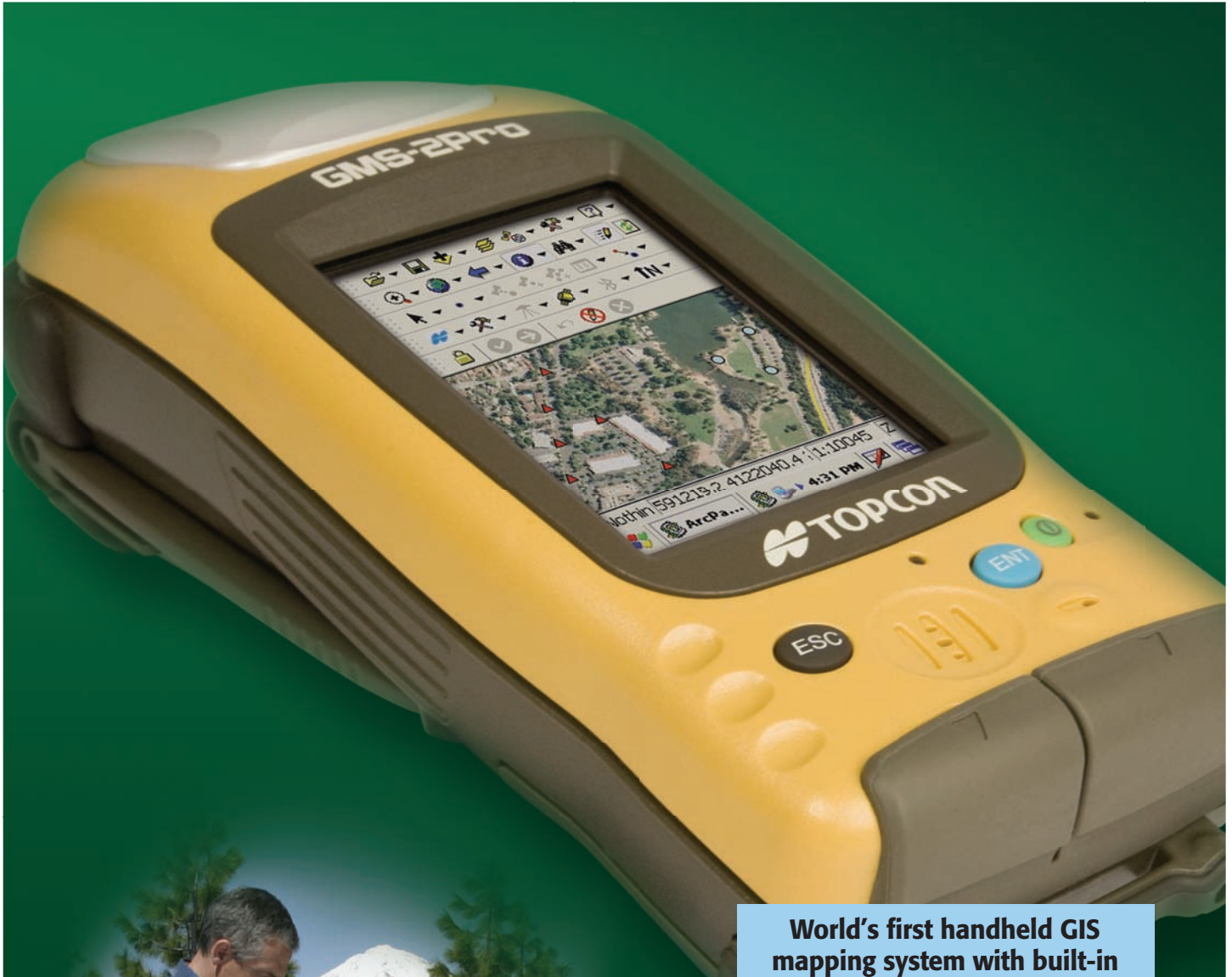


# **GMS-2 Pro**

## **Handheld GIS Mapping System**



**World's first handheld GIS mapping system with built-in camera, laser distance meter and barcode reader**

- INTEGRATED 2.0 MEGAPIXEL CAMERA
- INTEGRATED DISTANCE MEASURING DEVICE
- INTEGRATED BARCODE READER
- EASY ACCESS USB MEMORY EXPANSION
- REPLACEABLE, RECHARGEABLE ALL-DAY BATTERY
- DUAL CONSTELLATION SATELLITE TRACKING



