

GMS-2

Handheld GIS Mapping System



**Introducing the next generation
of a compact satellite
positioning receiver**

- INTEGRATED DIGITAL CAMERA
- INTERNAL BLUETOOTH® WIRELESS TECHNOLOGY
- EASY ACCESS USB MEMORY EXPANSION
- REPLACEABLE, RECHARGEABLE ALL-DAY BATTERY
- DUAL CONSTELLATION SATELLITE TRACKING

Topcon engineers have incorporated our industry leading dual constellation satellite tracking into a small handheld GPS receiver, the new GMS-2. This innovative new system provides an integrated digital camera powered by Topcon's revolutionary imaging technology. This powerful combination of dual constellation satellite performance and digital imaging technology has set a new standard for GIS field mapping.

Powered by Topcon's TPSCORE® GPS chip technology, the GMS-2 provides 50 channel tracking capability, for both GPS+ Glonass satellite systems. The TPSCORE® chip technology provides three levels of accuracy. Use the internal antenna for sub-meter GIS mapping applications. For a higher level of accuracy, use an optional external antenna for sub-foot or even centimeter level post processed GIS applications.

For real-time sub-meter mapping, the GMS-2 provides access to the WAAS and EGNOS correction services as a standard feature. Utilize the optional Topcon BR-1 Coast Guard Beacon Receiver, to wirelessly receive beacon correction for real-time location, mapping, and navigation applications. Using its internal Bluetooth® wireless technology, the GMS-2 can also be configured to connect to a regional real-time GPS reference station network using a Bluetooth dial-up networking enabled cell phone.

A significant advantage of the GMS-2 is its ease of use. For users familiar with ESRI software, a GMS-2 can run Topcon's ArcPad extension, Field Tools for ArcPad software for advanced GIS data collection and maintenance. Field Tools for ArcPad combines the power of ESRI ArcPad® with a special user interface that supports Topcon GPS products. For users looking for a simple field solution that is easy to adopt and learn, the GMS-2 will solve your field data collection challenges.



GMS-2
Handheld GIS Mapping System



Incorporating advanced technology not found in other handheld GPS units.



Advanced Digital Imaging

- Integrated digital camera
- Collect, store and automatically link digital images as an attributes to GPS coordinate locations
- No additional software needed. Just point and click. It's that easy!



Dual Constellation Tracking

- Combine the coverage of US GPS system with the Russian Glonass satellite system

More satellites means:

- Better performance in tough, obstructed areas
- Consistently lower DOP values and improved precision



Customized Software

Field Tools for ArcPad - For the advanced GIS professional who prefers the functionality of ESRI ArcPad Mobile GIS software

Field Tools for ArcPad combines the power of ESRI's ArcPad® with an added data collection toolbar to specifically support Topcon GPS mapping systems



Multiple Device Inputs

Access to a variety of ports including an:

- SD Memory Slot for extra, easy access storage and data transfer
- USB Port
- Serial Port
- Power
- Antenna

BR-1 Receiver

The BR-1 is the companion to the popular GMS-2 mapping/imaging device from Topcon. The BR-1 is designed to relay Coast Guard Beacon corrections wirelessly to the GMS-2 receiver for increased accuracy on the fly. Running on common rechargeable batteries to the GMS-2 the BR-1 provides added flexibility and accuracy to the GMS-2 for mapping and navigation.



Setting a new standard for handheld GPS systems, the GMS-2 combines more functionality into one device than ever conceived of before now!



Field Tools for ArcPad Software

An extension for ESRI's ArcPad® mobile GIS software, allowing a user to take full advantage of the GMS-2's integrated camera and dual constellation receiver.

Other primary features include:

- Informative, graphical GPS Status screen displaying GPS and Glonass satellites
- High accuracy mapping using real-time and post-processing techniques
- Log raw data for post-processing
- Work in native shapefile formats



GMS-2 standard package includes

- GMS-2 receiver
- Carrying Case
- Rechargeable Li-ion Battery Pack
- USB cable
- Battery charger
- Screen protectors
- Manual
- Stylus Pen
- Topcon Tools GIS post-processing module (optional)



The Leader in Positioning Technology...

Topcon Positioning Systems is the worldwide leading developer and manufacturer of precision positioning equipment and offers the widest selection of innovative precision GPS systems, laser, optical surveying, and machine control products.

From open-field construction projects to isolated surveying sites and from rolling farmland to inner city utility projects, Topcon Positioning Systems creates innovative technology solutions that give a decidedly competitive edge to end-users.

Recognized as the innovative trend-setter in its industry, Topcon has focused on developing an array of integrated positioning and automation technologies to meet the constantly changing demands facing GIS, construction, surveying, agriculture, utilities and law enforcement professionals worldwide. We look forward to building solutions that solve your data collection project challenges today and in the future.



Topcon Positioning Systems, Inc.

7400 National Drive
Livermore, CA 94550
www.topconpositioning.com

Specifications subject to change without notice

©2009 Topcon Corporation All rights reserved.
P/N: 7010-0766 Rev. C Printed in U.S.A. 6/09

Specifications

Number of Channels	50 GPS + Glonass L1 tracking
DGPS Accuracy	<1m*
L1 Static Function	H: RMS 3mm + 0.8ppm V: RMS 4mm + 1.0ppm
L1 PP Kinematic Function	H: RMS 10mm + 1.0ppm V: RMS 15mm + 1.0ppm
WAAS/EGNOS	Yes
CORS Beacon	Yes with BR-1
Internal Memory	SDRAM 128 MB Flash 256 MB
Processor/Operating System	520 MHz Intel PXA270 Bulverde/ Microsoft Windows® CE 5.0
Onboard Software	Field Tools for ArcPad® or TopSURV-GIS or 3rd party
Office Software (post-processing)	Topcon Tools-GIS
Display	3.5" 240 x 320 color QVGA w/ touch screen
Input/Output	Bluetooth, USB, Serial, ANT, and Power
Battery Life	7 hrs while in GPS mode
Battery Type	Li-Ion battery, Rechargeable/Replaceable
Dimensions	7.76" x 3.54" x 1.81" (197 x 90 x 46mm)
Weight	0.7kg
Environmental	IP66, 1 meter drop -20° to 50°C Operating Temperature -10° to 50°C Operating with camera -30° to 60°C Storage Temperature

* <50cm with external PG-A5 antenna

Other GIS/Mapping Solutions

GMS-110 - GIS Mapping & Navigation System

The Topcon GMS-110 system is designed to provide a rugged GIS Mapping solution that incorporates all of the primary position correction services- Beacon, WAAS, EGNOS, and OmniSTAR®-VBS. Utilizing Topcon's integrated system design and Bluetooth® wireless technology, the GMS-110 brings the versatility of a backpack GIS solution without the mess of a bunch of external cables and components.



GMS-200 - Precision GIS Mapping System

Topcon's GMS-200 precision GIS mapping solution is designed to give you a choice of all accuracy levels for GIS data collection in real-time: sub-meter, sub-foot and sub-centimeter. By combining Topcon's Field Tools for ArcPad software with a precision GPS receiver, the GMS-200 allows you to literally take your GIS layers into the field for accurate and efficient data collection and update. From natural resource mapping to building and maintaining spatial databases for large utility mapping applications, the GMS-200 is no ordinary GIS data collection solution.



Your local Authorized Topcon dealer is:

ESRI, ArcPad are registered trademarks of ESRI in the United States, the European Community, or certain other jurisdictions. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Topcon is under license. Other trademarks and trade names are those of their respective owners.