



PRECISION GPS+

TOPCON

GMS-110

Multi-Purpose GIS/Mapping System



ISO 9001:2000
FM 68448



Topcon's GMS-110 is ready for the field, and easy to learn and use.

The new Topcon GMS-110 system was designed to provide a compact, rugged GIS Mapping system 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 also provides your choice of field data controller. Now users can choose between ESRI's ArcPad 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.

GMS-110 Receiver System

- Sub-meter accuracy with real-time differential correction from OmniSTAR®-VBS and Navigation Beacons
- OmniSTAR® satellite differential correction provides wide area coverage
- Coastal navigation beacons provide free differential correction over most of North America and Europe
- WAAS and EGNOS ready



Your choice of field data controller software:



ESRI ArcPad

- ESRI ArcPad software provides intuitive data collection and allows GIS data to be uploaded and carried into the field for verification and update
- Data stored in Shape file format—GIS standard
- Supports multi-layer display of vector maps and raster images, including aerial photos and satellite imagery

- Create user defined data collection forms to exactly match your GIS database
- Captures points, lines, and polygons features with attributes

Topcon TopSURV-GIS

- 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
- Topcon "Bridges the Gap" with the World's First integrated Surveying and GIS data collection system



GMS-110 Technical Data

Description

GIS Mapping system that incorporates a 40 channel GPS receiver with integrated real time GIS correction services and multi-function antenna.

Tracking Specifications

Signals Tracked: L1 Code

Performance Specifications:

Baseline Accuracy (Code Solution): 0.5 - 3m

Realtime Correction: OmniSTAR®-VBS, WAAS, EGNOS, CORS Beacon
Realtime position accuracy is dependent on correction service used

Power Specifications

Battery: Internal Lithium-Ion batteries

Battery Life: 14 hours on full charge

External port: Yes

External power input: 6 to 28 volts DC

Power consumption: Less than 3.0 watts

MG-A5 Antenna Specifications

GPS Antenna: Microstrip on a flat ground plane

Differential Antenna: Integrated OmniSTAR®-VBS plus CORS Beacon, WAAS, EGNOS

I/O

Communication Ports: 2 Standard RS-232 Serial

2 Optional RS-232 Serial

Status Indicator: 2x3-color LED's

Integrated Control: 2, two-function keys (MINTER)

External Control & Display: FC-100 field controller, Windows CE® compatible device

Wireless Communication: Bluetooth™ version 1.1 comp.

Data Output

Real time data outputs: RTCM SC104 version 2.1, 2.2, 2.3, 3.0, CMR, CMR+

ASCII Output: NMEA 0183 version 3.0

Other Outputs: TPS format

Output Rate: Up to 20 times per second (20Hz)

Hardware Specifications

Environmental Specification: Waterproof Receiver & Antenna

Receiver Dimensions: 159w x 172h x 88d mm

6.3w x 6.8h x 3.5d inches

Receiver Weight:

Antenna Dimensions: 200w x 200d x 69h mm

7.9w x 7.9h x 2.7d inches

Antenna Weight: 0.5kg/1.1 lbs

Operating Temperature: -40°C to 55°C / -40°F to 130°F

www.topcon.com

© 2005 Topcon Corporation All rights reserved
P/N:7010-0720 Rev A Printed in USA 4/05



FC-100
Rugged Windows CE®
field computer



HiPer+
Wireless integrated
GPS+ receiver



HiPer Lite+
Cable-free integrated
GPS+ RTK System

