







TRIMBLE GNSS SYSTEMS: SOLVING YOUR CHALLENGES IN THE FIELD

INDUSTRY-LEADING GNSS SOLUTIONS DESIGNED WITH THE SURVEYOR IN MIND

Backed by a legacy of GNSS technology and surveying expertise, Trimble provides surveyors with reliable GNSS survey solutions that meet their distinct requirements. For more than 30 years, Trimble has been setting the standard when it comes to positioning technology—and that tradition continues today and into the future.

POWERFUL TECHNOLOGY YOU CAN DEPEND ON... ...NO MATTER WHAT THE CHALLENGE

Whether you are climbing over rough terrain to collect topographic data, racing to finish an as-built before nightfall, or staking out a road under the relentless summer sun, Trimble offers a complete portfolio of GNSS survey solutions to help you conquer your survey challenges.

Trimble offers survey professionals the GNSS options they require. Whether you need the cable-free convenience provided by Trimble integrated systems, the flexibility of Trimble modular systems, or the simplicity of handheld point measurement, Trimble has a solution for you.

Simply choose the system configuration and level of GNSS support that best fits your application and business needs.

ENABLING YOU TO BE THE BEST

Through every stage of your surveying project, a Trimble GNSS system ensures you're working at optimal efficiency with the utmost confidence in your work:

- Experience productivity that goes beyond having the best GNSS technology on the market
- Collect more data in less time via comprehensive GNSS support and an abundance of powerful features, including Trimble HD-GNSS and Trimble 360 technologies
- Combine surveying technologies, including Trimble optical and GNSS solutions, to accomplish more in the field
- Reduce rework with quality control features, such as Trimble SurePoint™ technology
- Easy-to-use field solutions allow you to get the most out of your GNSS system

GNSS SYSTEMS FOR ALL YOUR APPLICATION NEEDS

Built on a foundation of established and durable hardware, customizable software, and services, Trimble surveying systems are designed to support a range of surveying applications including:

- Architecture
- Cadastral & Boundary Surveying
- Geodetic & Control Surveying
- Land Seismic, Exploration, and Natural Resources
- Land Surveying
- Mining
- Utilities & Transportation

TRIMBLE xFILL – REVOLUTIONARY SURVEY TECHNOLOGY

Leveraging a worldwide network of Trimble GNSS reference stations and satellite datalinks, Trimble xFill seamlessly fills in for gaps in your RTK or VRS correction stream. In combination with a CenterPoint RTX subscription, survey level precisions are maintained for an infinite duration. Without a subscription, xFill-enabled technology fills in for connection outages of up to five minutes at a time.

With xFill™ technology the surveyor is never interrupted by connection outages that happen as they go up and down hills, into gulleys or culverts, or go beyond base station range.

Never experience a break in RTK level precision. CenterPoint RTX is available by annual and monthly subscription, or in blocks of hours to suit any job need.

TRIMBLE FIELD SOLUTIONS

UNLOCK THE POTENTIAL OF YOUR TRIMBLE GNSS SYSTEM

Trimble provides surveyors with a complete approach to managing fieldwork. Trimble Field Solutions achieve faster time-to-deliverable and improve your competitive edge with increased productivity and easy access into new, specialized applications.

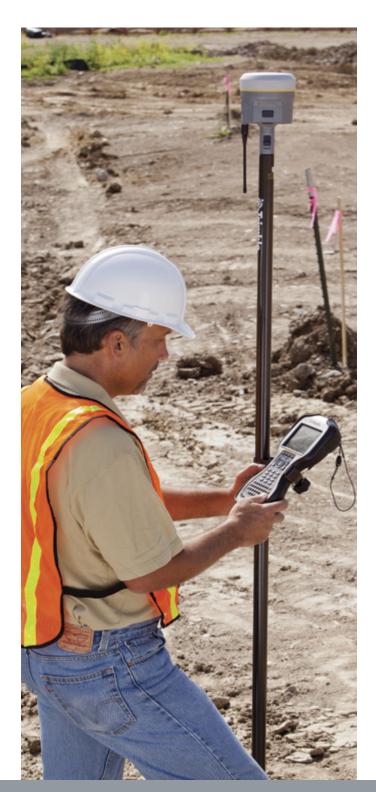
TRIMBLE CONTROLLERS

Trimble controllers – including the Tablet, TSC3, Trimble CU and Slate – support the unique ways you need to work. With an intuitive Windows-based interface, these controllers allow you to unlock the full potential of your survey solution. A range of connectivity and communication options make setup and data delivery fast and streamlined. Perform calculations, generate reports on your Trimble controller, and easily send and receive files via the Internet—all while still in the field.

