

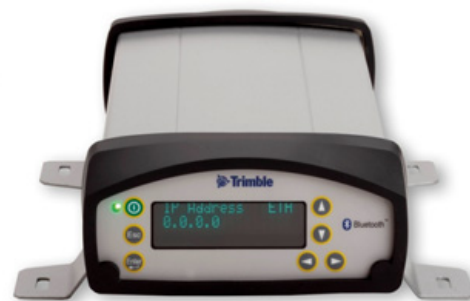
14 October 2008

Trimble NetR8 GNSS Reference Receiver

What are the primary functions of the Trimble NetR8 GNSS reference receiver?

The Trimble® NetR8™ reference receiver is specifically designed to function as the ultimate Global Navigation Satellite System (GNSS) receiver for the earth observation science sector, and the most complete campaign and/or Continuously Operating Reference Station (CORS) GNSS reference receiver. It can track, store, and send data to other Trimble hardware and software such as the GPSNet™ software or the Integrity Manager™ software.

The Trimble NetR8 reference receiver also supports rover integrity and storage integrity functions found in the Trimble reference station management RTKNet™ software.



What are the key benefits of the Trimble NetR8 reference receiver?

The Trimble NetR8 reference receiver is the most comprehensive CORS receiver ever developed. It represents the most versatile product on the market today for science applications (particularly for seismological and atmospheric studies) for any Trimble VRS™ network, for monitoring both network integrity and structural deformation, and for Differential Global Positioning System (DGPS) MSK beacon support.

The Trimble NetR8 reference receiver has the following features:

Feature	Benefit
Versatile—functions as a CORS or as a GNSS campaign receiver	Can switch between application types at any time. The receiver can be used as a standalone campaign receiver, with a variety of additional sensor inputs, or it can be connected to any Trimble VRS or Trimble Integrity Manager network.
Interactive front panel	Rugged front panel enables you to configure and control the receiver without an external computing device. It provides clear text messages for status indication and feedback.
Power over Ethernet (PoE)	<ul style="list-style-type: none"> Both power and Ethernet are conveniently supplied using one cable.

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	<ul style="list-style-type: none"> • Easier installations. • Unique to the industry.
50 Hz data tracking and storage	<ul style="list-style-type: none"> • Fastest tracking and storage rate in the industry. • Ideal for seismological and atmospheric applications. • New standard for GNSS observations allow for new applications and a unique market niche.
Five independent logging sessions	<ul style="list-style-type: none"> • Allows up to five unique data sets to be collected simultaneously at different sampling rates to suit multiple user applications. • No need to decimate or concatenate data sets in a postprocess mode. • Ensure critical, infrequent high-speed (motion) data is captured while the main application data is concurrently collected. • Sessions settings are controllable using the front panel or Web interface. • User-definable session memory size. • Enables you to keep more critical application-specific data.
76 channels. Supports all available external frequencies: <ul style="list-style-type: none"> • GPS – L1/L2/L2C/L5 • GLONASS – G1/G2 • SBAS – WAAS/EGNOS/MSAS/GAGAN/OmniSTAR 	<ul style="list-style-type: none"> • Allows users to collect the data from today’s and tomorrow’s GNSS constellations. • Future-ready CORS receiver.
Large internal memory – 4 GB	<ul style="list-style-type: none"> • Provides the ability to collect more data and extend the time between visits to reference site. • Supports large, high frequency data sets. • High memory-write speed with dedicated onboard non-removable memory. • Highest data reliability over long periods of time offered by on-board memory. (No external contacts are exposed to corrosion.)
IP67 rating	<ul style="list-style-type: none"> • The entire receiver, including its on-board memory and

	<p>internal battery components are IP67 rated.</p> <ul style="list-style-type: none"> • Operation and data collection are protected even in the most extreme environmental conditions.
All connectors available on back panel	<ul style="list-style-type: none"> • All connectors are fully IP67 rated, including the Ethernet port. • No need for adaptor cables in the field. • All applications can be run concurrently.

How does the Trimble NetR8 reference receiver compare to other Trimble Infrastructure reference receivers?

