

**GMS-110**



## **MULTI-PURPOSE GIS MAPPING SYSTEM**



**Bringing together unmatched  
versatility, power and value**

- SUB-METER REAL-TIME ACCURACY USING OMNISTAR OR COAST GUARD BEACONS
- TOPPAD SOFTWARE PROVIDES INTUITIVE GIS DATA COLLECTION
- WAAS AND EGNOS READY



Topcon's GMS-110 is a compact and versatile GIS data collection and maintenance system that offers a variety of real-time correction services for submeter accuracy almost anywhere in the world at any time. The GMS-110 provides the flexibility to choose between OmniSTAR® corrections, Coast Guard Radio Beacon corrections, or WAAS/EGNOS real-time differential correction services. Because these capabilities are integrated into the Map-RT receiver and MG-A5 antenna, no extra hardware is required to connect to these services keeping the GMS-110 a very compact, sleek solution. Depending on where your projects take you, there is a real-time differential correction solution to suit.



The GMS-110 is available with Topcon's FC-100, a ruggedized Windows CE® data collector for work in harsh environments. The FC-100 data collector provides a large, backlit display that can be viewed under any conditions from full sun to complete darkness.

The GMS-110 system provides your choice of field software. Now you can choose between TopPAD software for the advanced GIS professional, or Topcon's TopSURV-GIS for a surveyor-friendly GIS data acquisition system. TopPAD software combines the power of ESRI ArcPad® with a special user interface and hardware support specifically designed for Topcon GIS Mapping systems! With TopPAD, take your GIS layers into the field for accurate and efficient real-time data collection and maintenance. Back in the office, there's no need to convert to GIS compatible data formats because all of your work was done in Shapefile format, the industry standard for GIS. Alternatively, TopSURV-GIS combines point, line polygon and attribute collection with basic survey tasks such as topography, coordinate geometry and stakeout capability. With internal Bluetooth capability, the GMS-110 minimizes the nuisance of cables in the field. Additionally, the receiver contains an internal rechargeable Li-Ion battery eliminating any external power supply and cables in the backpack.

The Topcon tradition of integrating technologies into one easy-to-use and flexible system is alive in the GMS-110 mapping solution. From the rich, intuitive TopPAD mobile GIS software to the unparalleled number of integrated options for real-time differential correction, the GMS-110 is the most valuable tool to get the job done accurately and efficiently.



## **GMS-110**

Multi-Purpose GIS Mapping System

# It's time.



## Topcon GMS-110 is ready for the field, easy to use

- Sub-meter accuracy with real-time differential correction from OmniSTAR® or Coast Guard Beacons
- WAAS and EGNOS ready
- Powerful navigation capabilities allow easy relocation of features
- TopPAD software provides intuitive data collection and allows GIS data to be carried into the field for verification and update
- Work in native shapefile format
- Supports multi-layer display of vector maps and raster images, including aerial photos and satellite imagery
- Create user defined data collection forms to match your GIS database and simplify data collection
- Internal Bluetooth for cable-free field work
- Internal rechargeable batteries
- FC-100 Windows CE data collector with bright color touch screen



### Topcon Positioning Systems, Inc.

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**Specifications subject to change without notice**

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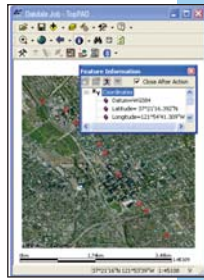
The new Topcon GMS-110 system is designed to provide a compact, rugged GIS Mapping solution that incorporates all of the primary position correction services – Beacon, WAAS/EGNOS, and OmniSTAR®-VBS. Utilizing Topcon's integrated system design and Bluetooth® wireless technology, the GMS-110 brings the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

The GMS-110 receiver system provides your choice of field software. Now users can choose between TopPAD field solution for the advanced GIS maintenance professional, and Topcon's TopSURV-GIS for the surveyor-friendly GIS data acquisition system. Both software systems are available on Topcon's rugged FC-100 Windows CE® color touchscreen field computer.

### TopPAD Software

A data collection program and mobile GIS.

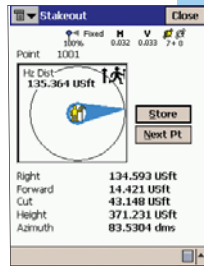
- Work in Shapefile format and bring your GIS data to and from the field without converting to a unique portable format
- Industry standard vector map and raster image display
- Ability to compare GPS data directly to geographic features in the real world adds a deeper sense of reality to the GIS database
- Multiple projections available
- Store raw GPS data for post-processing
- Configure GPS precision settings
- Build customized data entry forms



### TopSURV-GIS Software

GIS module of Topcon's popular TopSURV field survey software.

- Simple, straightforward project flow through Topcon's TopSURV interface
- Collect points, lines, and area components with multiple attributes
- Powerful navigation capabilities allow easy relocation of features
- Provides topography, coordinate geometry (COGO) and stakeout capabilities
- Topcon "Bridges the Gap" with the World's First integrated Surveying and GIS data collection solution for Windows CE®



### GMS-110

Multi-Purpose GIS Mapping System

## Specifications

### Tracking Specifications

Signals Tracked	L1 C/A Carrier
Number of Channels	20

### Performance Specifications

Static Accuracy	H: 3mm + 0.8ppm V: 4mm + 1.0ppm
Kinematic Accuracy	H: 10mm + 1ppm V: 15mm + 1ppm
Differential Code Solution	0.5m HRMS*
Real-time Correction Sources	OmniSTAR®-VBS, WAAS/EGNOS, CORS Beacon

\*Real-time position accuracy is dependent on correction service used

### Power Specifications

Battery	Internal Lithium-Ion batteries
Battery Life	15 hrs Beacon/OmniSTAR® on 18 hrs Beacon/OmniSTAR® off
Input Voltage	6 to 28 volts DC

### Receiver Specifications

Dimensions	157w x 48h x 170d mm/6.2 x 1.89 x 6.7 in
Weight	1.3kg / 2.8 lbs
Operating Temperature	-30°C to 55°C
Storage Temperature	-20°C to +35°C
Memory	Internal memory on-board flash Capacity - 128MB
Waterproof Rating	IP66

### Antenna Specifications

Differential Antenna	MGA-5 - GPS, OmniSTAR®, Beacon, WAAS/EGNOS
Dimensions	w/o adapter: 142 x 142 x 88 mm 5.59" x 5.59" x 3.46"
Weight	0.8kg / 1.76 lbs
Operating Temperature	-40°C to 65°C
Waterproof Rating	IP66

### I/O

Ports	Serial, Power, Antenna
Status Indicator	5 color LED's
Integrated Control	3 function keys (MINTER)
External Control & Display Unit	FC-100 field controller, Windows CE® compatible device
Wireless Communication	Bluetooth™ version 1.3

### Data Output

ASCII Output	NMEA 0183, version 3.0
Other Outputs	TPS format
Output Rate	Up to 20 times per second (20Hz)

Topcon sells GPS products into the precision markets only. Go to [www.topcongps.com](http://www.topcongps.com) for details.

\* Bluetooth™ type approvals are country specific. Please contact your Topcon representative for more information.



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