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]
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Update Rate	1Hz, 2Hz, 5Hz, 10Hz, 20Hz, 50Hz ^[5]
Reacquisition	<2s
Cold Start	<45s ^[6]
Real Time Kinematic	0.000
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	
Horizontal	<1.0m
Vertical	<1.5m
PPP(Precision Point Positionning)[7]	1.011
Horizontal	<0.1m
Vertical	<0.2m
Convergence time Communication	20~30 min
Data Interface	LEMO part (Enable to switch to Ethornet part and OTG function
Bluetooth	LEMO port (Enable to switch to Ethernet port and OTG function
WiFi	Bluetooth V2.1/ Bluetooth V4.0, support EDR
	802.11 b/g standard
Data Storage and Transmission	000 000 (0
Memory	8GB SSD (Solid State Disk) internal memory
Static data format	STH, Rinex2.x, Rinex3.x
Sampling rate	1Hz, 2Hz, 5Hz,10Hz, 20Hz
	Standard NMEA-0183: GSV, AVR, RMC, HDT, VGK, VHD, ROT,
	GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL, GRS
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	BINEX CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2
Reference I/O Electrical	
Electrical	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2
Electrical Battery	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V
Electrical Battery Battery life	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2
Electrical Battery Battery life Environmental	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V
Electrical Battery Battery life Environmental Operating temperature	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C
Electrical Battery Battery life Environmental Operating temperature Storage temperature	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity Shockproof	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing Withstand drop from 1.5m to concrete
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity Shockproof Waterproof/Dustproof	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity Shockproof Waterproof/Dustproof Physical	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing Withstand drop from 1.5m to concrete Test to IP67 standard
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity Shockproof Waterproof/Dustproof Physical Dimensions(mm)	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing Withstand drop from 1.5m to concrete Test to IP67 standard 115(L)×115(W)×40(H)
Electrical Battery Battery life Environmental Operating temperature Storage temperature Operating humidity Shockproof Waterproof/Dustproof Physical	CMR, CMR+, sCMRx, RTCM 2.x,RTCM 3.0,RTCM 3.1,RTCM 3.2 6800mAh, Li-ion battery built in, 3.7V Typically 8 hrs or more -30°C~+65°C -35°C~+75°C 5%~95% R.H. non-condensing Withstand drop from 1.5m to concrete Test to IP67 standard

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



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Innovative Network RTK Receiver







L-Band







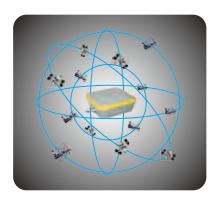




NEW FEATURES OF GNSS

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.

