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Trimble NetR5 : Frequently Asked Questions

Product Definition

1. What is the Trimble NetR5?

The Trimble® NetR5™ Reference Station is a multi-channel, multi-frequency GNSS (Global Navigation Satellite System) receiver designed for use as a stand-alone reference station or as part of a GNSS infrastructure solution.

Marketing Overview

2. What are the product's key messages?

- Proven Trimble R-Track™ Technology for Comprehensive GNSS Support
- Hardware and software designed with the user in mind
- An important component of the GNSS infrastructure solution

3. What are the key features and benefits of the NetR5 System?

Features	Benefits
Proven Trimble R-Track technology for GNSS support (L2C, L5, and GLONASS)	Greater availability of satellites: • Track signals where you couldn't before • More robust tracking • Future proofing
64 MB Internal and USB memory stick external hard drive	1757 hours of raw data can be stored internally; external storage through USB is available when required.
Zephyr Geodetic Model 2 – Modernized geodetic antenna	Capable of acquiring GPS L1, L2, L2C, L5; GLONASS L1, L2.
Security	Client authentication for data streams: • Configurable Ethernet ports for HTTP, and FTP • Web GUI access can be password protected with variable security • Settings
FTP push	File upload can be automatic: no manual copying of receiver files is required.

Features	Benefits
Configurable via front panel	Easily configure Ethernet settings and control outputs.
Internal battery	Supplies power to the unit for 20 hours.
Custom ASIC (Application Specific Integrated Circuit)	In the field the NetR5 is rugged and lightweight, and consumes very little power.
NTRIP	The NetR5 can act as an NTRIP client and an NTRIP server.
Bluetooth	Multiple Bluetooth® connections are supported.

4. Why has Trimble decided to include GNSS support at this time?

Trimble incorporates new technology when confident that it will provide surveying professionals with real field and business benefits. As evidence of this commitment to our customers, Trimble R-Track technology in the NetR5 now takes advantage of all currently available and imminent GNSS signals, including the new L2C signal and coming L5 band of GPS Modernization, plus GLONASS L1/L2. Trimble R-Track technology provides outstanding quality control in computing solutions using all available signals.

5. What differentiates the Trimble NetR5 GNSS from the Trimble NetRS?

The main differentiation between the NetR5 and NetRS receivers is the enhanced GNSS capabilities of the NetR5. Compare the two receivers using the following table:

Feature	NetR5	NetRS
L2C support	yes	yes
L5 support	yes	no
GLONASS support	yes	no
Internal memory limit	64 MB	1 GB
External memory limit	Limited by hard drive	NA
External frequency input	no	yes
PPS output	no	yes
NMEA	yes	no
NTRIP Client/Server	yes	no
TCP client	yes	no
E-mail notifications	yes	no
Front panel	yes	no
Serial ports	2	4
FTP server	yes	yes
FTP push	yes	no
HTTP	yes	yes
HTTPS	no	yes
8 language support	yes	no
Internal battery	yes	no
Multiple session logging	no	yes
IP filtering	no	yes
Bluetooth	yes	no

6. Is the NetR5 a replacement for the NetRS?

No. The NetR5 offers L5 and GLONASS. It is intended for RTK and geodetic users of reference stations. The NetR5 is not designed to replace the NetRS. The NetRS has some specific features that are desired by a few users in the scientific and academic communities. As a result, the NetRS will REMAIN available to support these users.

Technical Overview

7. What version of GPSNet or GPSBase supports the Trimble NetR5?

The NetR5 is optimally supported by GPSNet and GPSBase 2.5 software.

8. Is the NetR5 capable of working with GPS L5 today or will it need some special upgrade when the GPSL5 satellites are available?

The NetR5 will work with GLONASS today and GPS L5 when the signal becomes available. No hardware upgrades will be required.

9. What third-party augmentation systems does the Trimble NetR5 track?

The NetR5 supports SBAS WAAS/EGNOS.

10. Does the Trimble NetR5 do TCP and UDP?

The NetR5 is capable of both TCP and UDP communications.

11. Does the Trimble NetR5 work as a TCP client?

Yes, the NetR5 can work as a TCP Client and also a server.

12. Does the older Zephyr Geodetic antenna or a Trimble Choke Ring antenna support the NetR5?

The Zephyr Geodetic and Trimble Choke Ring antennas will work with the new receiver, but only the GPS L1 and L2 signals will be available. The Model II antenna will deliver robust GPS L1, L2, and L5 and GLONASS L1 and L2.

13. How many power inputs does the NetR5 support?

The NetR5 supports two power inputs. One input is through the multiport adapter and the other is through the lemo connector. In addition, the NetR5 has an internal battery which will power the unit for 15 hours.

14. Can the number of serial ports be increased by using the USB port with a USB-2-Serial device/converter?

USB-to-serial adapters are not supported.

15. How do I upgrade to a PPS output feature?

PPS output is not available.

16. How do I connect an external frequency input?

External frequency input is not available.

17. What is the NetR5 instrument's IPX standard?

Ingress Protection (IP) numbers indicate protection from solids and liquids. The NetR5 is rated at IP67 which corresponds to:

- 6 – Totally protected against dust.
- 7 – Protected against the effects of temporary immersion between 15 cm and 1 m. Duration of test 30 minutes.

18. In what languages can the Trimble NetR5 Web GUI display?

English, German, French, Spanish, Italian, Russian, Chinese and Japanese.

19. What Web clients work with the NetR5?

Microsoft Explorer, Netscape or Firefox work with the NetR5.

20. Does the NetR5 have a programmatic interface like the NetRS?

No, The NetR5 does not have a programmatic interface.

21. Does the NetR5 have PPS?

No.

22. Does the NetR5 support time delay for correction broadcasts

Yes, the NetR5 does support time delay correction broadcasts.