

KEY FEATURES

H-Star technology for subfoot postprocessed accuracy

Optional Tornado antenna for decimeter postprocessed accuracy

Receiver, antenna and battery in one compact unit

Bluetooth wireless technology for convenient cable-free operation

Rugged and weatherproof for all conditions

User-replaceable battery that lasts a full day in the field

Choice of field device and field software to suit your workflow



FULLY INTEGRATED BLUETOOTH GPS RECEIVER WITH H-STAR TECHNOLOGY FOR SUBFOOT ACCURACY

The GPS Pathfinder[®] ProXH[™] receiver introduces a new era in GPS for GIS data collection. A GPS receiver, antenna, and all-day battery in one, the ProXH receiver delivers subfoot (<30 cm) accuracy with Trimble's revolutionary H-Star[™] technology. Don't be fooled by its rugged good looks—the ProXH receiver is quite simply the most sophisticated high performance GPS receiver on the market.

H-Star technology for high accuracy

Bringing together advanced GPS receiver design and a powerful new postprocessing engine, H-Star technology is in a class of its own. There's no need to initialize—in the time taken to record your attribute information, the ProXH receiver logs the data you need to achieve subfoot accuracy. And you can collect data with confidence that you will achieve subfoot accuracy with greater consistency at longer baselines, in tougher environments, and with shorter occupations. Trimble field software displays the accuracy you can expect after postprocessing, while you're in the field.

Back in the office, the GPS Pathfinder Office software, or the Trimble[®] GPS Analyst[™] extension for ESRI ArcGIS Desktop software, guides you through the H-Star correction process and shows you the accuracy you've achieved.

Need to get the very best accuracy?

Add a Tornado[™] antenna to your ProXH receiver to get decimeter (10 cm / 4 inch) postprocessed accuracy. With H-Star technology the ProXH is more than just a GPS receiver, it's a total system for high accuracy GIS data collection.

Cable-free convenience

The all-in-one design of the ProXH receiver means it's simple to set up and easy to use. Forget lost or tangled cables: with a Bluetooth[®] wireless connection you're cable free between the ProXH receiver and your field computer. Nothing to snag or break as you move through difficult terrain.

The flexible mounting system makes it quick and easy to fit the ProXH receiver for the job at hand. It all adds up to a powerful GPS system that maximizes your productivity and makes your fieldwork surprisingly simple.

All day every day

The receiver has an integrated battery, good for a full day's work; simply charge the battery overnight and you're ready to go again. The ProXH receiver will last the distance, and its rugged design can take a lot of punishment. Rain, hail or shine, it's built to keep working, whatever the environment throws at you.

Options to suit your workflow

You can choose a field computer and software to suit your workflow. The ProXH receiver is ready to use with a variety of field computers, including laptops, Tablet PCs and PDAs, and of course Trimble's own rugged field computers: the Trimble Recon[®] handheld and Trimble Ranger[™] handheld.

Choosing software? Trimble's TerraSync[™] software or the GPSCorrect[™] extension for ESRI ArcPad software provides a complete solution from field to office and back. Choose any off-the-shelf GPS field software, or use the GPS Pathfinder Tools Software Development Kit (SDK) to build an application that's customized to your needs.

Productivity and precision

When accuracy is critical for your GIS, the ProXH receiver delivers reliable subfoot performance. Field workers will love the convenience of its compact, cable-free design—and the ability to collect high accuracy data quickly and efficiently. With the GPS Pathfinder ProXH receiver, you don't have to choose between productivity and precision—you can have it all!

GPS Pathfinder ProXH receiver

STANDARD FEATURES

GPS

- Integrated GPS/SBAS¹ receiver and antenna
- H-Star technology for subfoot (<30 cm) postprocessed accuracy
- Decimeter (10 cm / 4 inch) postprocessed accuracy with the optional external Tornado antenna
- Submeter accuracy in real time
- EVEREST™ multipath rejection technology
- RTCM input
- NMEA and TSIP protocol support

System

- Integrated GPS receiver, antenna and battery
- Integrated Bluetooth wireless technology
- User replaceable all-day battery
- Wearable GPS receiver with ergonomic belt clip
- Rugged weatherproof housing

Software

- GPS Controller software for mission planning and GPS configuration
- Bluetooth deactivation utility

Accessories

- Power supply with international adapter kit
- Ergonomic belt clip
- Screwthread adaptor for range pole, backpack, or vehicle mounting
- Null modem cable
- User Guide

OPTIONAL FEATURES

Software

- TerraSync software
- Trimble GPSCorrect extension for ESRI ArcPad software
- Custom applications built with the GPS Pathfinder Tools Software Development Kit (SDK)
- GPS Pathfinder Office software
- Trimble GPS Analyst extension for ESRI ArcGIS Desktop software