TRIMBLE ACCESS FIELD SOFTWARE

Modern surveyors need field software that is powerful, but intuitive. Trimble Access™ software offers numerous features and capabilities to greatly improve your efficiency. Streamlined workflows—such as Roads, Monitoring, Mines, and Tunnels—guide crews through common project types and allows crews to get the job done faster with less distractions. Trimble Access workflows can also be customized to fit your needs.





INTEGRATED GNSS SYSTEMS: ALL THE CAPABILITY YOU REQUIRE IN ONE DEVICE

TRIMBLE INTEGRATED SYSTEMS COMBINE THE GNSS RECEIVER, ANTENNA, RADIO-MODEM, AND BATTERY INTO A SINGLE INTEGRATED, COMPACT UNIT. THIS POPULAR CONFIGURATION GIVES SURVEYORS THE LATEST IN GNSS TECHNOLOGY IN A USER-FRIENDLY SYSTEM THAT IS LIGHTWEIGHT, RUGGED, AND CABLE FREE.

TRIMBLE R10

PRODUCTIVITY BEYOND GNSS

Designed to help surveying professionals work more effectively, the Trimble R10 represents the next generation of GNSS Surveying. With powerful technologies that go beyond comprehensive GNSS support, the Trimble R10 enables the surveyor to collect more reliable data – no matter what the job.

- Cutting edge Trimble HD-GNSS processing engine enables surveyors to measure points more quickly.
- SurePoint technology fully compensates for pole tilt. Conveniently measure points that were otherwise inaccessible with complete quality assurance.
- Trimble xFill[™] technology provides less downtime in the field, with continuous RTK coverage during connection outages from an RTK base station or VRS network.
- Powerful 440-channel solution with Trimble 360 technology delivers the most advanced satellite tracking.
- Trimble CenterPoint™ RTX™ delivers GNSS corrections via satellite
 or internet connection for unprecedented speed and accuracy for
 a PPP solution.
- Ergonomic design for easier and more comfortable handling.
- Integrates seamlessly with V10 Imaging Rover and S-Series total station positioning sensors.
- Pair with Trimble Access and the TSC3 controller, Tablet, Slate or Trimble CU for the most powerful solution on the market.

TRIMBLE HD-GNSS PROCESSING ENGINE

A NEW GENERATION OF CORE POSITIONING TECHNOLOGY

Integrated into the Trimble R10, the Trimble HD-GNSS processing engine transcends traditional fixed/float techniques to provide a more accurate assessment of error estimates than traditional GNSS processing engines, especially in challenging environments. Markedly reduced convergence times as well as high position and precision reliability enable surveyors to collect measurements with confidence.

Whether you are working in real-time or in a post-processing application, Trimble HD-GNSS will let you work at optimal efficiency. For real-time applications, experience reduced GNSS survey startup times and improved reliability of reported RTK precisions. For postprocessed applications, experience faster processing with a simplified workflow that typically does not require raw GNSS data filtering before processing.

TRIMBLE R8

THE INDUSTRY LEADING TOTAL SOLUTION

The Trimble R8 has long set the bar for advanced GNSS surveying systems. For surveyors facing demanding RTK applications, the Trimble R8 is an invaluable GNSS partner.

- Powerful 440 channel solution with Trimble 360 technology delivers the most advanced satellite tracking.
- Comprehensive support for all existing and planned GNSS constellations and augmentation systems included as standard.
- Flexible wireless communication options for connecting to the controller, receiving RTK/network corrections and connecting to the internet.
- Web user interface and remote configuration
- Pair with Trimble Access and the Trimble TSC3, Trimble Tablet or Trimble CU for the industry leading field solution.



TRIMBLE R6

SCALABLE, FLEXIBLE, READY FOR ANYTHING

The Trimble R6 combines advanced GNSS technology with the scalability and freedom to adapt and grow as your business needs change.

- 220-channel system with Trimble R-Track satellite tracking technology.
- Industry-leading GNSS positioning with GPS L2C, L5, and QZSS
- Fully upgradable so you can choose the level of GNSS support that suits your needs today and upgrade as your requirements evolve.
- Choose the type of communications to best fit your needs.
- Pair with Trimble Access and the Trimble TSC3, Trimble Tablet, or Trimble CU for the most flexible field solution.