Feature	NetR3	NetRS®	NetR5™	NetR8
Trimble R-Track™ technology (L2C – Civil signal)	Y	Y	Y	Y
GPS L5 signal processing	Y ¹	N	Y	Y
GLONASS support	Y	N	Y	Y
External clock input	N	Y	N	Y
Power over Ethernet (PoE)	N	N	N	Y
Channels	76	39	76	76
Five-session data logging	N	N	N	Y
Internal battery	Y	N	Y	Y
RTK engine for rover integrity	Y ¹	N	Y	Y
PPS output	N	Y	Y ¹	Y
Event Input	N	Y	N	Y
User-defined shut-down voltage	N	N	N	Y
User-defined power-up voltage	N	N	N	Y
Portable base station	N	Y	Y	Y
Full D9 serial port	N	Y	N	Y
Data tracking and storage rate	20 Hz	10 Hz	20 Hz	50 Hz
On-board storage size	64 MB ¹	1 GB	64 MB	4 GB
CMR and CMR+	N	Y	Y	Y
RTCM 2.1 and 2.3	N	Y	Y	Y
RTCM 3	N	N	Y	Y
Bluetooth	N	N	N	Y

¹ Optional feature.

Is the Trimble NetR8 reference receiver compatible with all network software packages?

The Trimble NetR8 reference receiver is compatible with version 2.70 of the Trimble GPSNet and RTKNet software and with most third-party applications where the RTCM 3.1 observation data is used. Version 1.10 of the Trimble Integrity Manager software does not support the NetR8 reference receiver, however future versions will.

Can I use the NetR8 reference receiver as a campaign receiver before installing my permanent network?

Yes. The NetR8 reference receiver is designed to cover all aspects of a network deployment.

Can I add the Trimble NetR8 reference receiver to my existing CORS network?

Yes. The versatile Trimble NetR8 reference receiver provides all of the functionality required to densify an existing network.

Can I use the Trimble NetR8 reference receiver in a Sparse GLONASS application?

Yes. The Trimble NetR8 reference receiver is ideal for Sparse GLONASS applications.

Is the Trimble NetR8 reference receiver RoHS-compliant and CE Certified?

Yes. Additional regulatory compliances include FCC Part 15 (Class B Device), C-Tick Industry Canada ICES-003, RSS-210, RSS-Gen, and RSS-310.

What applications would benefit from the Trimble NetR8 reference receiver?

The Trimble NetR8 reference receiver can be used in existing networks or new network installations. It can support the most demanding applications for the earth science community and for the surveying, construction, mapping, and agricultural industries.

Applications for the Trimble NetR8 reference receiver include:

- Expanding network size
 - Adding GNSS support to current GPS only networks
 - Trimble rover Integrity Monitor receiver
 - Implementing Sparse GLONASS functionality
- Campaign applications
- Seismic studies
- Meteorological studies
- Projects in locations with remote connectivity and extreme weather conditions
- One PPS output to improve DGPS radio beacon transmitter performance
- IGS primary reference network compliant with frequency input and GNSS Choke Ring antenna
- SBAS monitoring stations (WAAS/EGNOS/MSAS/GAGAN/OmniSTAR)

What streaming inputs and outputs are supported by the Trimble NetR8 reference receiver?

Input messages	Output messages
CMR	NMEA-0183 Version 2.30
CMR+	RT17
RTCM 2.1	RT27
RTCM 2.2	GSOF
RTCM 2.3	CMR+
RTCM 3	RTCM 2.3
RTCM 3.1	RTCM 3
	RTCM 3.1
	BINEX
	CMR

Can I connect a reference station radio to the Trimble NetR8 reference receiver?

Yes. The NetR8 reference receiver supports connections to radios and cell phones using its serial ports.

Does the Trimble NetR8 reference receiver support FTP?

Yes. The NetR8 reference receiver includes FTP server functionality and supports FTP push.

Can I use the Trimble NetR8 reference receiver as a field campaign receiver for postprocessing data observation?

Yes. The NetR8 reference receiver is designed to function both as a campaign receiver for postprocessing as well as a CORS receiver for RTK applications.

Can I add options to the Trimble NetR8 GNSS reference receiver?

No. The Trimble NetR8 reference receiver is a premium product that supports all currently available functionality. All possible options are supported.

When will the Trimble NetR8 reference receiver be available for purchase? And when will it start shipping?

The Trimble NetR8 reference receiver is available for purchase today. It is expected to begin shipping on 27 October 2008. For more information, please contact your local authorized Trimble distributor.

How do I order the Trimble NetR8 reference receiver?

For more information, you may do one of the following:

- Contact: Your local authorized Trimble distributor
- Email: infrastructure_sales@trimble.com
- Phone: 1 800-767-4822 (in the U.S.A)
- Phone: +1 303-323-4111 (outside the U.S.A)