DATASHEET



TRIMBLE GPS PATHFINDER PROXRT RECEIVER

KEY FEATURES

OmniSTAR HP, XP, G2, or VBS technology for worldwide decimeter to submeter accuracy in the field

Optional support for GLONASS for OmniSTAR

Real-time H-Star technology for decimeter or subfoot accuracy in the field

Rugged receiver able to work in extreme temperatures with an internal all day battery

Choice of field device, field software, and setup style to suit your requirements



FLEXIBLE GNSS RECEIVER WITH REAL-TIME DECIMETER ACCURACY

Whether you need to relocate buried pipes and cables, or accurately map underground assets and critical infrastructure, the Trimble® GPS Pathfinder® ProXRT receiver has it all. This real-time decimeter receiver adds another dimension to your field kit, giving you the confidence to know the job was done right while you're still on site. Combining OmniSTAR support, optional GLONASS support, H-Star™ technology and dual-frequency GNSS, the GPS Pathfinder ProXRT receiver is a truly versatile solution offering you the accuracy you need, worldwide.

Decimeter accuracy in real time with OmniSTAR HP

You need accuracy and you want it now. A VRS network or a local base station is not available in your area? Then realtime decimeter accuracy with OmniSTAR HP couldn't be easier—just purchase a subscription and wait for the over the air corrections. The Trimble GPS Pathfinder ProXRT receiver is also capable of using the OmniSTAR XP/G2 service (for 20 cm / 8 inch accuracy) and OmniSTAR VBS service (for instantaneous submeter accuracy).

Optional support for GLONASS for OmniSTAR

Installing the GLONASS option on your GPS Pathfinder ProXRT receiver increases the number of GNSS satellites that you observe when working in the field with the OmniSTAR G2 service for improved accuracy. GLONASS improves your ability to maintain lock on enough satellites to keep working when sky visibility becomes limited, letting you work for longer in tough GNSS environments. Tracking GLONASS satellites as well as GPS satellites improves your productivity by reducing the time required to achieve real-time accuracy.

Real-time decimeter accuracy with H-Star

The GPS Pathfinder ProXRT receiver brings Trimble H-Star technology to the field in real time. Connect to a Trimble VRS™ network or a local base station correction source and you can collect decimeter (10 cm / 4 inch) or subfoot (<30 cm / <12 inch) positions in the field. Simply use a wireless link to your local VRS network, or set up your own base station for the flexibility to work wherever you need to.

Galileo Support

The latest generation of Trimble 360™ receiver technology enables tracking of the Galileo GIOVE-A and GIOVE-B test satellites for signal evaluation and test purposes, through the Web Browser interface available with the NMEA optional upgrade.

Built for the field

The Trimble GPS Pathfinder ProXRT receiver is built for the tough field conditions where you work, and can operate even in extreme temperatures. The integrated lithium-ion battery is designed for all day use, so you can continue working for as long as you need.

The choice is yours

You can choose the field computer and software to suit your workflow. The ProXRT receiver is ready to use with the rugged Trimble Nomad® G or Juno® series handhelds or a variety of field computers, including laptops, Tablet PCs, and PDAs.

Choosing mapping software? Trimble TerraSync™ and GPS Pathfinder Office software provide a complete solution from field to office and back. Or use an application built using the GPS Pathfinder Field Toolkit that's totally customized to your needs.

And the GPS Pathfinder ProXRT receiver gives you the flexibility to choose the style of setup to suit your requirements. Choose a pole for added precision or a backpack for your convenience and added comfort.

Real time. Real accurate. Real choice.

The Trimble GPS Pathfinder ProXRT receiver delivers a winning combination of decimeter accuracy with real-time positioning, truly taking GIS data collection to a new level. No matter where in the world you work, the ProXRT receiver gives you a complete real-time decimeter solution.



TRIMBLE GPS PATHFINDER PROXRT RECEIVER

STANDARD FEATURES

GNSS

- Trimble H-Star technology for decimeter (10 cm / 4 inch) and subfoot (< 30 cm / <12 inch) accuracy in either real time or postprocessed
- "Worldwide" support for OmniSTAR HP (decimeter), XP/G2 (20 cm / 8 inch), and VBS (submeter) services²
- DGPS corrections by radio link, NTRIP, or VRS network through a handheld with integrated modem
- Integrated SBAS³
- Trimble Everest™ multipath rejection technology

System

- Integrated all day battery
- Integrated Bluetooth® wireless technology for operation on a pole
- Rugged housing

Standard accessories

- Trimble Tornado™ antenna
- Antenna cable
- Power supply with international adaptor kit
- Null modem cable, DB9-Lemo cable, and multiport adaptor
- Hard carry case
- **Ouick Start Guide**

