



GeoBeacon receiver

KEY FEATURES

High quality beacon corrections for real-time GPS accuracy

Bluetooth wireless technology for cable-free communications

Rugged and waterproof for all conditions

Integrated receiver, antenna, and battery in one compact, lightweight unit

Advanced anti-jamming design for best performance in difficult environments

BLUETOOTH BEACON RECEIVER FOR HIGH QUALITY REAL-TIME DIFFERENTIAL CORRECTIONS

Trimble's GeoBeacon™ receiver adds the precision of real-time differential GPS to your GIS data collection projects. With its built-in Bluetooth® radio, the GeoBeacon receiver communicates cable-free to Trimble's range of rugged GPS receivers and handhelds, to provide reliable, high quality real-time corrections. And it doesn't compromise on convenience—the GeoBeacon receiver's advanced design integrates the beacon receiver, antenna, and power supply in a lightweight, wearable package.

Reliable real-time accuracy

The accuracy of differential GPS not only ensures high quality data for your GIS, it also makes locating assets in the field quicker and more accurate. With a GeoBeacon receiver, you can navigate directly to the feature, so you'll save time and have the confidence that you're inspecting the right asset. Back in the office data processing is streamlined too. Since the data you collected was corrected in real time, you can transfer that data directly into your GIS without the need for any further processing.

The sophisticated GeoBeacon receiver features an advanced anti-jamming design and a high performance digital signal processor, to ensure you receive reliable corrections even in the most challenging locations. Because beacon signals are not subject to the same line of sight limitations as satellite-based correction sources, the GeoBeacon receiver is ideal for use in difficult environments such as under canopy or in urban canyons.

Cable-free and wearable

With Bluetooth wireless technology built in, the GeoBeacon receiver works cable-free with Trimble's GeoExplorer® series handhelds, and GPS Pathfinder® ProXT™, ProXH™, and ProXRT receivers.

And with the GeoBeacon receiver's convenient belt pouch, you've got a totally wearable solution that won't get in your way while you work. Your crews will move faster and be more productive, with no down time from broken cables and no extra equipment to weigh them down.

Convenient and hassle-free

The GeoBeacon receiver is ready to go, straight out of the box. A quick glance at the status LEDs will confirm that you're tracking a beacon, and you can get to work. And no matter where your work takes you, the ultra-rugged, waterproof GeoBeacon receiver won't let you down.

With a powerful battery built right in to the receiver unit, you can work all day in the field. Simply plug in your GeoBeacon receiver to recharge overnight and you're ready to go again the next day.

Increase your productivity

With the GeoBeacon receiver, you'll save time and money. Correct GPS positions in real time as you work; relocate assets more quickly; and transfer field data directly into your GIS without postprocessing—it all adds up to increased productivity.

The GeoBeacon receiver—the convenient and reliable real-time solution for all your GIS data collection projects.



GeoBeacon receiver

STANDARD FEATURES

System

- Dual-channel Minimum Shift Keying (MSK) Differential GPS (DGPS) beacon receiver
- Integrated beacon receiver, antenna, and power supply
- Automatic tracking of best available beacon signal
- Fixed mode for tracking a specified beacon station
- Anti-jamming design for reliable tracking
- Bluetooth for cable-free communication
- Rugged, dustproof, and waterproof casing
- Lightweight and durable belt pouch
- All-day, internal rechargeable battery

Software

- GeoBeacon Controller software for simple set-up and status
- Bluetooth deactivation utility

Accessories

- Power supply with international adapter kit
- Belt pouch
- Null modem cable
- User Guide and Software CD

OPTIONAL FEATURES

Accessories

- Range pole bracket
- Vehicle power adaptor
- Portable external power kit
- Hard Carry Case

Supported GPS receivers

- GeoXH™ handheld
- GeoXT™ handheld
- GeoXM™ handheld
- GPS Pathfinder ProXRT receiver
- GPS Pathfinder ProXH receiver
- GPS Pathfinder ProXT receiver

TECHNICAL SPECIFICATIONS

Physical

Size	13.0 cm × 12.5 cm × 12.4 cm (5.1 in × 4.9 in × 4.9 in)
Weight	0.80 kg (1.76 lbs)
Power	
Low (beacon receiver only)	1.5 Watts
Normal (with Bluetooth)	1.6 Watts
Battery	Internal lithium-ion, rechargeable in unit 17.8 Watt hours

Environmental

Temperature	
Operating	-20 °C to +50 °C (-4 °F to +122 °F)
Storage	-40 °C to +70 °C (-40 °F to +158 °F)
Sand and dust	IP67, MIL-STD-810F, Method 510.4, Procedures I and II
Water	IP67, MIL-STD-810F, Method 512.4, Procedure I
Drop	1.22 m (4 ft)
Vibration	Vibration resistant

Input/output

Communications	DE9 (M) RS-232 serial port Bluetooth ¹ for wireless communications
Output protocol	RTCM SC-104 v2.2 4800 baud, 8 data bits, 1 stop bit, no parity
Interface	2 hardware control keys, 3 color LEDs

Beacon receiver

Channels	2
Frequency range	283.5 kHz to 325 kHz
Frequency spacing	500 Hz
MSK bit rate	Automatic
Operation modes	Manual or Automatic
Cold start time	< 2 minutes
Warm start time	< 15 seconds
Demodulation	Minimum Shift Keying (MSK)
Dynamic range	100 dB
Frequency offset	± 5 Hz
Adjacent channel rejection	60 dB @ f ₀ ±500 Hz

¹ Bluetooth type approvals are country specific. The GeoBeacon receiver has Bluetooth approval in the U.S. and EU. For other countries please consult your local Distributor.

Specifications subject to change without notice.

© 2006-2008, Trimble Navigation Limited. All rights reserved. Trimble, the Globe & Triangle logo, GeoExplorer, and GPS Pathfinder are trademarks of Trimble Navigation Limited, registered in the United States Patent and Trademark Office and in other countries. GeoBeacon, GeoXH, GeoXM, GeoXT, ProXH, and ProXT are trademarks of Trimble Navigation Limited. The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Trimble Navigation Limited is under license. All other trademarks are the property of their respective owners. PN 022501-032D (03/08)



ELECTRONIC DATA SOLUTIONS®

P.O. Box 31, Jerome, ID 83338
Ph: 208-324-8006
Fax: 208-324-8015
www.elecdata.com

NORTH & SOUTH AMERICA

Trimble Navigation Limited
10355 Westmoor Drive
Suite #100
Westminster, CO 80021
USA
+1-720-587-4574 Phone
+1-720-587-4878 Fax

EUROPE & AFRICA

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

ASIA-PACIFIC & MIDDLE EAST

Trimble Navigation
Singapore PTE Limited
80 Marine Parade Road
#22-06 Parkway Parade
Singapore, 449269
SINGAPORE
+65-6348-2212 Phone
+65-6348-2232 Fax



www.trimble.com
store.trimble.com