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Trimble NetR9 Reference Receiver Series: Frequently Asked Questions

What is the Trimble NetR9 GNSS reference receiver?

The Trimble® NetR9™ GNSS (Global Navigation Satellite System) reference receiver is a full-feature, top-of-the-line receiver that provides maximum features and functionality from a single piece of hardware.



What are the primary functions of this reference receiver?

The NetR9 GNSS receiver offers the most advanced solution for campaign and/or Continuously Operating Reference Station (CORS) use. It can track, store, and feed data to other Trimble software programs such as GPSNet™, RTKNet™, VRS³Net™, Integrity Manager™, 4D Control™, or Charisma™ software for the MSK industry. This receiver also supports advanced options such as rover integrity and the various storage integrity functions offered by Trimble network software.

Is the NetR9 GNSS reference receiver compatible with network software packages?

Yes. Using the RT27 format, this receiver can be connected to Trimble software platforms for maximum functionality. In addition, it can be connected to third-party software packages that accept observations in the industry standard format of RTCM version 3.x.

Can I add the NetR9 GNSS reference receiver to my existing CORS network?

Yes. The NetR9 receiver provides all of the required functionality for network densification.

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Trimble Engineering & Construction Group, 5475 Kellenburger Road, Dayton, OH 45424-1099, USA

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What applications can benefit from the NetR9 GNSS reference receiver?

The NetR9 receiver can be used in existing networks or new network installations. It supports the most demanding applications for the agricultural, earth science, surveying, construction, and mapping and GIS (Geographic Information System) industries.

Specific applications for the NetR9 GNSS reference receiver include:

- Network expansion and improved functionality (for example, GLONASS, rover integrity)
- Campaign applications
- Seismic studies
- Meteorological studies
- MSK beacon site support and modernization
- SBAS monitoring stations (WAAS/EGNOS/MSAS/GAGAN/OmniSTAR)
- Deformation and monitoring

Is the NetR9 GNSS reference receiver RoHS compliant and CE certified?

Yes. The NetR9 receiver meets regulatory compliances for the following items:

- RoHS
- China RoHS
- FCC Part 15.247 FCC certifications
- Class B Device FCC Part 15 and ICES-003 compliance
- RSS-310 and RSS-210 Industry Canada compliance
- CE mark compliance
- C-Tick mark compliance
- UN ST/SG/AC.10.11/Rev. 3, Amend. 1 (Li-Ion battery)
- UN ST/SG/AC.10/27/Add. 2 (Li-Ion battery)
- WEEE

Can I add options to the NetR9 GNSS reference receiver?

Yes. The NetR9 GNSS reference receiver is available in three configurations: the NetR9 Ti-1 (full feature), the NetR9 Ti-2 (fully upgradable), and the NetR9 Ti-3 (fully upgradable). Any option that is not part of the standard Ti-x package may be upgraded at any time to enable functionality or to increase existing memory or logging rates to a maximum equivalent to that of the NetR9 Ti-1 offering. The enabled options of each package are as follows:

Feature	NetR9 Ti-3	NetR9 Ti-2	NetR9 Ti-1
Channels	440	440	440
Data tracking/storage rate	1 Hz	20 Hz	50 Hz
On-board storage size	0 GB	4 GB	8 GB
GPS L1/L2 signal processing	✓	✓	✓
GPS L2C signal processing	—	✓	✓
GPS L5 signal processing	—	✓	✓
GLONASS signal processing	—	✓	✓
Galileo signal processing	—	—	✓
Other signal processing	—	—	✓
CMR/CMR+ input	—	✓	✓
CMR/CMR+ output	—	✓	✓
CMRx input	—	✓	✓
CMRx output	—	✓	✓
RTCM input	—	✓	✓
RTCM output	—	✓	✓
Advanced RTCM output	—	✓	✓
Event Marker	—	✓	✓
NMEA	—	✓	✓
Bluetooth	—	✓	✓
External USB support	—	✓	✓
RTK	—	✓	✓
Integrated USB support	—	✓	✓
Programmatic Interface	—	—	✓

How does the NetR9 GNSS reference receiver compare to other Trimble Infrastructure reference receivers and/or reference stations?

Feature	NetRS®	NetR3	NetR5™	NetR8™	NetR9™
Channels	39	76	76	76	440
Data tracking/storage rate	10 Hz	20 Hz	20 Hz	50 Hz	50 Hz
On-board storage size	1 GB	64 MB	64 MB	4 GB	8 GB
Trimble R-Track™ technology	✓	✓	✓	✓	✓
GPS signal processing	✓	✓	✓	✓	✓
GLONASS signal processing	—	✓	✓	✓	✓
Galileo signal processing	—	—	—	—	✓
Bandwidth for future signal processing	—	—	—	—	✓
Internal battery	—	✓	✓	✓	✓
Integrated RJ45 jack	—	—	—	✓	✓
Power over Ethernet (PoE)	—	—	—	✓	✓
Integrated USB with device and host support	—	—	—	—	✓
External clock input	✓	—	—	✓	✓
PPS output	✓	—	✓	✓	✓
Event input	✓	—	—	✓	✓
User-defined power on and off voltage	—	—	—	✓	✓
Email alerts	—	✓	✓	✓	✓
Support of five or more data logging sessions	✓	—	—	✓	✓
RINEX and Google Earth support	—	—	✓	✓	✓
FTP and email push	—	—	✓	✓	✓
RTK engine for rover integrity	—	✓	✓	✓	✓
CMR/CMR+™ format	✓	—	✓	✓	✓
CMRx	—	—	✓	✓	✓
RTCM 2.x/3.x	✓	—	✓	✓	✓
Bluetooth® wireless technology	—	—	✓	✓	✓

Does the NetR9 GNSS reference receiver support USB functionality?

Yes. The NetR9 receiver uses an integrated Mini B USB port on the receiver. The receiver ships with multiple adapter cables that support a wide variety of applications. This means that the receiver can be browsed either as an external drive, by computer through a USB cable, or can log data to an external USB drive. This allows for data retrieval directly through USB cable or USB drive.

Does the NetR9 GNSS reference receiver support FTP?

Yes. The NetR9 receiver supports FTP server functionality and FTP Push technology.

Does the NetR9 GNSS reference receiver support HTTPS?

Yes. The NetR9 receiver supports HTTPS functionality.

Does the NetR9 GNSS reference receiver support NTRIP software?

Yes. The NetR9 receiver supports NTRIP Server, Client, and Caster functionality.

For how long can I log to the internal memory on the NetR9 GNSS reference receiver?

The NetR9 receiver has up to 8 GB of internal storage available. With 8 GB of memory installed, and when set to “Log all in view,” it can log approximately 23.5 years of 15-second dual-frequency GPS data. If you enable GLONASS, the receiver can log approximately 11 years of data.

When will the NetR9 GNSS reference receiver be available for purchase and when will it begin shipping?

The NetR9 reference receiver is available for purchase today. For more information, contact your local authorized Trimble distributor or your regional Trimble sales representative.

How do I order the NetR9 GNSS reference receiver?

For more information, do one of the following:

- Contact your local authorized Trimble distributor
- Contact your Trimble sales representative
- Email infrastructure_sales@trimble.com
- Phone 1-800-767-4822 (inside the USA)
- Phone 1-303-323-4111 (outside the USA)