot could avoid inserting SIM card into wrong place, it will become more and more convenient for users to insert and take out the SIM card. Lightweight design is convenient to carry to the field



S660N



GNSS Performance

Equipped with most advanced GNSS board with 336/692 channels, and go with unmatched GNSS multi-constellation tracking performance, SOUTH S660N is able to track most signals from all kinds of running satellite constellations. And this compact device owns the ability of enabling or disabling constellation tracking. Moreover, with the high-performance of GNSS board, S660N reserves L-Band signal tracking, and PPP (Precise Point Positioning) function.

Upgraded processing algorithm

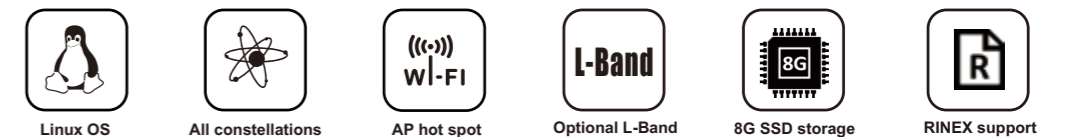
The core RTK algorithm upgrade, integrates the adaptive calculation and single point smoothly positioning ability, it can realize the continuous and reliable positioning in bad conditions such as under the trees, around building and etc.

Functional LEMO interface

The new LEMO interface is designed to integrate data transmission and charging, it's carried out thousands of pullout and insertion experiments, and still maintains good performance.

Battery solutions

Built in a set of high-capacity of battery with 6800mAh that can last full-day continuous work, what's more, S660N supports the external power pole with connecting to the new design of LEMO port, this is an ideal option of power supply solution.



New S86



Inbuilt high-capacity battery

With the low power consumption of inner core modem, the built-in high-capacity battery can last up to 10 hours continuous work, users completely don't need to worry about the battery life in the fieldwork.

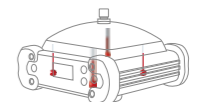
Visual HD display

The HD OLED colorful display supports multiple languages display and it is suitable for field work with high brightness and low power consumption.



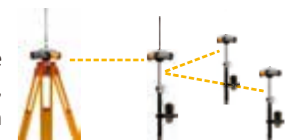
Intelligent temperature control technology

Built-in sensitive thermometer sensors can monitor the temperature of each integrated module in real time and then adjust it to make sure the receiver is in a best status.

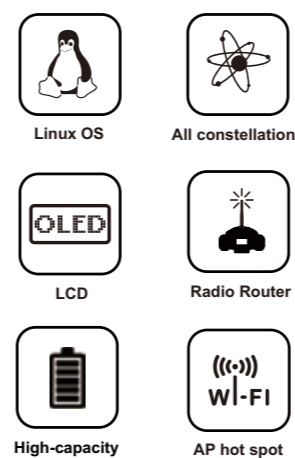
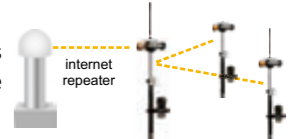


In-built functional digital radio

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



Besides, new S86 is able to work as a repeater to transfer corrections from radio Base station or even the CORS station, it greatly improves the utility of device and the flexibility of fieldwork.



Controller Products

H5 (Android)



H5 is a new generation professional controller running on Android which offers state of the art smartphone capabilities combined with rugged professional quality. And the alphanumeric keypad which gives flexibility for surveyors field work.

In term of structure of H5 controller, it was built with magnesium alloy materials, extremely a industrial rugged and lightweight controller which reaches to IP68. Your data will be protected and the reliability of the device in the most challenging environments.

H5 uses 3400 mAh Li-ion battery which is the same battery with RTK receiver so that it can share the battery charger with RTK, there is no more extra charger for H5 batteries. In addition, the powerful 4G network module can provide multiple options and perfect experience of high speed network connection.

H5 controller is equipped with various sensors such as barometer, gyroscope, E-compass, Gravity sensor, etc. There are even additional options such as built-in bar code reader and interphone functions. With Bluetooth 4.0+EDR, as well as NFC, H5 is faster to connect with RTK receiver, users don't need to waste time on searching Bluetooth IDs. With 13 megapixel camera and 16G huge storage space, H5 can meet all kinds of needs from users on the field work.

H3Plus (Android)



Running with Android 6.0 operating system which an extremely stable OS, H3Plus offers state of the art smartphone capabilities. And the important that Google Service is available on controller so that H3Plus can meet various needs of users. And the alphanumeric keypad with backlight which gives flexibility for surveyors field work.

4.3 inch capacitive touch screen which is able to resist against strong light interference, H3Plus can clearly display software interface in the strong sunshine, makes operations on controller intuitive.

Ultra-rugged frame with IP68 industrial level protection, the H3Plus controller offers everything you expect, it works well in extremely tough conditions like humidity extremes, vibration and shock.

