# DATASHEET

## **GPS Pathfinder Office** software

#### **KEY FEATURES**

Differentially correct to improve the quality of your GPS data

H-Star processing for subfoot accuracy with the GPS Pathfinder ProXH receiver

Import and export data in a variety of GIS formats

Create sophisticated data dictionaries to match your GIS or database

Carry out quality control on your data before you transfer it to the GIS

#### **POWERFUL GPS DATA PROCESSING SOFTWARE**

The GPS Pathfinder® Office software adds value to your GIS data collection and data maintenance projects. This powerful and easy-to-use software ensures your data is consistent, reliable, and accurate—enabling you to make informed decisions.

#### Improve the accuracy of your GPS data

The differential correction process can improve the accuracy of your GPS positions from around 10 meters<sup>1</sup> to submeter and better, depending on the environment and your GPS receiver. With Trimble's new H-Star™ technology you can achieve accuracies of subfoot (30 cm) and even 8 inches (20 cm) with the GPS Pathfinder ProXH™ receiver.

Make sure that your data is differentially corrected using the best quality base station data available with GPS Pathfinder Office software's unique Integrity Index grading system. Providing a list of monitored base data providers from around the world, the Integrity Index helps you select quality providers to use when differentially correcting your data.

Increase the efficiency of your field work The GPS Pathfinder Office software helps you plan and schedule GPS field sessions so your field time is productive and data collected is of the highest quality. Data can be imported from a number of GIS and database formats allowing previously collected GIS data to be taken back to the field for verification and update.

The GPS Pathfinder Office software's Data Dictionary Editor creates custom lists of features and attributes for data collection. You can be confident that data collected in the field meets your specific GIS needs by creating your own data dictionary or importing one from your GIS based on its exact data schema. In the field, the Data Dictionary prompts the field crew to enter specific information—ensuring data integrity and compatibility with your GIS or database.

#### Ensure you have quality data

You can view your features for comparison against any number of background files such as aerial photographs or satellite imagery of the area you are working in. You can even display and use background data directly from a web map server.

Before transferring your data to a GIS, CAD, or database system, you can analyze it to confirm it is complete and free of errors. GIS feature and attribute data can be changed, and unnecessary or unwanted GPS positions can be deleted. This ensures that only the highest quality data is exported to your GIS.

GPS Pathfinder Office software—making it easy for you to manage, correct, and update your GIS data.

1 Typical autonomous GPS accuracy.



#### FEATURES AND OPTIONS

#### **GPS** accuracy

- Improve GPS position accuracy through differential postprocessing
- Achieve subfoot (30 cm) accuracy by H-Star processing data from the GPS Pathfinder ProXH receiver
- Postprocess real-time differential GPS data to improve accuracy and consistency
- Review and edit GPS data before you transfer it to a GIS
- Compatible with any Trimble<sup>®</sup> GPS Pathfinder receiver or GeoExplorer® series handheld

#### **GIS compatibility**

- Import data from popular GIS, CAD, and database formats
- Export data into a wide variety of GIS, CAD, and database formats
- Create data dictionaries to ensure data collected is consistent with GIS requirements

#### Workflow

- Plan GPS field sessions to ensure productive use of field time
- Set up multiple field computers with the same files and settings
- Automate data transfer, differential correction, and data export

#### **Recommended hardware**

Operating system . . . . . Microsoft® Windows® NT 4.0 (SP6 or later), 2000,

	XP, or XP Tablet PC Edition
Processor type	Pentium
Processor speed	400 MHz
Memory	64 MB RAM
Free disk space	160 MB
Input/outputRS-2	232 serial port and USB port

#### **Available languages**

<ul> <li>English</li> </ul>	<ul> <li>German</li> </ul>	<ul> <li>Russian</li> </ul>
<ul> <li>Portuguese</li> </ul>	<ul> <li>Spanish</li> </ul>	• Korean
<ul> <li>French</li> </ul>	<ul> <li>Japanese</li> </ul>	<ul> <li>Chinese (Simplified)</li> </ul>

**Field software options** 

#### TerraSvnc<sup>™</sup> software

- Trimble GPScorrect<sup>™</sup> extension for ESRI ArcPad software
- Applications developed using GPS Pathfinder Tools Software Development Kit (SDK)

#### **GPS RECEIVERS AND ACCURACY (HRMS)<sup>1</sup> SPECIFICATIONS**

Receiver/Handheld d	Real-time ifferential	Postprocessed differential	Postprocessed carrier <sup>2</sup>
GPS Pathfinder ProXT <sup>™</sup>	submeter	submeter	1 cm
GPS Pathfinder ProXH	submeter	30 cm <sup>3</sup>	1 cm
GPS Pathfinder Pro XRS	submeter	50 cm	1 cm
GPS Pathfinder Pocket	2–5 m	2–5 m	not available
GeoXT™	submeter	submeter	30 cm
GeoXM™	2–5 m	2–5 m	not available
Trimble Recon <sup>™</sup> GPS Pocket edition	n 2–5 m	2–5 m	not available

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#### SUPPORTED FORMATS

#### **Import formats**

- AutoCAD DXF
- dBASE
  - ESRI Shapefiles
  - MapInfo MIF
  - Microsoft Access MDB
  - Export formats
  - ARC/INFO (for NT and UNIX) Generate
  - AutoCAD DXF (with or without blocks)
  - dBASE
  - ESRI Shapefiles
  - GRASS
  - IDRISI Vector
  - MapInfo MIF
  - MGAL
  - Microsoft Access MDB
  - Microstation DGN
  - PC-ARC/INFO Generate
  - PC-MOSS

#### **Vector background formats**

- AutoCAD ASCII DXF (.dxf)
- AutoCAD binary DXF (.dxf)
- ESRI Shapefiles (.shp)
- Trimble SSF format (.ssf, .cor, .phs, .imp)

Raster (image) background formats

- JPEG (.jpeg)
- MrSID (.sid)
- TIFF (.tif)
- Windows bitmap (.bmp)

Web map servers

- ArcIMS
- OpenGIS

#### **Base file formats**

- Hatanaka (Compressed RINEX)
- RINEX
- Trimble DAT format
- Trimble SSF format
- 1 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 degrad precision by interfering with signal reception. Accuracy varies with proximity to base station by +1 ppm for postprocessing and real-time.

**Compression types** 

• Self-extracting executable (.exe)

• GZip (.gz)

• Zip (.zip)

- 2 GPS Pathfinder receivers require 45 minutes tracking satellites to achieve this accuracy. The GeoXT handheld requires 10 minutes tracking satellites to achieve this accuracy. Please refer to the individual product datasheet for further information.
- 3 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.

Specifications subject to change without notice.

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#### SUPPORTED BASE FILE AND COMPRESSION FORMATS