

GMS-110

GIS Mapping & Navigation System



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

- REAL-TIME CORRECTION USING OMNISTAR OR COAST GUARD BEACONS
- FIELD TOOLS FOR ARCPAD SOFTWARE PROVIDES INTUITIVE GIS DATA COLLECTION
- WAAS AND EGNOS READY

Topcon's GMS-110 is a versatile GIS data collection and update system that offers a variety of integrated 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 differential correction services for real-time mapping and navigation. 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 flexible 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-120, a ruggedized data collector for work in harsh environments. The FC-120 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 Field Tools for ArcPad software for the advanced GIS professional familiar with ESRI's ArcPad, or Topcon's TopSURV-GIS for an easy-to-learn GIS data acquisition system. Field Tools for ArcPad software combines the power of ESRI ArcPad® with a special user interface and hardware support specifically designed for Topcon GIS Mapping systems. With Field Tools for ArcPad, 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. TopSURV-GIS combines, point, line, polygon and attribute collection in an easy-to-use point-and-click interface. 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 mobile GIS field collection software to the unparalleled number of integrated options for real-time differential correction, the GMS-110 is a valuable tool to get your mapping jobs done accurately and efficiently.



GMS-110

Multi-Purpose GIS Mapping System

The new Topcon GMS-110 system is designed to provide a flexible, 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. Users can choose between Field Tools for ArcPad for the advanced GIS professional, and Topcon's TopSURV-GIS for simple field data collection. Both software systems are available on Topcon's rugged FC-120 color touchscreen field computer.

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 Pro's integrated camera, compass, laser distance meter, and barcode reader.

Other primary features include:

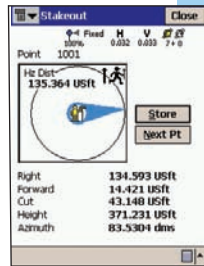
- Informative, graphical GPS Status screen displaying GPS and Glonass satellites
- High accuracy mapping using real-time and post-processing techniques
- Log raw data for post-processing
- Work in native shapefile formats



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
- Preconfigured library of collection styles
- Direct import/export of GIS and CAD files



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-120 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.

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

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It's time.

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



- Integrated real-time differential correction from OmniSTAR® or Coast Guard Beacons
- WAAS and EGNOS ready
- Powerful navigation capabilities allow easy relocation of features
- Field Tools for ArcPad 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-120 rugged data collector with bright color touch screen



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Specifications subject to change without notice

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