

Net S9

Continuously Operating Reference Station



- Integrated professional OEM board
- New design of aluminum alloy housing
- IP67 industrial level standard
- WIFI hotspot and Bluetooth connections
- STH, RINEX raw data storage to FTP server
- eMMC technology for internal memory

Summary

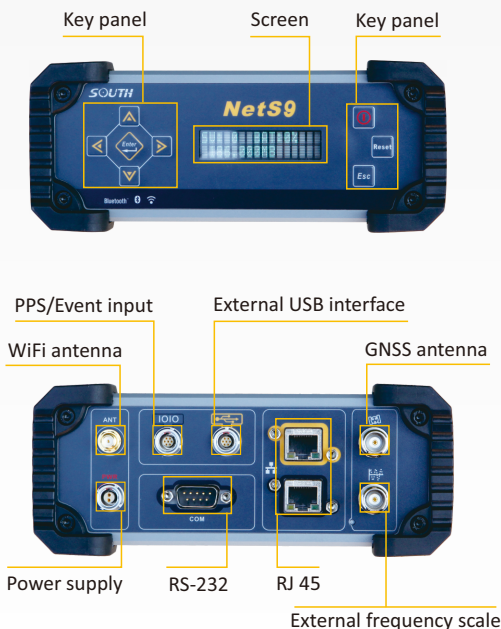
SOUTH NET S9 has integrated professional OEM board, compatible with all constellations.

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 Uninterrupted Power Supply (UPS) backup.

SOUTH NET S9 is using eMMC (Embedded 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



Distributor Info

GNSS

| | |
|----------------------------|--|
| Channels | 692 channels, 220 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 | L1 BOC, E5A, E5B, E5AltBOC1 |
| SBAS | L1, L2C, L5 |
| Initialization | Typically<10 seconds |
| Initialization reliability | >99.9% |

Accuracy

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|---------------------------|--|
| SBAS positioning accuracy | <5m (typically) 3DRMS RMS |
| Code differential GNSS | Horizontal: 0.25 m + 1 ppm RMS Vertical: 0.50 m + 1 ppm RMS |
| Static(long observations) | Horizontal: 2.5 mm + 0.1 ppm RMS Vertical: 3 mm + 0.4 ppm RMS |
| Static | Horizontal: 2.5 mm + 0.5 ppm RMS Vertical: 3.5 mm + 0.5 ppm RMS |
| Rapid static | Horizontal: 2.5 mm + 0.5 ppm RMS Vertical: 5 mm + 0.5 ppm RMS |
| RTK(UHF) | Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS |
| RTK(NTRIP) | Horizontal: 8 mm + 0.5 ppm RMS Vertical: 15 mm + 0.5 ppm RMS |

Data storage & output

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|-------------------|--|
| Data storage | 8G (extend to 32G) 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, ROT, GKG, 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 Push and USB copy |

Data communication

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|-------------------|---|
| Ethernet protocol | Support TCP/IP, HTTP 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

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|--------------|--|
| Power supply | 9V~28V 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 configuration |
| Consumption | 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

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|----------------------|---|
| 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 2m drop onto concrete |
| Waterproof/Dustproof | IP67 level standard, protect against for temporary immersion to a depth of 1m; Completely protect from dust |

Environmental

| | |
|---------------------|---------------------------------------|
| Storage temperature | -40℃~+80℃ |
| Working temperature | -40℃~+75℃ |
| Humidity | Relative humidity, 10%~100%condensing |