Collecting, storing, and accessing accurate information in a GIS database has long been a priority for GIS practitioners in fields such as environmental management, utility infrastructure mapping, forestry, archeology, emergency management, and more. A new mapping solution exists making this process easier for a single user or for safely deploying multiple users within an organization. Capabilities such as collecting accurate position information along with automatically associated digital photographs, calculating offsets using laser rangefinders and collecting barcode information can now be done with just one handheld device! Users who mastered these techniques with multiple devices as well as those who have not yet attempted them, will find a much simplified workflow and an enhancement in the amount and quality of data collected in the field with the use of the Topcon GMS-2 Pro.

The GMS-2 Pro is a new GNSS (dual constellation tracking) handheld GPS receiver with a truly integrated digital camera, laser distance meter, digital compass and barcode reader. No other data collector has so many functions packed into just one small device making it the most streamlined, compact mapping receiver available today. The internal autofocus digital camera allows users to snap digital photographs of GIS features. These photographs are automatically linked to the GIS feature so that extra time is not wasted linking images to features back in the office. The internal distance meter and magnetic compass are used to map offset points. With one device, users can now map various features from a single location or map features that are inaccessible on foot, unsafe or are in places with poor satellite coverage.

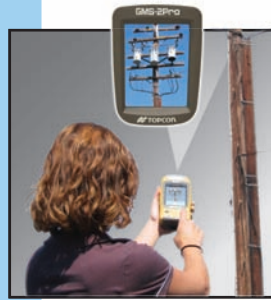
Tasks that used to take various pieces of equipment from different manufacturers and significant time and effort to set up and configure can now be done easily with just one device.



**GMS-2 Pro**  
Handheld GIS Mapping System



## A revolutionary all-in-one device for accurate, fast and safe GIS field mapping.



### Integrated 2.0 Megapixel Camera

That's right, a 2.0 megapixel camera with auto focus picture taking ability. Use the 256MB of built-in Flash memory to store photos on board. Use the external SD card slot for additional memory. Digital photographs can be stored in either .bmp or .jpg format for additional speed and flexibility.



### Integrated Laser Distance Meter

Use the internal laser distance meter in conjunction with the compass to map offset points which are inaccessible, unsafe or are in places with poor satellite coverage. As an added bonus, the laser can also be used in conjunction with Topcon field software functions to calculate the height and width of features mapped in the field.



### Extra Memory

The GMS-2 Pro is loaded with memory. 256MB Flash is standard. The SD card slot and the mini USB Host functionality provide expandable memory options and accelerated data transfer capabilities.



### Integrated Barcode Reader

The digital camera doubles as a barcode reader. Store the barcode information directly in the text field as attribute data. There are so many possibilities for this function that we are sure our users will surprise us with unique applications.

### BR-1 Beacon Receiver

For real-time submeter mapping applications the GMS-2 Pro can be wirelessly connected to the Topcon BR-1 beacon receiver. The BR-1 is designed to relay Coast Guard Beacon corrections wirelessly to the GMS-2 Pro receiver for increased accuracy. Running on rechargeable batteries common to the GMS-2 Pro, the BR-1 will provide added flexibility and accuracy to the GMS-2 Pro mapping system.



# The GMS-2 Pro brings to reality what was once just a dream of incorporating more functionality into one handheld device than ever thought possible!



## Sub-foot Accuracy

In addition to sub-meter accuracy, your GMS-2 Pro can reach sub-foot accuracies with post-processed or real-time correction. Use an external PG-A5 antenna to log a block of kinematic carrier data for post processing in Topcon Tools software. Or use a cell phone or modem to connect to a local reference station network for instantaneous real-time corrections. Your cell phone or modem can be conveniently connected using the internal wireless Bluetooth capability of the GMS-2 Pro.



