

GeoExplorer CE Series

The new standard GPS platform for mobile GIS

Key features and benefits

- **High-performance GPS with integrated WAAS (for free real-time corrections)**
- **Rugged Windows CE handheld for all-day use in extreme conditions**
- **Streamlined data collection and maintenance with TerraSync software**
- **Perfect for mobile GIS field software such as ESRI's ArcPad**
- **Backlit high-resolution outdoor color touch screen for high visibility in a wide range of conditions**

The GeoExplorer® CE series of GPS CE handhelds takes mobile GIS in an exciting new direction. Whether your task is collecting and maintaining data to keep your GIS up to date, or using your GIS data in the field, the GeoExplorer CE series is the solution.

A GPS CE handheld is a CE device with an integrated Trimble GPS receiver. A unique combination of GPS and the Windows CE operating system, it's light, portable, and incredibly powerful.

Versatile Windows CE

With Windows CE you have maximum flexibility. Choose popular GIS field software like Trimble's TerraSync™ or ESRI's ArcPad™; or choose purpose-built software that meets the needs of your field application.

Windows CE also gives you simple connectivity. Use the fast USB support module to connect to a desktop computer for data transfer. Or use the optional serial clip to connect to a cellphone for wireless access to Web map servers, e-mail, and the Internet.

High-accuracy GPS

The GeoExplorer CE series gives you accurate, reliable GPS data. Differentially correct in real time or, for extra precision, postprocess data from TerraSync or GPSCorrect™.

Because the GPS receiver and antenna are built into the field computer, it's never been easier to use GPS in your application.



The GeoExplorer CE handheld integrates GPS and Windows CE

The system is more than just cable-free: it's a totally integrated solution.

Flexible options

Choose the model that suits your field requirements. The **GeoXM™** integrates reliable, real-time corrected GPS into your mobile GIS application, so you can re-locate assets with confidence and fulfill work orders efficiently.

The **GeoXT™** offers all the features of the GeoXM, plus a submeter receiver and EVEREST™ multipath rejection technology. It's ideal for working under canopy, in urban canyons, or anywhere you need high-accuracy data collection and maintenance.

Both models have enough

storage space for all your GIS data. The fast processor and large memory mean even big graphics files load quickly, and they look great on the outdoor color screen.

Rugged and portable

Everything you need for a long and productive day in the field is in the palm of your hand. You can leave the spare batteries behind too: the internal battery easily lasts for a whole day of GPS operation. All this is sealed into a reliable, rugged unit that works where and when you need it.

Don't choose between ergonomics and flexibility, or precision and convenience. Choose GeoExplorer CE and have it all.

Trimble

GeoExplorer CE Series

The new standard GPS platform for mobile GIS

STANDARD FEATURES

System

- Embedded Windows CE 3.0 operating system (H/PC 2000)
- 206 MHz StrongARM processor
- 128 MB or 512 MB non-volatile Flash data storage
- Outdoor color display
- Ergonomic cable-free handheld
- Rugged and water-resistant design
- All-day internally rechargeable battery

GPS

- Submeter or 2–5 meter accuracy options
- Integrated WAAS
- RTCM real-time correction support
- NMEA and TSIP protocol support

STANDARD SOFTWARE

- GPS Controller for control of integrated GPS and in-field mission planning
- GPS Connector for connecting integrated GPS to external ports
- Windows Explorer, Pocket Internet Explorer, Inbox, Text Editor, Calculator, Voice Recorder, ActiveSync, Connect to Desktop, Remote Networking

OPTIONAL SOFTWARE

- TerraSync
- GPS Pathfinder® Tools Software Development Kit (SDK)
- GPS Pathfinder Office
- Subscription to GPS Pathfinder Express service
- GPSCorrect for ArcPad

STANDARD ACCESSORIES

- Support module with power supply and USB data cable
- Getting Started Guide
- Hand strap
- Pouch
- Stylus

OPTIONAL ACCESSORIES

- Serial clip for field data and power input
- Vehicle power adapter¹
- Portable power kit¹
- External antenna
- Pole-mountable ground plane
- Baseball cap with antenna sleeve
- Beacon-on-a-Belt (BoB™) differential correction receiver
- Hard carry case
- Null modem cable¹
- Backpack kit

¹ Serial clip also required.

² Accuracy specification requires data to be collected with a minimum of 4 satellites, maximum PDOP of 6, minimum SNR of 4, 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.

³ Postprocessing with GPS Pathfinder Office software or GPS Pathfinder Express service.

⁴ Requires collection of carrier data. (Only available with GPS Pathfinder Office).

⁵ Accuracy varies with proximity to base station.

TECHNICAL SPECIFICATIONS

Handheld Specifications

Physical:

Size 21.5 cm × 9.9 cm × 7.7 cm
(8.5" × 3.9" × 3.0")

Weight 0.72 kg (1.59 lb) with battery

Processor: 206 MHz Intel StrongARM SA-1110

Memory: 32 MB RAM

128 MB or 512 MB internal Flash disk

Power:

Low (no GPS) 1.1 Watts

Normal (with GPS) 1.9 Watts

High (with GPS and backlight) 2.8 Watts

Battery: Internal lithium-ion, rapidly rechargeable in unit, 21 Watt-hours

Environmental:

Operating Temp. -10°C to +50°C (14°F to 122°F)

Storage Temp. -20°C to +70°C (-4°F to 158°F)

Humidity 99% non-condensing

Casing Wind-driven rain and dust-resistant per IP 54 standard, slip-resistant grip, shock- and vibration-resistant

Communications: USB connectivity via support module, serial communications via optional DE9 serial clip adapter

Display: 240 × 320 pixel full outdoor color display, with backlight

Audio: Microphone and half duplex speaker
Record and playback utilities

Interface: Anti-glare coated touch screen

2 hardware control keys
4 programmable permanent touch buttons
Soft Input Panel (SIP) virtual keyboard
Audio system events, warnings, and notifications

GPS Performance Specification

	GeoXT	GeoXM
Channels:	12	8
Integrated real-time:	WAAS	WAAS
Other:	EVEREST multipath rejection technology	
Update Rate:	1 Hz	1 Hz
Time to first fix:	30 sec (typical)	30 sec (typical)
Accuracy (RMS) after differential correction:		
	GeoXT	GeoXM
GPS Pathfinder postprocessing³	Submeter ²	2–5 m ²
GPS Pathfinder carrier postprocessing⁴	30 cm ²	N/A
Realtime	Submeter ^{2,5}	2–5 m ^{2,5}
Protocols:		
NMEA	Industry standard protocol for the output of GPS data. Supported messages are GGA, VTG, GLL, GSA, ZDA, GSV, RMC.	
TSIP	Trimble Standard Interface Protocol for full control of GPS receiver input and output.	

Specifications subject to change without notice



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