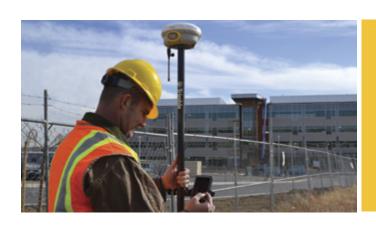


TRIMBLE R4

DEPENDABLE WHEN EVERY POINT COUNTS

The Trimble R4 is designed for surveyors looking for straightforward GNSS technology that performs under rigorous conditions:

- 220-channel system with Trimble R-Track satellite tracking technology.
- Scalable from postprocessing to VRS™ to multi-constellation RTK configurations
- The flexibility to choose the level of GNSS support that is perfect for your application.
- Everything you need to perform a basic survey campaign
- Pair with Trimble Access and the Trimble Slate Controller for a dedicated GNSS solution



YEARS OF GNSS TECHNOLOGY EXPERIENCE, EXPERTISE,
AND LEADERSHIP BUILT INTO EVERY RECEIVER



MODULAR GNSS SYSTEMS

IN A MODULAR TRIMBLE GNSS SYSTEM, YOU CAN CHOOSE THE RADIO AND GNSS ANTENNA THAT MAKES THE MOST SENSE FOR YOUR APPLICATION.

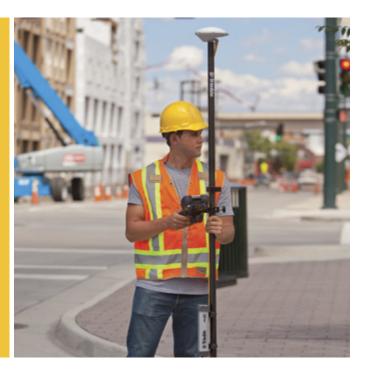
 Select from the Zephyr[™] GNSS antenna or the Zephyr Geodetic GNSS antenna for reduced multipath when used as a base station.

TRIMBLE NETR9 GEOSPATIAL

COMPREHENSIVE GNSS MODULARITY

The Trimble NetR9 Geospatial is a GNSS receiver designed to provide Survey and Engineering professionals with maximum functionality and flexibility. The Trimble technologies provided in the NetR9 Geospatial are a unique and comprehensive combination.

- Trimble HD-GNSS technology, Trimble CenterPoint RTX,
 Trimble xFill and Trimble 360 are all integrated into this modular receiver system
- The Trimble NetR9 Geospatial supports a wide range of high-accuracy positioning modes, including mobile field base station or an RTK and RTX rover with markedly reduced convergence times



TRIMBLE R7

THE TOTAL MODULAR SOLUTION

The Trimble R7 offers comprehensive GNSS support in a modular design that employs an external GNSS antenna for greater freedom to adapt depending on the application.

- Advanced 72-channel system with Trimble R-Track satellite tracking technology.
- Provides the flexibility to be used on the pole or as a base station with external high power UHF radio.
- Partner with Trimble Access and the TSC3 controller or Trimble Tablet for the optimal field solution.

TRIMBLE R5

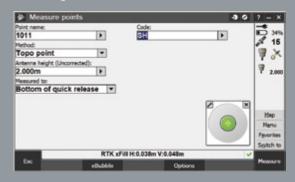
SCALABLE, RUGGED, RELIABLE

The Trimble R5 lets you take the best of Trimble GNSS technology anywhere you want to go.

- Modular 72-channel configuration with Trimble R-Track technology and your choice of the GNSS antenna puts you in total control.
- Rugged housing build to manage the most extreme environments
- Partner with Trimble Access and the TSC3 controller or Trimble Tablet for the ideal field solution.

TRIMBLE CENTERPOINT RTX

Trimble CenterPoint RTX delivers RTK level precision anywhere in the world without the use of a local base station or Trimble VRS network. Survey using satellite or internet delivered corrections in areas where terrestrial based corrections are not available. When surveying over a great distance in a remote area, such as a pipeline or utility right of way, CenterPoint RTX eliminates the need to continuously move a base station or maintain connection to cell coverage.



HANDHELD SYSTEMS: HIGH-ACCURACY SURVEY + HANDHELD POINT MEASUREMENT

TRIMBLE GNSS HANDHELD SYSTEMS OFFER HIGH-ACCURACY ROVING ON THE POLE PLUS THE CONVENIENCE OF HANDHELD DATA COLLECTION WITH AN RTK POSITION.

TRIMBLE GEO 7X WITH TRIMBLE ACCESS

PROVIDING OPTIONS FOR YOUR CHOICE OF WORKFLOW

The rugged Trimble Geo 7X with Trimble Access is a complete solution for Surveyors and Engineers, designed to make both high-accuracy surveying and handheld point measurement easier, more efficient, and more flexible.

 Dedicated network rover solution suitable for all your surveying needs.