Field computers

- Field computer powered by the Windows Mobile® version 6 operating system, Windows Mobile version 5.0 software, or Windows Mobile 2003 software for Pocket PCs, such as:
 - Trimble Ranger handheld
 - Trimble Recon handheld
- Field computer running Windows® desktop operating system

Accessories

- Tornado antenna
- 1 foot pole (for backpack mounting)
- 2 meter range pole
- Hard carry case
- Serial port splitter cable
- GeoBeacon™ receiver
- Backpack
- Range pole bracket
- Magnetic vehicle mount

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TECHNICAL SPECIFICATIONS

Physical

Integrated GPS receiver, antenna, and battery
Size 10.6 cm x 4.0 cm x 14.6 cm (4.2 in x 1.6 in x 5.75 in)
Weight 0.53 kg (1.16 lb)
Power

Low (GPS only) 0.8 Watts
Normal (GPS and Bluetooth) 1.0 Watt
High (optional Tornado antenna, GPS, and Bluetooth) 1.6 Watts

Battery User replaceable lithium-ion, chargeable in unit, 13.3 Watt hours

Environmental

Temperature

Operating –20 °C to +60 °C (–4 °F to +140 °F)
Storage –30 °C to +85 °C (–22 °F to +185 °F)

Humidity 99% non-condensing

Casing Wind-driven rain and dust-resistant per IP 54 standard

Drop 1.22 m (4 ft), MIL-STD-810F, Method 516.5, Procedure IV

Vibration Vibration resistant, MIL-STD-810F, Method 514.5, Procedure I

Shock Shock resistant, MIL-STD-810F, Method 516.5, Procedure I

Input/output

Serial Dual port in single DE9

Bluetooth² 2 NMEA/TSIP Serial Port (SPP) services

Interface Power button, 3 status LEDs

GPS

Channels 12 (L1 code and carrier/L2 carrier)³

Integrated real-time SBAS¹

Update rate 1 Hz

Time to first fix 30 seconds (typical)

Protocols TSIP, NMEA (GGA, VTG, GLL, GSA, ZDA, GSV, RMC)

Accuracy (HRMS)⁴ after differential correction

H-Star postprocessed⁵

With internal antenna 30 cm

With optional Tornado antenna 10 cm⁷

Code postprocessed 50 cm

Carrier postprocessed⁶

With 20 minutes tracking satellites 10 cm

With 45 minutes tracking satellites 1 cm

Real-time (SBAS¹ or external RTCM source) Submeter

1 SBAS (Satellite Based Augmentation System). Includes WAAS (Wide Area Augmentation System) available in North America only. And EGNOS (European Geostationary Navigation Overlay System) available in Europe only.

2 Bluetooth type approvals are country specific. The GPS Pathfinder ProXH receiver has Bluetooth approval in the U.S. and EU. For other countries please consult your local Distributor.

3 L2 capability requires purchase of the optional Tornado antenna.

4 Horizontal Root Mean Squared accuracy. Except in conditions where most GPS signals are affected by trees, or buildings, or other objects. Accuracy varies with proximity to base station by +1 ppm for code postprocessing and real-time.

5 Requires H-Star data to be collected for up to 2 minutes. Requires a minimum of three good quality dual frequency reference stations within 200 km, or one good quality dual frequency reference station within 80 km. With one reference station accuracy degrades at +1 ppm beyond 80 km.

6 Postprocessed carrier accuracy varies with proximity to base station by +2 ppm. 45 minute carrier capability applies only to GPS Pathfinder Office software and is limited to 10 km from the base station.

7 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 satellites with L2 measurements, shorter distance to the base station(s), and use of more (than one) base stations for postprocessing.

Specifications subject to change without notice.



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KEY FEATURES

Ultra-rugged and lightweight

Integrated wireless connectivity
(Bluetooth and wireless LAN)

Two CompactFlash expansion slots

Windows Mobile version 6
operating system

GPS functionality easily added

ULTRA-RUGGED HANDHELD, WITH FLEXIBLE CONNECTIVITY AND WINDOWS MOBILE VERSION 6 OPERATING SYSTEM

The new-generation Trimble® Recon® handheld is as tough as ever...with an IP67 rating, it's impervious to water and dust. And inside the rugged casing, it's packed with connectivity options. As well as non-volatile memory, and an industry-standard, open operating system, you have built-in Bluetooth® and wireless LAN. With all of this, the Trimble Recon handheld is simply the best-connected, lightweight and ultra-rugged field computer available.

The Trimble Recon handheld features a high-performance 400 MHz processor, an improved screen that's readable in direct sunlight, and a built-in microphone. The system provides two CompactFlash (CF) slots, letting you add GPS cards, barcode scanners and other devices—or add a memory card if you want to take additional data into the field.

Bluetooth and wireless LAN

Bluetooth lets you connect to mobile peripherals without cables, and wireless LAN gives you access to local area networks, email and the Internet. You can use Bluetooth to connect wirelessly to other devices such as a laser rangefinder, or if you need to navigate or map assets for your GIS, the Trimble Recon handheld connects seamlessly with Trimble's GPS Pathfinder® receivers. You can also use it to connect to a mobile phone to receive real-time corrections from a VRS provider—or to connect to the Internet, especially if you want to download additional data such as maps.

