

## KEY FEATURES

H-Star technology for subfoot postprocessed accuracy

Microsoft Windows Mobile Version 5.0 software for Pocket PC, allowing maximum flexibility in software choice

512 MB onboard memory plus removable SD memory

Bluetooth and wireless LAN connectivity options

Rugged handheld with all-day battery



## THE ULTIMATE SOLUTION FOR HIGH ACCURACY GIS DATA COLLECTION

The GeoXH™ handheld is Trimble's top-of-the-line solution for high accuracy GIS data collection. Engineered with H-Star™ technology, the GeoXH handheld delivers the subfoot (30 cm) accuracy required by electric and gas utilities, water and wastewater services, land reform projects, and other applications where on-the-spot positioning is crucial.

The unique GeoExplorer series combines a Trimble® GPS receiver with a rugged handheld computer, built for all-day use and packed with connectivity options. Technology this clever has never been more convenient.

### H-Star technology for best 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 GeoXH handheld logs the data you need to achieve subfoot accuracy.

If you need the very best accuracy, add a Zephyr™ antenna to your GeoXH handheld to get 8 inch (20 cm) accuracy. Whatever your requirements, you can collect data with confidence, because Trimble field software shows you the accuracy you can expect after postprocessing, while you're in the field.

Back in the office, Trimble postprocessing software guides you through the H-Star correction process and shows you exactly the accuracy you've achieved.

### Software to fit your workflow

The GeoXH handheld comes with a powerful 416 MHz processor running the most advanced operating system available—Microsoft® Windows Mobile™ Version 5.0 software for Pocket PC. Windows Mobile is the industry standard open platform for mobile devices, so you can choose a software solution to match your workflow, whether off-the-shelf or purpose built.

Windows Mobile Version 5.0 features familiar Microsoft software, including Pocket Word, Pocket Excel, and Pocket Outlook®, giving you all the tools you need for a seamless exchange of data between the field and the office. And you get increased security features and persistent memory storage, so you can be sure your data is safe.

### Convenient connectivity

With the GeoXH handheld you have the flexibility to work exactly the way you want to. Do you need to access the Internet or your organization's secure network to get the most up-to-date data? No problem—with the GeoXH handheld you have built-in wireless LAN and Bluetooth® technology to ensure you stay connected.

When connection to your enterprise database isn't an option, the GeoXH handheld offers plenty of secure on-board memory for storing your data. And there's a Secure Digital (SD) memory card slot, allowing you to add gigabytes of memory for all your map data.

### Built for the field

The GeoXH handheld has an integrated battery, good for a full day's work; simply charge the battery overnight and you're ready to go again. The GeoXH handheld 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 weather throws at you.

### When accuracy is critical

Rugged design and powerful functionality are the hallmarks of the GeoExplorer® family. The GeoXH handheld takes it to a new level with revolutionary H-Star technology. When accuracy is critical, the GeoXH handheld delivers—with unprecedented efficiency and reliability, when and where you need it.

With the GeoXH handheld, high accuracy GIS data collection is no longer just a goal—it's a reality.

## STANDARD FEATURES

### System

- Microsoft Windows Mobile Version 5.0 for Pocket PC
- 416 MHz Intel X-Scale processor
- 512 MB non-volatile Flash data storage
- Sealed SD card slot
- Outdoor color display
- Ergonomic cable-free handheld
- Rugged and water-resistant design
- All-day internally rechargeable battery
- Bluetooth wireless
- 802.11b Wireless LAN

### GPS

- H-Star technology for subfoot (30 cm) postprocessed accuracy
- Submeter accuracy in real-time
- Integrated SBAS<sup>1</sup>
- RTCM real-time correction support
- NMEA and TSIP protocol support
- EVEREST multipath rejection technology

### Software

- GPS Controller for control of integrated GPS and in-field mission planning
- GPS Connector for connecting integrated GPS to external ports
- Microsoft ActiveSync®, Calculator, File Explorer, Internet Explorer, Pictures, Pocket Excel, Pocket Outlook (Inbox, Calendar, Contacts, Notes, Tasks), Pocket Word, Windows® Media Player
- Transcriber (handwriting recognition)
- Microsoft Streets & Trips/AutoRoute™ software

