# DATASHEET

# GPS Pathfinder ProXH receiver

## **KEY FEATURES**

H-Star technology for subfoot postprocessed accuracy

Optional Zephyr antenna for 8-inch 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



## HIGH PERFORMANCE INTEGRATED GPS RECEIVER FOR SUBFOOT ACCURACY

The GPS Pathfinder® ProXH<sup>™</sup> 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<sup>™</sup> 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.

#### Introducing H-Star technology

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; 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<sup>®</sup> GPS Analyst<sup>™</sup> extension for ESRI ArcGIS 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 Zephyr<sup>™</sup> antenna to your ProXH receiver to get 8 inch (20 cm) accuracy. H-Star technology 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<sup>®</sup> 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 the GIS TSCe<sup>™</sup> field device.

Choosing software? Trimble's TerraSync<sup>™</sup> software or the GPScorrect<sup>™</sup> 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!



#### **STANDARD FEATURES**

#### GPS

- Integrated GPS/SBAS<sup>1</sup> receiver and antenna
- H-Star technology for subfoot (30 cm) postprocessed accuracy
- Submeter accuracy in real-time
- EVEREST<sup>™</sup> 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 waterproof 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 software

#### **Field computers**

- Field computer running Microsoft<sup>®</sup> Windows<sup>®</sup> CE operating system or Microsoft Windows Mobile<sup>™</sup> 2003 software for Pocket PCs, such as:
  - GIS TSCe field device
  - Trimble Recon handheld
- Field computer running Microsoft Windows desktop operating system

#### Accessories

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

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#### Physical

Filysical
Integrated GPS receiver, antenna, and battery
Size
Weight0.53 kg (1.16 lb)
Power
Low (GPS only)
Normal (GPS and Bluetooth)
High (optional Zephyr antenna, GPS, and Bluetooth) 1.6 Watts
BatteryUser replaceable lithium-ion, chargeable in unit
12.6 Watt hours
Environmental
Temperature
Operating
Storage30 °C to +85 °C (–22 °F to +185 °F)
Humidity100% fully sealed
Sand and dust IP67, MIL-STD-810F, Method 510.4, Procedures I and II
Water
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
ShockShock resistant, MIL-STD-810F, Method 516.5, Procedure I
Input/output
Serial Dual port in single DE9
Bluetooth <sup>2</sup> 2 NMEA/TSIP Serial Port (SPP) services
Interface Power button, 3 status LEDs
GPS
Channels
Integrated real-time
-
Update rate
Time to first fix
Protocols TSIP, NMEA (GGA, VTG, GLL, GSA, ZDA, GSV, RMC)
Accuracy (HRMS) <sup>3</sup> after differential correction
H-Star postprocessed <sup>4</sup>
With internal antenna
With optional Zephyr antenna
Code postprocessed Submeter
Carrier postprocessed <sup>5</sup>
With 20 minutes tracking satellites
With 45 minutes tracking satellites 1 cm
Real-time (SBAS <sup>1</sup> or external RTCM source)
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. 2 Herizontal Poet Mean Squared accuracy, Pequires data to be collected with minimum

3 Horizontal Root Mean Squared accuracy. Requires data to be collected with minimum of 4 satellites, maximum PDOP of 6, minimum SNR of 39 dBHz, minimum elevation of 15 degrees, and reasonable multipath conditions. Ionospheric conditions, multipath signals or obstruction of the sky by buildings or heavy tree canopy may degrade precision by interfering with signal reception. Accuracy varies with proximity to base station by +1 ppm for postprocessing and real-time.

4 Requires H-Star data to be collected for up to 2 minutes. Requires a minimum of 3 good quality dual frequency reference stations within 200 km.
5 Accuracy varies with proximity to base station by + 5ppm.

Specifications subject to change without notice.



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