TOPCON

GMS-200

Precision GIS Mapping Solution

Ultimate Precision Mapping Solution for GIS Professionals

- <1CM RTK CAPABILITY
- 20CM - SUB-METER ACCURACY WITH REAL-TIME DIFFERENTIAL CORRECTION
- WAAS AND EGNOS READY
- INTUITIVE FIELD SOFTWARE

Topcon's GMS-200 Precision GIS Mapping system is designed for high accuracy GIS data collection and navigation no matter what your level of expertise. The GMS-200 simplifies workflows by allowing the acquisition of this data in real-time. This eliminates the need for post-processing back in the office against local base station data and allows you to see accurate results instantly in the field giving immediate confidence to your work. If collecting data to a high level of accuracy easily is a critical element in building and maintaining your GIS database, then the GMS-200 solution is for you!

The GMS-200 offers an unparalleled variety of real-time accuracy options. For jobs that require the highest level of accuracy, use the GMS-200 for static or real-time kinematic (RTK) solutions and achieve centimeter level results. For sub-foot applications, use the GMS-200 with OmniSTAR® HP service for real-time results better than 20cm. With Topcon's advanced GPS receiver technology and integrated OmniSTAR® XP, OmniSTAR® VBS or WAAS/EGNOS correction capability, positions accurate to less than 1 meter can be collected under even the most demanding conditions. This makes navigating and relocating features a fast and simple process.

The GMS-200 is available with Topcon's FC-120, a ruggedized Windows CE® 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 bright sun to complete darkness.

The GMS-200 system provides your choice of field software. Now you can choose between Field Tools for ArcPad software for the advanced GIS professional, or Topcon's TopSURV-GIS for a surveyor-friendly GIS data acquisition system. Field Tools for ArcPad software combines the power of ESRI ArcPad® field software with a special user interface and hardware support 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 field data to GIS compatible data formats because all of your work was done in shapefile format – a GIS standard. Or alternatively, TopSURV-GIS combines point, line, polygon and attribute data collection with basic survey tasks such as topography, coordinate geometry and stakeout capability. With internal Bluetooth® capability, the GMS-200 minimizes the nuisance of cables in the field. Additionally, the receiver contains an internal Li-Ion rechargeable battery eliminating any external power supply and cables in the backpack.

The Topcon tradition of accuracy, productivity and innovation is alive in the GMS-200 system. From the rich, intuitive Field Tools for ArcPad data collection and maintenance software to the precision GPS receiver, the GMS-200 solution will help you meet all the challenges of building and maintaining a high accuracy GIS database.

GMS-200

Precision GIS Mapping Solution

Topcon GMS-200 is ready for the field, easy to use.

- Static or Real-time Kinematic (RTK) modes for <1cm results
- 20cm - Sub-meter accuracy with real-time differential correction from OmniSTAR®
- WAAS/EGNOS ready
- Powerful navigation capabilities allow easy relocation of features

The GMS-200 provides your choice of field software. Now users can choose between Field Tools for ArcPad field software for the advanced GIS professional, and Topcon's TopSURV-GIS for the surveyor-friendly GIS data acquisition system. Both software solutions are available on Topcon's rugged FC-120 Windows CE® color touchscreen field computer.

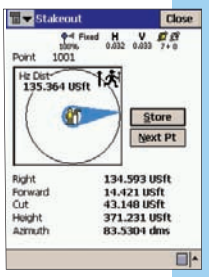
Field Tools for ArcPad Software

A data collection system and a mobile GIS.

- Work in Shapefile 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
- Optional geotagging on the image with date/time and position information
- 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
- Collect points, lines, and area features with multiple attributes
- Powerful navigation capabilities
- Provides topography, coordinate geometry (COGO) and stakeout capabilities
- Topcon "Bridges the Gap" with the World's First integrated Surveying and GIS data collection solution

GMS-200
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Specifications

Tracking Specifications		
Signals Tracked	L1/L2 C/A and Pcode & Carrier	
Number of Channels	20	
Performance Specifications		
Static Accuracy	L1+L2	L1
	H: 3mm + 0.5ppm	H: 3mm + 0.8mm
	V: 5mm + 0.5ppm	V: 4mm + 1.0mm
RTK/Kinematic Accuracy	L1 +L2, L1	
	H: 10mm + 1ppm	
	V: 15mm + 1ppm	
Differential Code Solution	OmniSTAR® HP	<20cm
	OmniSTAR® XP	<0.5m
	OmniSTAR® VBS	<0.5m
	WAAS/EGNOS	<1m
Power Specifications		
Battery	Internal Lithium-Ion batteries	
Battery Life	10 hrs w/OmniSTAR® on	
	11 hrs w/Beacon on	
	16 hrs GPS only	
Input Voltage	6 to 28 volts DC	
Receiver Specifications		
Dimensions	159w x 99h x 172d mm/6.3 x 3.5 x 6.8 in	
Weight	1.4kg / 3.0 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-2 - L1/L2 GPS/OmniSTAR®	
Dimensions	w/o adapter: 89d x 103mm	
	3.5" x 4.01"	
Weight	0.5kg / 1.1 lbs	
Operating Temperature	-40°C to 55°C	
Waterproof Rating	IP66	
I/O		
Ports	2 seria: HP, GPS	
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.

It's time.

Topcon GMS-200 is ideal for all real-time GIS mapping applications

Sub-meter Accuracy
Use the GMS-200's integrated real-time OmniSTAR® XP, OmniSTAR®-VBS or WAAS correction

- Natural Resource Management
- Forestry
- Fish & Wildlife
- Health
- Homeland Security
- Agriculture
- Urban Planning
- Asset Management

Sub-foot Accuracy (<20cm)
Use the GMS-200's integrated real-time OmniSTAR® HP correction

- Electric & Gas
- Utilities
- Water & Wastewater
- Cadastral
- Telecommunications
- Transportation
- Petroleum & Mineral Exploration

Centimeter-Level Accuracy
Use the GMS-200's Real-time kinematic (RTK) or Static modes

- Engineering
- Utilities
- Police
- Survey
- Parcel Layer Mapping
- Construction
- Communication Infrastructure
- Deformation Monitoring

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