Net S9

Continuously Operating Reference Station

· Integrated professional OEM board

· New design of aluminum alloy housing

· IP68 industrial level standard

· WIFI hotspot and Bluetooth connections

· STH, RINEX raw data storage to FTP server

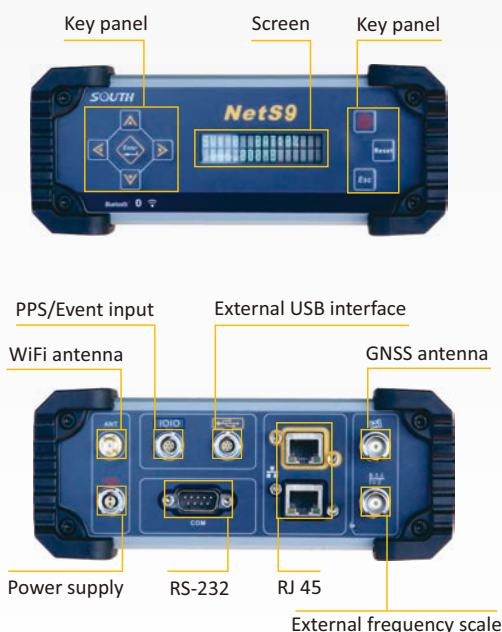· eMMC technology for internal memory

Summary

SOUTH NET S9 has integrated professional OEM board, 336 channels, compatible with all constellations.

In addition, we greatly improve the operation experience and convenience for users with the additional function of WiFi hotspot and Bluetooth connections, thus, users are able to configure receiver with any mobile terminal. NET S9 is not only able to record STH file, but also support RINEX file storage.

10000mAh high capacity of battery built-in, can act as a primary power source or as an Uninterupted Power Supply (UPS) backup.

SOUTH NET S9 is using eMMC (Embeded Multi Media Card) technology for internal memory, faster and larger, stable and reliable. Moreover, NET S9 allows to connect to an external storage devices(maximum up to 1TB) via USB Host interface so that you don't have to worry about data storage.

User Interface

Key panel   Screen   Key panel

PPS/Event input   External USB interface

WiFi antenna   GNSS antenna

Power supply   RS-232   RJ 45

External frequency scale

Distributor Info

GNSS

Channels	220 channels, 336 channels(optional), 692 channels (optional)
GPS	L1 C/A, L2E, L2C, L5
GLONASS	L1 C/A, L1P, L2 C/A(GLONASS M only), L2P
BDS	B1, B2, B3
GALILEO	E1 BOC, E5A, E5B, E5AltBOC1, E6
SBAS	L1 C/A, L5
Initialization	Typically<10 seconds
Initialization reliability	>99.9%

Accuracy

Code differential GNSS positioning	Horizontal: 25mm+1ppm RMS Vertical: 50mm+1ppm RMS
SBAS positioning accuracy	<5m (typically) 3DRMS RMS
Static GNSS surveying Baseline<30km	Horizontal: 2.5mm+0.5ppm RMS Vertical: 5mm+0.5ppm RMS
Static GNSS surveying Baseline>30km	Horizontal: 4mm+0.5ppm RMS Vertical: 9mm+0.5ppm RMS
Real-time Kinematic Baseline<30km	Horizontal: 10mm+1ppm RMS Vertical: 20mm+1ppm RMS
Real-time Kinematic Network RTK	Horizontal: 8mm+0.5ppm RMS Vertical: 15mm+0.5ppm RMS

Data storage & output

Data storage	32G (extend to 64G) internal memory is capable of cycle-recording raw data, adopts eMMC technology, stable and reliable
Positioning rate	1Hz, 2Hz, 5Hz, 10Hz, 20Hz, 50Hz(depend on setup option)
Reference output	CMR, CMR+, RTCM2.1, RTCM2.2, RTCM2.3, RTCM3.0, RTCM3.1, RTCM3.2, sCMRx, RTCA, NOVATELX
Navigation output	ASCII: NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL, GRS, GBS and binary
Data format	Support STH, RINEX2.x, RINEX3.x raw data storage
Data retrieval	Download form HTTP, FTP and USB copy

Data communication

Ethernet protocol	Support TCP/IP, HTTP,FTP and NTRIP protocol
Serial port	Navigation data, static data and differential correction data transmission, PPS-UTC
Bluetooth	Bluetooth 2.1 (Class2)+EDR, 2.4GHz
WiFi	2.4GHz, IEEE 802.11 b/g/n, allows to access built-in web user interface with the mobile terminal via its WIFI hotspot

Electrical

Power supply	9V～36V DC input, 3 separate interfaces for power supply with over-voltage protection
Battery	10000mAh high capacity of battery built-in
Battery life	More than 15 hours for continuous work in default
Consumption	configuration Low power consumption 3.8W

User interface

Front panel	Front panel display with buttons and LED screen
Network interface	Two RJ45 network interface
RS-232 serial	One RS-232 serial port(9-pin), data transmission
USB	Two USB port, USB host and USB device
Power interface	Three separate power interface
Multi-function interface	One port supports PPS output, Event marker input, serial port and power supply
External frequency port	One external frequency scale port, supports high-precision atomic clock connection
GPS Antenna interface	Choke ring antenna connection
WIFI antenna interface	Allows to connect a WIFI broadcast antenna

Physical

Dimension(L×W×H)	216mm×178mm×72mm
Weight	2.28kg
Shock and vibration	Rugged aluminum alloy housing plus plastic ring seal, designed to survive a 3 m drop onto concrete
Waterproof/Dustproof	IP68 level standard, protect against for temporary immersion to a depth of 1m; Completely protect from dust

Environmental

Storage temperature	-40 ℃～+80℃
Working temperature	-40℃～+85℃
Humidity	Relative humidity, 10%–100%condensing

SOUTH
Target your success