## GMS-2 Pro Standard Package Includes:

- GMS-2 Pro Receiver
- Carrying Case
- Rechargeable Li-ion battery
- USB Cable
- Battery Charger
- Screen Protectors
- Stylus Pen
- Neck strap
- Topcon Tools post processing software (optional)

## Field Software Solutions

No mapping solution is satisfactory unless the software is easy to use and learn.

Topcon offers a variety of software solutions and as well as partner solutions for the GMS-2 family of products. Whether it's an existing sophisticated ESRI ArcPad® customization or a deployment of many novice users into the field, Topcon has a software solution to suit. Field Tools for ArcPad® is an extension for ESRI's ArcPad® mobile GIS software, allowing a user to take full advantage of the GMS-2 Pro's integrated camera, compass, laser distance meter, and barcode reader.



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
- Geotagged images

Topcon software also provides the flexibility to connect to high accuracy survey grade receivers for cm-level results in real-time. This provides a complete solution for GIS users who have high accuracy database requirements.

Keeping a GIS database up-to-date can be a challenge. GIS departments must figure out a way to do more with less people and less funding. With the Topcon GMS-2 Pro, accurate data can be mapped in less time with less effort. Tracking both the US GPS and the GLONASS satellite constellations means less down time in the field. Easy-to-use software allows for deployment of multiple users in the field. The integrated digital camera and laser distance meter means field personnel will return to the office safely with more detailed information than ever before. This little GMS-2 Pro is the simple answer to some of your biggest GIS data collection and maintenance challenges.



### Topcon Positioning Systems, Inc.

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**Specifications subject to change without notice**

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P/N: 7010-2007 Rev. B Printed in U.S.A. 12/08

## Specifications

|  |  |
|--|--|
| <b>Number of Channels</b>                | 50   |
| <b>DGPS Accuracy</b>                     | <1m*   |
| <b>L1 Static Function</b>                | H: RMS 3mm + 0.8ppm<br>V: RMS 4mm + 1.0ppm   |
| <b>L1 PP Kinematic Function</b>          | H: RMS 10mm + 1.0ppm<br>V: RMS 15mm + 1.0ppm   |
| <b>WAAS/EGNOS</b>                        | Yes  |
| <b>CORS Beacon</b>                       | Yes with BR-1  |
| <b>Internal Memory</b>                   | SDRAM 128MB<br>Flash 256MB NAND  |
| <b>Interface</b>                         |  |
| USB                                      | Mini Port  |
| Card Slot                                | SD   |
| <b>GNSS Receiver</b>                     | GPS + GLONASS  |
| <b>Processor/Operating System</b>        | 520 MHz Intel PXA270<br>Microsoft Windows® CE 5.0  |
| <b>Onboard Software</b>                  | Field Tools for ArcPad®  |
| <b>Office Software (post processing)</b> | Topcon Tools GIS   |
| <b>Display</b>                           | 3.5" 240 x 320 color QVGA w/ touch screen  |
| <b>Laser Distance Meter</b>              | .22 to 50m, +/-5mm m.s.e   |
| <b>Built-in Camera</b>                   | 2.0 Megapixel, Barcode Reader  |
| <b>Keyboard</b>                          | 3 Key plus Virtual Keyboard  |
| <b>Magnetic Compass</b>                  | +/- 4 degrees (in level after calibration)   |
| <b>Input/Output</b>                      | Bluetooth, USB, Serial, ANT, and Power   |
| <b>Battery Life</b>                      | 7 hrs while in GPS mode  |
| <b>Battery Type</b>                      | 2500mAh Removable, Li-Ion Rechargeable   |
| <b>Dimensions</b>                        | H: 8.27" W: 3.7" D: 3.07" (210 x 94 x 78mm)  |
| <b>Weight</b>                            | 0.9kg (1.98lb)   |
| <b>Environmental</b>                     | IP66, 1 meter drop<br>-20° to 50°C Operating Temperature<br>-10° to 50°C Operating with camera<br>-30° to 60°C Storage Temperature |

\* <50cm with external PG-A5 antenna

## 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.

Your local Authorized Topcon dealer is:

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