However, if you are within range of a Wi-Fi network, the built-in wireless LAN in your Trimble Recon handheld makes it very easy to send and receive data—as soon as you arrive at a Wi-Fi hotspot, such as your office or work depot, you can quickly and

securely transfer large amounts of data into the network.

Industry-standard software

The Trimble Recon handheld is powered by the Windows Mobile® version 6 operating system—so you can choose the software that matches your workflow, whether it's off-the-shelf or purpose-built. And because all your data and applications reside in persistent storage, they are secure even in the event of power loss.

Rugged and reliable

Designed for the realities of mobile GIS field work, the Trimble Recon is a rugged and reliable handheld which connects seamlessly with Trimble GPS receivers. Mobile technology is changing fast, but the Trimble Recon handheld is designed with the future in mind—its open operating system, expandable storage and flexible connectivity deliver all you need, and more, in the most rugged, reliable solution available.



Trimble Recon handheld

STANDARD FEATURES

- Windows Mobile version 6 operating system
- 1 x Type I and 1 x Type I/II CompactFlash (CF) slots for memory expansion and the addition of accessories
- Outdoor color display
- Rugged and waterproof design
- Integrated speaker and microphone
- 400 MHz Intel PXA255 XScale processor
- 256 MB non-volatile Flash data storage
- Integrated Bluetooth¹ wireless technology for connectivity to other devices
- Integrated 802.11g wireless LAN for local network connectivity

Software

- Microsoft[®] ActiveSync[®], Microsoft Office Mobile (Word Mobile, Excel Mobile, OneNote Mobile, PowerPoint Mobile), Internet Explorer Mobile, File Explorer, Windows Live[®] Messenger, Windows Media Player, Pictures & Videos, Outlook Mobile, Contacts, Calendar, Tasks, Calculator
- Bluetooth¹ File Transfer
- Transcriber (handwriting recognition)

Accessories

- International AC battery charger (100–240 V)
- Screen protectors (2-pack)
- 2 stylus pens
- Getting Started Guide
- Hand strap
- USB data cable

OPTIONAL FEATURES

Software

- TerraSync[™] software
- Trimble GPSCorrect[™] extension for ESRI ArcPad software
- GPS Pathfinder Tools Software Development Kit (SDK)
- GPS Pathfinder Office software
- Trimble GPS Analyst[™] extension for ESRI ArcGIS software

Accessories

- 12 V vehicle charging cable
- Socket Communications Bluetooth kit
- Optical CF-Cap[™]
- Range pole bracket
- AA PowerBoot[™] module
- Extended CF-Cap
- Pouch
- CompactFlash cards—GPS, GPRS, bar code scanners, camera, wireless LAN, or Bluetooth

TECHNICAL SPECIFICATIONS

Physical

Size 16.5 cm x 9.5 cm x 4.5 cm (6.5 in x 3.75 in x 1.75 in)
Weight 0.49 kg (17 oz) with battery module
Processor 400 MHz Intel PXA255 XScale CPU
Memory Nonvolatile NAND Flash 256 MB (~31 MB reserved)
Battery Internal 3800 mAh NiMH, rechargeable in unit

Environmental

Operating temperature –30 °C to +60 °C (–22 °F to +140 °F)
Storage temperature –40 °C to +70 °C (–40 °F to +158 °F)
Humidity MIL-STD-810F, Method 507.4
Sand and dust IP67, MIL-STD-810F, Method 510.4, Procedures I and II
Water IP67, sealed against accidental immersion (1 m for 30 min)
MIL-STD-810F, Method 512.4, Procedure I
Drop 1.22 m (4 ft), MIL-STD-810F, Method 516.5, Procedure IV
26 drops from 1.22 m (4 ft) onto plywood over concrete
6 additional drops at –30 °C (–22 °F)
6 additional drops at 60 °C (140 °F)
Vibration Vibration resistant, MIL-STD-810F, Method 514.5
Altitude MIL-STD-810F, Method 500.4, Procedures I, II & III
15,000 ft at 23 °C (73 °F)

Input/output

Expansion 1 x Type I and 1 x Type I/II CF slot
CF-Cap seal protects from rain, wind, and dust
Display 240 x 320 pixel (¼ VGA) color TFT with LED front light
Interface TFT touch screen, 10 hardware control keys
Soft Input Panel (SIP) virtual keyboard and Transcriber software
Audio system events, warnings, and notifications
Communications Bluetooth¹, 802.11g wireless LAN
DE9 (M) RS-232 serial port, USB-slave port

1 Bluetooth type approvals are country specific. The Trimble Recon handheld has Bluetooth approval in the U.S., Canada, the EU, Australia, and New Zealand. For other countries please consult your local Distributor.

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