With featuring the professional and powerful 4G network module, and the dual SIM card slots design, H3Plus gives you high-speed network experience with data communication and interaction. What's more, 6500 mAh Li-ion battery can fulfill the long working time in daily jobs.

T17N (Windows Mobile)



With a powerful TI Cortex-A8 (1G Hz) processor and a high speed flash storage to address the performance and capabilities, SOUTH T17N can launch the latest software faster and more efficiently. This controller can also accommodate up to 32GB TF card to satisfy your need.

T17N adopts Type-B USB interface to make sure the connection more stable, and in case of breaking off carelessly while it is being used. Moreover, T17N is equipped with serial port that allows the communication with receiver by cable, as well as better to use for firmware update

6500mAh, removable Li-ion huge capacity battery can provide almost continuous operation in 2-3 working days, and it greatly reduces the likelihood of low power during any full-day job.

GIS Products

N80 series



N80 series tablet are the industrial rugged GNSS collection terminal which integrated with high precision GNSS board, high sensitive antenna, 4G network modem, WiFi and dual-mode Bluetooth modem, leads the portable high precision tablet in the field of large-size screen mapping.

In the form of the ubiquitous, internet is penetrating and fusion in all corners of surveying technology, and setting off an unprecedented reconstruction and transformation. In the rapidly development information age, data sharing is an inevitable trend, N80 can meet the needs of mapping and GIS industry with the high speed communication modem.

Compass2



The Compass 2 is a new portable GNSS receiver with a delicate design, embedded with Android system. Packaged with a 1.4-inch touch screen, it is convenient to get satellites information, GIS collection, stakeout, etc. Taking photos, recording videos and video calling are possible thankful for the built-in camera and 4G network module

1.5 GHz processor and 3 GB RAM provide powerful performance. Integrated 32 GB ROM ensures your massive data storage.

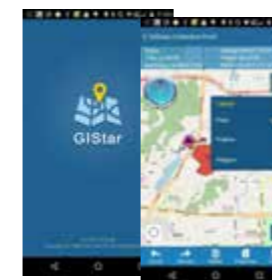
Compass3



The Compass 3 integrates with high-precision GNSS module, high-performance helical antenna, 4G network module, WiFi and Bluetooth. And it supports tracking dual frequency signal from GPS, GLONASS, GALILEO and BDS constellations. With lightweight and rugged performance, Compass3 can be widely used for traditional surveying, automatic vehicle positioning, mobile devices routing inspection, etc. Such a compact and ease of use equipment can meet variety of needs of users in the fields with centimeter level.

Based on Linux platform, this configurable receiver supports electronic fence system to protect users from potential dangerous area.

GIS software



GISStar for Android system was designed for GIS application, which adopts GIS (Geographic Information System) technology to collect and manage geographic data. It's applied to resource management and configuration, urban planning and management, environment assessment and modeling, land information system and cadastral application, facilities management and maintenance, agriculture and transportation.

GISStar takes advantages of Android system, realizes point and line operation much conveniently by touch screen. It also supports various data format import and export, such as shp file, dxf file, kml file and gpx file, which fully meet the demands of different of users.

Digital UHF

S6 digital UHF



SDR-based technology

SOUTH S6 is the world's first intelligent radio which is based on Linux platform, so that it could be configured by accessing its own embedded Web UI management.

S6 digital UHF adopts SDR (Software Defined Radio) technology which base on common hardware platform to achieve variety of communication modules by using software, it is the innovation of wireless communication.

Configurable transmitting power and protocol

SOUTH S6 self-developed digital radio is built for mission-critical applications where a combination of flexibility and supreme performance, which can fully support the communications with the mainstream radio protocols such as Trimtalk450S, SOUTH, SOUTH+, SOUTHx, huace, ZHD and Satel. Realize the random switching of the radio range 410MHz-470MHz in 120 channels and the power level (10W/20W/35W) as well.

Excellent power adjustment

S6 is able to monitor the transmitting power in real-time so that it can make self-adaptive dynamic adjustment for transmitting power according to the variation of voltage of external battery, that can make sure the working range not be affected by changing power, extremely flexible and reliable.



Multiple protection mechanism

S6 digital UHF is integrated internal protection circuit and use special element to protect components, CMOS circuit and interface circuit from ESD(Electro-Static Discharge) occurred.

And the over-voltage over-current multiple protection mechanism can avoid the risk of damaging and burning the component by over-voltage and over-current, fully ensures the stability and reliability of hardware.

What's more, S6 is equipped with SPD (Surge Protective Device), and combined with inverse connection mechanism, which can be in case of connecting to the inverse node on external battery.

Cable-free communication

Equipped with advanced WiFi and Bluetooth communication module, S6 can be random configured by accessing internal web UI with WiFi connection by any in hand devices, no more configured it in advanced with computer before going to the field.