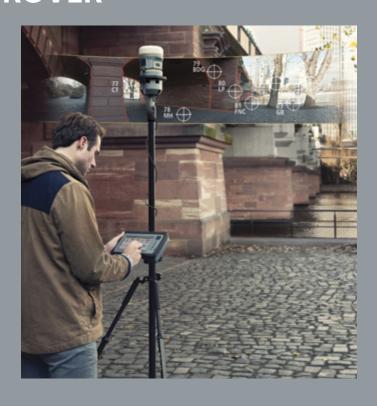


- Can be mounted on a survey rod with an external antenna for survey-grade accuracy. Off the rod, seamlessly switch to its integrated antenna for handheld point measurement with easy access to features such as the integrated camera.
- Trimble Access field software provides a familiar, easy-to-use interface that will ensure instant real time productivity or will help you collect GNSS data for post-processing in the Trimble Business Center software.

TRIMBLE V10 IMAGING ROVER

The Trimble V10 Imaging Rover with Trimble VISION™ technology is an integrated camera system that precisely captures a 60 MP, 360-degree digital panoramas for efficient visual documentation and measurement of the surrounding environment. The Trimble V10 enables you to capture more critical information that can be transformed into enhanced, rich geospatial deliverables.

- A total of 12 calibrated cameras seven panorama and five downward-looking – provide complete site documentation that can be used to make photogrammetric measurements.
- Capture panoramas, review images and store observations using Trimble Access field software.
- In the field, use the Trimble V10 to visually observe and capture the entire job site.
- In the office, Trimble Business Center offers close-range photogrammetry tools to perform survey-grade measurement of imaged features and prepare rich deliverables.
- Integrates seamlessly with the Trimble R4, R6, R8 and R10 GNSS receivers or Trimble S-Series total station.



	INTEGRATED SYSTEMS				MODULAR SYSTEMS			HANDHELD SYSTEMS
	Trimble R10	Trimble R8	Trimble R6	Trimble R4	NetR9 Geospatial	Trimble R7	Trimble R5	Geo7X
GNSS Surveying	Real-time (RTK/VRS) and Postprocessed	Real-time (RTK/VRS) and Postprocessed	Real-time (RTK/VRS) and Postprocessed	Real-time (RTK/VRS) and Postprocessed	Real-Time (RTK/VRS) and Postprocessed	Real-time (RTK/VRS) and Postprocessed	Real-time (RTK/VRS) and Postprocessed	Real-time (VRS) and Postprocessed
Tracking Technology	Trimble 360	Trimble 360	R-Track	R-Track	Trimble 360	R-Track	R-Track	R-Track
Channels	440	440	220	220	440	72	72	220
Solution Type	HD-GNSS	Fixed/Float	Fixed/Float	Fixed/Float	HD-GNSS	Fixed/Float	Fixed/Float	Fixed/Float
xFill	Yes	No	No	No	Yes	No	No	No
RTX	Yes	No	No	No	Yes	No	No	No
SurePoint	Yes	No	No	No	No	No	No	No
UHF Radio	Receive & Transmit	Receive & Transmit	Receive & Transmit	Receive & Transmit	External Only	Receive Only (external for transmit)	Receive Only (external for transmit)	No
Cellular	Yes	Yes	Yes	Yes	External	External	External	Yes
WiFi	Yes	No	No	No	No	No	No	Yes
Ethernet	No	No	No	No	Yes	No	No	No
Bluetooth	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Memory	4 GB	57 MB	11 MB	11 MB	8 GB	Removable	Removable	4 GB
Antenna	Integrated	Integrated	Integrated	Integrated	External	External	External	Integrated and External
Camera	No	No	No	No	No	No	No	5 MP
Web Interface	Yes	Yes	No	No	Yes	Yes	No	No
Integrated Surveying	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
GPS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Glonass	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Galileo	Yes	Yes	Yes	Yes	Yes	No	No	No
BeiDou (Compass)	Yes	Yes	Yes	Yes	Yes	No	No	No
SBAS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Battery	Single; removable	Single; removable	Single; removable	Single; removable	Single, Internal	Dual; removable	Dual; removable	Single; removable
Field Solution	Trimble Access (Tablet, TSC3 or Trimble CU)	Trimble Access (Tablet, TSC3 or Trimble CU)	Trimble Access (Tablet, TSC3 or Trimble CU)	Trimble Access (Trimble Slate Controller)	Trimble Access (Tablet, TSC3 or Slate) Front Panel	Trimble Access (Tablet, TSC3 or Trimble CU)	Trimble Access (Tablet, TSC3 or Trimble CU)	Trimble Access (on board)

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