SPECIFICATIONS

SPECIFICATIONS	
GNSS Performance	
Channels	336, 692 (optional) ^[1]
GPS	L1, L2C, L2P, L5
GLONASS	L1, L2
BDS	B1, B2, B3 ^[2] , B1C,B2a (Optional)
Galileo	E1C, E5a, E5b, E5AltBOC ^[3]
QZSS	L1 C/A, L1 SAIF, L2C, L5, LEX
SBAS	L1 C/A, L5
L-Band	Optional ^[4]
Update Rate	•
•	1Hz, 2Hz, 5Hz, 10Hz, 20Hz, 50Hz ⁽⁵⁾
Reacquisition	<2s
Cold Start	<45s ⁽⁶⁾
Real Time Kinematic	
Horizontal	0.008m+1ppm
Vertical	0.015m+1ppm
Initialization time	Typically<8 seconds (Baseline<30km)
Initialization reliability	Typically>99.9%
Code Differential GNSS Positioning	
Horizontal	0.25m+1ppm
Vertical	0.50m+1ppm
Static	
Horizontal	2.5mm+1ppm
Vertical	5mm+1ppm
Single Point Positioning	општ тррпі
Horizontal	<1.0m
1.07.20	
Vertical	<1.5m
PPP(Precision Point Positionning) ^[7]	
Horizontal	<0.1m
Vertical	<0.2m
Convergence time	20~30 min
Communication	
Data Interface	LEMO port (Enable to switch to Ethernet port and OTG function)
Bluetooth	Bluetooth V2.1/ Bluetooth V4.0, support EDR
WiFi	802.11 b/g standard
Data Storage and Transmission	
Memory	8GB SSD (Solid State Disk) internal memory
Static data format	STH, Rinex2.x, Rinex3.x
Sampling rate	1Hz, 2Hz, 5Hz,10Hz, 20Hz
Camping rate	Standard NMEA-0183: GSV, AVR, RMC, HDT, VGK, VHD, ROT,
	GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL, GRS
Navigation autnut	
Navigation output	Extended NMEA-0183: PSIC PST, GSI, BSI, VCV, TRA, SLB, EDP,
	TPI, TRI, VCM, STA, DEV, AAT, REC, DAL
	BINEX
Reference I/O	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2
Electrical	
Battery	6800mAh, Li-ion battery built in, 3.7V
Battery life	Typically 8 hrs or more
Environmental	
Operating temperature	-30°C~+65°C
Storage temperature	-35°C~+75°C
Operating humidity	5%~95% R.H. non-condensing
Shockproof	Withstand drop from 1.5m to concrete
Waterproof/Dustproof	Test to IP67 standard
Physical	1000 to II Of Oldindard
Dimensions(mm)	115(L)×115(W)×40(H)
	540g(Internal battery included)
Weight	o-rog(internal battery included)
 [1] 336 channels and 692 channels for the option. [2] B3 is supported by the model which is installed SOUTH board. [3] GALILEO E5 AltBOC signal acquisition is subjected to the capability of OEM board. [4] Reserved. And it requires a subscription to data service. 	[5] Optional, different board needs firmware to support such a frequency.[6] Typical value. No almanac or ephemerides and no approximate position or time.[7] The accuracies depend on correction service chosen.

Remarks: Measurement accuracy and operation range might vary due to atmospheric conditions, signal multipath, obstructions, observation time, temperature, signal geometry and number of tracked satellites. Specifications subject to change without prior notice



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



Innovative Network RTK Receiver

Intelligent, Versatile, Innovative, Compact,Lightweight,Rugged





L-Band





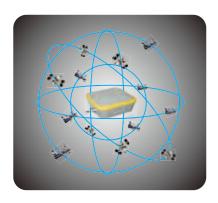




NEW FEATURES OF GNSS

Full satellite constellations support

Equipped with most advanced GNSS board, 692 channels and 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 .



Inner optimized structure

Enhancement of anti-interference performance and optimization of capture time and first positioning time.

L-Band & PPP

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.



Intelligent storage ability



SOUTH S660N is equipped with 8GB **8GBSSD** Solid State Disk that ensures adequate storage space for data collection, as well as the stability of high data sampling rate.

Static performance

Base on the intelligent platform, S660N supports STH, Rinex2.x and Rinex3.x format data storage.

Relying on the advanced GNSS board, S660N can support 20Hz static sampling rate after

upgrading.





20Hz

PERFORMANCE OF S660N

WiFi

According to current trend of RTK surveying, WiFi is a brand-new and useful technology of RTK measurement that makes effective use of GNSS receiver, which greatly improves the working efficiency and the flexibility.



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.



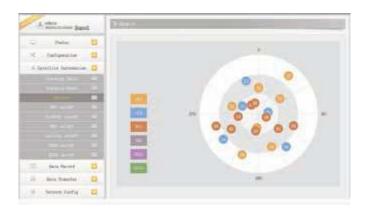
Outstanding receiver housing

The brand new design for improvement of waterproof, and the steadiness of inner structure, S660N new housing can endure every kind of shocks to protect inner components from looseness and damage.



Web User Interface server

Embedded Linux operating system and SOUTH intelligent cloud platform, S660N receiver is no more a simple and compact RTK receiver, now it is a complete intelligent operation system with web UI management platform.



Application fields

S660N can be widely used in the fields of engineering measurement, GIS data collection, forestry and agricultural land management, etc. Such a high-precision device is sure to meet the needs of various users.

