DATASHEET

TRIMBLE GEOEXPLORER 6000 SERIES

KEY FEATURES

Trimble Floodlight satellite shadow reduction technology

More positions and increased accuracy in tough environments

Sunlight readable display

For unmatched clarity in bright sunlight

3.5G cellular capability

High-speed Internet connectivity in the field

5 megapixel autofocus camera

Capture high quality photographs and link directly to features

Field-swappable battery

All day operation and the convenience of swap-and-go battery replacement



THE ACCURACY YOU NEED ANYWHERE YOU NEED IT

Bringing together the essential functionality for productive GIS data collection in one device, the Trimble® GeoExplorer® 6000 series also delivers positioning accuracy in challenging GNSS situations such as under trees and near buildings with Trimble Floodlight™ technology. Wherever you work, it just works.

Accurate, productive, reliable data collection

Integrating both a GPS/GLONASS receiver and a dual frequency GNSS antenna, the Trimble GeoExplorer 6000 series delivers accuracy you can depend on to record new assets, or reliably navigate back to previously recorded locations.

Used with Trimble's range of powerful field and office software, GeoExplorer 6000 series handhelds allow you to work faster and in more places than ever before. The Trimble GeoExplorer series can deliver down to centimeter accuracy—either postprocessed or in real time for the confidence the job is done right while still on site.



Trees and buildings create "satellite shadows", limiting the areas where you can reliably collect high-accuracy GNSS data.

Using Trimble Floodlight technology, the GeoExplorer 6000 series continues to deliver productive, usable data under tree canopy or in urban canyons. You can work with fewer disruptions, meaning better data, faster, at less cost.

Designed for work, wherever you work

The Trimble GeoExplorer series works for the way you work. The built-in 5 megapixel autofocus camera, with geotagging capability, gives you one of the best ways to capture information about an asset, event, or site. A sunlight-optimized display maintains exceptional clarity in all outdoor conditions for crisp on screen text and images. And you can stay connected with an optional integrated 3.5G cellular modem for continuous network and Internet access to real-time map data, web-based services, Trimble VRS™ corrections, and live update of field information.



With the Trimble GeoExplorer 6000 series you get it all.



TRIMBLE GEOEXPLORER 6000 SERIES

PRODUCT MODELS

	GeoXH	GeoXT
Accuracy	Decimeter/Centimeter	Submeter
Floodlight	Yes	Optional
Cellular modem	Optional	Optional
Camera	5 MP	5 MP

GNSS

Receiver	Trimble Maxwell [™] 6 GNSS chipset
Channels	220 channels
Systems	GPS, GLONASS ¹
	WAAS/EGNOS/MSAS/GAGAN
Update rate	1 Hz
Time to first fix	45 s (typical)
NMEA-0183 support	Optional
Trimble Floodlight to	echnologyOptional
RTCM support	RTCM2.x/RTCM3.x
CMR support	CMR/CMR+/CMRx

GeoXT handhelds

GLONASSL1C/A	, LIP
GeoXH handhelds	

GLONASS......L1C/A, L1P, L2C/A, L2P

GNSS ACCURACY² GeoXH Centimeter Edition

Real-time Centimeter output

Horizontal (external antenna ³) 1 cm + 1 ppm	n
Vertical (external antenna) 1.5 cm + 2 ppm	n
Horizontal (internal antenna) 2.5 cm + 1.2 ppm	n
Vertical (internal antenna) 4 cm + 2 ppm	n

Postprocessed Centimeter output

Horizontal (external antenna ³)	1 cm + 1 ppm
Vertical (external antenna)	1.5 cm + 1 ppm
Horizontal (internal antenna)	2.5 cm + 1.2 ppm
Vertical (internal antenna)	4 cm + 1.5 ppm

All GeoXH configurations

Real-time and postprocessed H-Star (Horizontal	RMS)
H-Star	+ 1 ppm

All GeoXH and GeoXT configurations

Real-time	DGM22	(Horizontai	KIVIS)	
				_

Code	75 cm + 1 ppm
SBAS ⁴ (WAAS/EGNOS/MSAS)	.typically $< 1 \text{ m}$

Postprocessed DGNSS (Horizontal RMS)

Code	50 cm + 1 ppm
Carrier (after 45 minutes)	1 cm + 2 ppm

ENVIRONMENTAL (MIL-STD-810G)

Drop shock	1.2 m (4 ft) to plywood over concrete
Functional shock	Method 516.6 Procedure I
Vibration	Method 514.6 Procedure I
Relative humidity	95% non-condensing
Maximum operat	ing altitude 3,658 m (12,000 ft)
Maximum storag	e altitude 5,000 m (16,400 ft)