And base station can connect with radio via Bluetooth connection that correction datastream is transferred by this way, it gets rid of limitation of cable length, which increases productivity and applicability.

SDL series



SDL series modules are SOUTH's self-developed internal digital radio which are built for mission-critical applications where a combination of flexibility and supreme performance, which can fully support the communications with the mainstream radio protocols such as Trimtalk450S, SOUTH, SOUTH+, SOUTHx, huace, ZHD and Satel. Realize the random switching of the radio range 410MHz-470MHz in any channels and the power level as well.

These modules are designed to smaller and smaller, and performance is increased by an average of 20 percent, such compact modules are appropriate for all kinds of RTK receiver with featuring the reliability and stability.

Hydrographic Products

SL20



SOUTH SL20 surveying boat adopts dual spray pumps for the propulsion system, and use differential motion to control driving direction of boat. This propulsion system greatly improve the disadvantages of propeller system in previous products that in case of aquatic plants are sucked into propeller and damage the propulsion system.

Coming with carbon nanofiber material and the innovative hull design, SL20 surveying boat becomes an outstanding hydrographic equipment with small size and lightweight, it is very convenient to carry to the field, and one person is able to accomplish the mission.

With moon pool design which running through the bottom, SL20 is able to carry the ADCP(Acoustic Doppler Current Profilers), echo sounder, RTK receiver or the other equipments, which makes small boat be a combination system and implement surveying works to be diversified.

SL20 boat is mainly applied to the basin of rivers, lakes and reservoirs where there is quiet waves. It can sail to about 2km away from control center with manual remote control, or it is set to return automatically while it reach to the boundary of specified working area.



Compact and lightweight, realize one-man lift up, ease of launch and retrieve



105cm of hull length, easy for the field transportation.



Dual spray pumps propulsion system



Running through the bottom moon pool designed for ADCP or Echo-sounder

Field Software

SurvX4.0



SurvX is a GNSS surveying and mapping software, based on years of accumulated market experience, combined with the benefits of international mainstream surveying and mapping softwares, such as RTK control, GIS data collection, road design, google map view. SurvX has very outstanding graphic interaction function, humanizing operation process, ease of use.

EGStar for Android



EGStar for Android is designed for old users by remaining classical menus which is similar to the previous version on Windows Mobile platform, and also for new users with popular Android interface at present, these 2 user interfaces are able to be switched according to the operation habit of users.

EGStar for Android version supports google map as basemap, it meets demands of most users. The software is able to be installed on H3Plus controller and any other Android devices, it fits for the users who have different of Android-based controller. And it is easy to be updated online while there is any updates for software.

FieldGenius



FieldGenius for WM

To meet diverse needs, FieldGenius combined advanced functionality, advanced display with high definition graphic and intuitive interface, powerful road design module, code-free connectivity, ease of use, advanced autodesk land development desktop support and volume of equipments supported, it is a good choice for the effect-oriented groups.

FieldGenius for Android™

New technology opens opportunities to develop better tools for the survey industry. FieldGenius for Android™ now is available and extends MicroSurvey's mission to provide a brand-neutral solution, supporting most common hardware available in the market today.

Office Software

SGO-South Geomatic Office

SGO-SOUTH GEOMATICS OFFICE is a brand new office software for surveyors. There are many enhanced modules integrated. It is not just a post-processing software anymore, but a comprehensive office software for surveyors. It can edit, process, analysis the data of GNSS receivers, Total Stations, Levels. Besides, the new SGO also supports CAD, Cloud, Online map, Road design, EGSTAR project analysis, Earthwork calculation, Data quality check and some tools of debugging. SGO is your reliable partner which can meet your most of job requirements.



The new base map function is added to combine the software with Google Maps intelligence. The data processing personnel can intuitively obtain the distribution of the control net and the environmental conditions around the site through the visual communication of the base map, thereby judging the data receiving quality of the station to accurate data editing.

Supports SP3 precise ephemeris calculation to make the points be more accurate after calculating. And the precise ephemeris is allowed downloading. In addition, such as point name synchronization RINEX file export, PPP fusion algorithm optimization, single point report contains RMS/DOP convergence graph and so on.

Supports multi-constellation (GPS/GLONASS/BDS/Galileo) free combination solution, single-constellation solution, intelligent elimination of gross error data, accurate reading of data segments.

Adopting the new "tropospheric estimation" algorithm, which increases the accuracy and achieve high-precision solution for long baseline by improving data volume and data quality.



Match CAD's attribute structure, layers and symbols; Support DXF data format import and export; Measure volume quickly and easily; Automatically simulate terrain, and create CAD results

Adopting the global ultra-high-order Earth Gravitational Model, EGM2008, which the global coverage of the data exceeds 80%, and the elevation accuracy is improved while ensuring the accuracy of the plane.

The new data processing engine can quickly import geographic data, process static baselines, and dynamic baselines. The processing speed is three times higher than the old ones.