OPTIONAL FEATURES

Receiver options

- **GLONASS** support
- NMEA output

Optional software

- Trimble TerraSync software
- Trimble GPS Pathfinder Office software
- Custom applications built with the Trimble GPS Pathfinder Field Toolkit

Optional field computers

- Trimble Juno series handheld
- Trimble Nomad G series handheld
- Field computer running Windows® desktop operating system

Optional accessories

- Backpack kit (backpack, 1 foot pole segment, quick release adapters)
- Pole kit (2 m carbon fibre range pole, pole mount kit, quick release adapters)
- Magnetic vehicle mount

TECHNICAL SPECIFICATIONS

Physical

GNSS receiver and integrated battery	
Size 24 cm x 12 cm x 5 cm including connectors (9.4 in x 4.7 in x 1.9 i	n)
Weight	s)
Battery	nit
Antenna	
Size	n)
Weight	s)

Environmental—GNSS receiver
Temperature
Humidity
Waterproof IP67 for submersion to depth of 1 m (3.3 ft), dustproof
Shock and Vibration Designed to survive a 1 m (3.3 ft) pole
drop onto a hard surface

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Environmental—antenna

	MIL-STD-810-F to survive a 2 m (6.56 ft) drop onto concrete
Input/output	
Serial	2 Serial ports (DB9 and Lemo)
Bluetooth	Fully-integrated, fully-sealed 2.4 GHz,
	3 channel Bluetooth ⁴ module
Interface	Power button and front panel display
Protocols	
Data Output .	Internal Trimble only (Note: NMEA output optional)
Real-time corre	ections
GNSS	
Channels	
Satellite systems	GPS, GLONASS ⁵ , Galileo ⁶ , SBAS
	L1C/A, L2C, L2E (Trimble method for tracking L2P)
	L1C/A. L1P. L2C/A. L2P

Accuracy (HRMS) after correction⁷

OmniSTAR.....

Real-time positioning

H-Star ¹
Short baseline (within a VRS network or <30 km)
Long baseline (30–80 km)Subfoot (<30 cm)
OmniSTAR ²
HP10 cm
XP/G2
VBS Submeter
Code corrections (SBAS or external correction source)Submeter
ostprocessed positioning

SBASL1C/A supporting WAAS,MSAS & EGNOS

Carrier postprocessed with 45 minutes tracking satellites . . 1 cm + 2 ppm⁹

- 1. Real-time decimeter accuracy can be achieved with H-Star data when the baseline length is less than 30 km. Both the base and the rover must be dual frequency and observing at least five common satellites (six during dual-satellite constellation operation). In less optimal conditions or at ranges between 30 km and 80 km, real-time subfoot accuracy can be achieved. H-Star specified accuracy is typically achieved within 2 minutes.
- 2. OmniSTAR typically requires convergence time to achieve the specified accuracy. Refer to www.
 OmniSTAR.com for additional information on accuracy specifications and initialization times.
 3. BBAS (Satellite Based Augmentation System). Includes WAAS (Wide Area Augmentation System) available in North America only, EGNOS (European Geostationary Navigation Overlay System) available in Europe only, and MSAS, available in Japan.
 4. Bluttent true average and the statement of the sta
- A Bluetooth type approvals are country specific. The GPS Pathfinder ProXRT receiver has Bluetooth approval in the U.S. and EU. For other countries consult your local Distributor.

 5. The ProXRT receiver can be purchased with GLONASS pre-installed or the ProXRT can be purchased without GLONASS and subsequently upgraded to GLONASS capability if required.
- The GPS Pathfinder ProXRT receiver includes the latest generation of Trimble 360 receiver technology and is capable of tracking the Galileo GIOVE-A and GIOVE-B test satellites for signal evaluation and test purposes, through the Web Browser interface available with the NMEA optional upgrade. This powerful receiver technology conforms to the current Open Service Signals-in-Space Interface Control Document (OS SIS ICD), Issue 1, Revision 1, September 2010.
- Signals-in-space interrace Control Document (US 3IS LUD), issue 1, Nevision 1, September 2010.

 Sale of receivers based on information in the Galileo ICD is subject to the licensing terms for manufactures promulgated by the European Commission (EC).

 Horizontal Root Mean Squared accuracy. Except in conditions where most GPS signals are affected by trees, or buildings, or other objects. Except when using VRS or OmniSTAR corrections, accuracy varies with proximity to base station by +1 ppm for code postprocessing and real-time.
- The following factors increase the availability of 10 cm accuracy after H-Star postprocessing: longer elapsed time tracking uninterrupted L1/L2 carrier phase data, tracking of more GPS or GLONASS satellites with 12 measurements, shorter distance to the base station(s), and use of more (than one) base stations for postprocessing.

 45 minute carrier capability applies only to the GPS Pathfinder Office software and is limited to 10 km from the base station.

Specifications are subject to change without notice.



. GIOVE-A, GIOVE-B

VBS, HP, XP, and G2

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