### Accessories

- Support module with power supply and USB data cable
- Getting Started Guide
- Getting Started Disc includes Outlook 2002 and ActiveSync 4.0
- Hand strap
- Pouch
- Stylus kit

## 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

- Serial clip for field data and power input
- Vehicle power adaptor<sup>2</sup>
- Portable power kit<sup>2</sup>
- Zephyr antenna kit
- Hurricane antenna kit
- GeoBeacon™ receiver
- Hard carry case
- Null modem cable<sup>2</sup>
- Backpack kit
- 2 meter range pole
- Range pole bracket

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## TECHNICAL SPECIFICATIONS

### Physical

Size	21.5 cm × 9.9 cm × 7.7 cm (8.5 in × 3.9 in × 3.0 in)
Weight	0.78 kg (1.76 lb) with battery
Processor	416 MHz Intel PXA-270 X-Scale processor
Memory	64 MB RAM and 512 MB internal Flash disk
Power	
Low (no GPS or backlight)	1.5 Watts
Normal (with GPS and backlight)	2.3 Watts
High (with GPS, backlight, Bluetooth, and Wireless LAN)	3.2 Watts
Battery	Internal 6800 mAh lithium-ion, rechargeable in unit 25 Watt-hours

### Environmental

Temperature	
Operating	-10 °C to +50 °C (14 °F to 122 °F)
Storage	-20 °C to +70 °C (-4 °F to 158 °F)
Casing	Wind-driven rain and dust-resistant per IP 54 standard Slip-resistant grip, shock and vibration resistant

### Input/output

Communications	Bluetooth <sup>3</sup> , 802.11b Wireless LAN USB client v1.1 compliant <sup>4</sup> via support module Serial via optional DE9 serial clip adaptor Ethernet 10/100 BaseT compatible via support module
Bluetooth Profiles	
Client and host support	Serial Port, Object Push
Client support only	Dial-Up Networking
Host support only	File Transfer (using OBEX)
Display	Advanced outdoor TFT, 240 × 320 pixel 65,536 colors, with backlight
Audio	Microphone and speaker, record and playback utilities
Interface	Touch screen, Soft Input Panel (SIP) virtual keyboard 11 hardware control keys, handwriting recognition software Audio system events, warnings, and notifications

### GPS

Channels	12 (L1 code and carrier/L2 carrier)
Integrated real-time	SBAS <sup>1</sup>
Update rate	1 Hz
Time to first fix	30 seconds (typical)
Protocols	TSIP, NMEA (GGA, VTG, GLL, GSA, ZDA, GSV, RMC)
Accuracy (HRMS) <sup>5</sup> after differential correction	
H-Star postprocessed <sup>6</sup>	
With internal antenna	.30 cm
With optional Zephyr antenna	.20 cm
Code postprocessed	Submeter
Carrier postprocessed <sup>7</sup>	
With 20 minutes tracking satellites	.10 cm
With 45 minutes tracking satellites	.1 cm
Real-time (SBAS <sup>1</sup> or external RTCM source)	Submeter

<sup>1</sup> 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.

<sup>2</sup> Serial clip also required.

<sup>3</sup> Bluetooth and Wireless LAN type approvals are country specific. GeoExplorer 2005 series handhelds have Bluetooth and Wireless LAN approval in the U.S. and EU. For other countries please consult your local Distributor.

<sup>4</sup> Fully compatible with USB v2.0 computers.

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> Accuracy varies with proximity to base station by +5 ppm.

Specifications subject to change without notice.



### NORTH & SOUTH AMERICA

Trimble Navigation Limited  
7401 Church Ranch Blvd  
Westminster, CO 80021  
USA  
+1-720-887-4374 Phone  
+1-720-887-8019 Fax

### EUROPE, AFRICA & MIDDLE EAST

Trimble GmbH  
Am Prime Parc 11  
65479 Raunheim  
GERMANY  
+49-6142-2100-0 Phone  
+49-6142-2100-550 Fax

### ASIA-PACIFIC

Trimble Navigation Australia  
PTY Limited  
Level 1/120 Wickham Street  
Fortitude Valley, QLD 4006  
AUSTRALIA  
+61-7-3216-0044 Phone  
+61-7-3216-0088 Fax