TEMPERATURE

Operation	20 °C to +60 °C (-4 °F to	+140 °F)
Storage	. −30 °C to +70 °C (−22 °F to	+158 °F)

INGRESS PROTECTION

Henzes I Notzetion	
Water/Dust IP	65

SIZE AND WEIGHT

Height	234 mm (9.2 in)
Width	99 mm (3.9 in)
Depth	56 mm (2.2 in)
Weight (inc. battery)	925 g (2.0 lb)

BATTERY

Type	 Rechargeable, 	removable Li-Ion
Capacity		11.1 V 2.5 AH
Charge time		. 4 hours (typical)

BATTERY RUN TIME⁵

	GeoXH	GeoXT
GNSS	9 hours	11 hours
GNSS & Wi-Fi	8 hours	9.5 hours
GNSS & cellular	6.5 hours	7 hours
Standby time (typical)	50 days	50 days

CONNECTORS & INPUTS

- · Internal microphone and speaker
- · Mini USB connector
- DE-9 serial via optional USB to serial converter
- · External power connector
- SIM socket
- SDHC card socket

CAMERA

Still mode	Autofocus 5 MP
Still image format	JPG
	Up to VGA resolution
Video file format	

CELLULAR⁶ & WIRELESS⁷

UMTS/HSDPA	850/900/2100 MHz
GPRS/EDGE	. 850/900/1800/1900 MHz
Wi-Fi	802.11 b/g
Bluetooth	Version 2.1 + EDR

DISPLAY

Type	Transflective LED-backlit LCD
Size	4.2" (diagonal)
Resolution	480x640
Luminance	280 cd/m2

HARDWARE

UJ
ΛB
GΒ
GΒ

LANGUAGES

 English, Spanish, French, German, Italian, Portuguese (Brazilian), Chinese (Simplified), Korean, Japanese,

IN THE BOX

GeoExplorer 6000 series handheld, rechargeable battery pack, pouch and strap, USB data cable, AC power adaptor, screen protector kit, spare stylus & tether, documentation

OPTIONAL ACCESSORIES

- Trimble Zephyr[™] Model 2 external GNSS antenna
 Trimble Tornado[™] external GNSS antenna
 Trimble Tempest[™] external GNSS antenna

- · Vehicle power supply
- 1.5 m & 5 m external antenna cable
- Range pole kit for external antenna
- Carbon fiber monopole kit
- Backpack kit for external antenna
- Vehicle mount
- Hard carry case
- Null modem cable
- USB to serial converter cable

SOFTWARE COMPATIBILITY

- Trimble TerraSync software
- Trimble GPS Pathfinder® Office software
- Trimble Positions[™] software suite
- Trimble GPScorrect[™] extension for Esri ArcPad software
- Trimble GPS Analyst[™] extension for Esri ArcGIS for Desktop software
- Trimble GPS Controller software
- Trimble GNSS Connector software
 Trimble TrimPix[™] Pro system
- Custom applications built with a Mobile GIS Developer Community software development kit (SDK)
- Third party NMEA-based applications
- 1 GLONASS is enabled on GeoXT and GeoXH handhelds with Floodlight technology enabled.
 2 Accuracy and reliability may be subject to anomalies due to multipath, obstructions, satellite geometry, and atmospheric conditions. Always follow recommended GNSS data collection practices. Specified Centimeter accuracy can normally be achieved for baselines of 30 km or less. Specified H-Star accuracy can normally be achieved for baseline lengths of 100 km or less. Centimeter and H-Star accuracy is typically achieved within 2 minutes. Carrier postprocessed accuracy is limited to data collected within 10 km of the base station used for corrections.
- to data collected within 10 km of the base station used for corrections.

 3 Stated accuracy is for the Zephyr Model 2 antenna.

 4 SBAS (Satellite Based Augmentation System). Includes WAAS; available in North America only, EGNOS; available in Europe only and MSAS; available in Japan only.

 5 Actual run time will vary with conditions and environment
- of use.
- of use.

 6 Not available on all configurations. The GeoXH and GeoXT 3.5G edition handhelds are PTCRB certified and can operate on supported networks that do not require carrier certification. Consult with your local reseller for more information.

 7 Bluetooth and Wi-Fi type approvals are country specific. GeoExplorer 6000 series handhelds have Bluetooth and Wi-Fi approval in the U.S. and in most European countries. For further information please consult your local reseller.

Specifications subject to change without notice.





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