

# MobileMapper™ 100

BLADE™  
TECHNOLOGY  
INSIDE

A Breakthrough in Handheld Accuracy



FAST  
POWERFUL  
ACCURATE

FLEXIBLE



## MobileMapper 100

MobileMapper® 100 is the newest generation of handheld mapping devices introduced by Ashtech. Designed for GIS data collection and mapping, the MobileMapper 100 integrates an open operating system, built-in communications and the Ashtech's powerful BLADE technology. BLADE allows the MobileMapper 100 to operate in extreme GNSS environments while maintaining the high accuracies desired by GIS professionals.

Ashtech MobileMapper 100 delivers state-of-the art features in a smart, compact, and lightweight handheld concept that gives users the ultimate field experience. Combined with MobileMapper Field proprietary software or Ashtech Business partners' offerings, MobileMapper 100 brings the openness, flexibility and scalability needed to answer any mobile GIS requirements.

## High-Accuracy Handheld

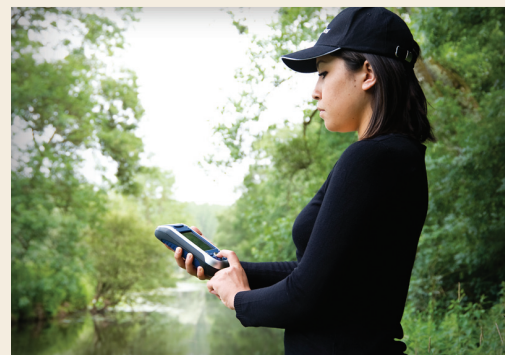
- True handheld operations
- Powerful BLADE processing technology
- Sub-meter, decimeter or centimeter real-time accuracy modes
- Extended position availability in urban canyons and under canopy

## Designed For The Field

- Compact & lightweight design for optimal mobility, use and comfort
- Integrated communications for easy data transfer and GNSS differential
- Powerful electronics for fast data collection and seamless processing
- Ruggedized for outdoor use in extreme conditions

## Flexible

- Extended Connectivity and multimedia features
- Windows Mobile standards for full 3rd party software compatibility
- Ancillary sensors interfacing
- GNSS scalability: GPS or GPS/Glonass configurations
- Compatible with 3<sup>rd</sup> party networks (VRS, FKP, MAC)



## MobileMapper Field and Office Software

### Complete solution:

The Ashtech MobileMapper software suite includes all GIS features that professionals really need without the burden of complicated and rarely used functions. It also provides a direct interface to external sensors such as range laser finders.

### Versatile application:

MobileMapper Field is the perfect solution for GIS data collection, asset management, area measurements, maps creation and update.

### Easy to learn, Easy to use:

Ashtech software is very intuitive, requiring a minimum of user training. It enables rapid deployment across the workforce for large scale GIS data collection or maintenance.



## Tune MobileMapper 100 to your Applications

### Windows Mobile Openness:

With Windows Mobile 6.5 you may upload any necessary utility or software on your MobileMapper 100, whatever suits your next job. You can collect GIS/GPS points and maps via the GIS application of your choice, either a third party software such as ESRI® ArcPad® or the proprietary Ashtech application.

### Software Choice:

Take advantage of the solutions that Ashtech Business Partners are offering. Either in Forestry, Agriculture, Utility asset management, Underground cable location, etc... the application choice is large. Specific GIS software or hardware solution combined with your MobileMapper 100 form an accurate all-in-one mobile GIS solution, 100% matching your professional needs.

# MobileMapper 100 Technical Specifications\*

## GNSS Characteristics

- 45 parallel all-in-view channels
  - GPS
  - GLONASS
  - L1 C/A
  - SBAS: WAAS/EGNOS/MSAS
- Ashtech BLADE technology for optimal performance
- DGPS, RTK and post processing with Ashtech MobileMapper Office software
- Up to 20 Hz GPS, GLONASS, SBAS position output and raw data (code and carrier)
- NMEA 183 messages output
- RTCM2.3, RTCM3.1, CMR and CMR+, DBEN, ATOM (Ashtech Optimized Messaging)
- RTK Network: VRS, FKP, MAC

## Accuracy Specifications (Horizontal RMS)<sup>1</sup>

- Real-time SBAS: < 50 cm typical
- Real-time DGPS: < 30 cm typical
- Real-time RTK: < 30 cm down to 1 cm
- Post-processing: < 30 cm down to 1 cm

## Processor

- Marvell PXA 320
- Frequency clock 806 MHz

## Operating System

- Microsoft Windows Mobile 6.5
- Languages available: English, French, Spanish, German, Portuguese, German, Italian, Simplified & Traditional Chinese, Japanese, Korean<sup>2</sup>
- Software package includes:
  - GNSS Toolbox to control GNSS
  - Internet Explorer
  - Microsoft Office Mobile
  - ActiveSync
  - Transcriber (handwriting recognition)

## Communications

### Cellular

- Built in GPRS, EDGE class 12 modem
- Quad band 850/900 MHz, 1800/1900 MHz

### Bluetooth

- Bluetooth 2.1 (class 2) with DER
- Profiles: SPP, DUN, FTP, OPP, HSP, A2DP

### Other

- RS232, USB through docking station
- Wireless LAN 802.11b/g (SDIO slot)

## Physical Characteristics

### Size

- Receiver: 190x90x43 mm (7.5x3.5x1.7 in)

### Weight

- Receiver only: 0,48 kg (1.06 lb)
- Receiver with battery: 0,62 kg (1.43 lb)

## User Interface

### Keyboard

- Alphanumeric virtual keyboard
- 4 ways navigation, Ok, menu, escape, zoom in/out, contextual keys
- Illuminated keyboard

### Display

- Colour TFT High resolution display sunlight readable with touch screen, LED backlight.
- Size: 3.5" portrait

## Memory

- 256 MB SDRAM
- User data storage: 1 GB Nand Flash (non volatile)
- SDHC memory card

## Environmental Characteristics

- Operating temperature: -20° to +60°C (-4 to 140°F)
- Storage temperature: -25° to +70°C (-13 to 158°F)
- Humidity: 10 to 90% non condensing
- Waterproof
- Vibration and Shock: ETS300 019, vibration Mil STD 810 method 514.5
- Free drop: 1.2 m on concrete

## Power Characteristics

- Removable battery: Li-Ion, 6600mAh
- Battery life: > 8 hrs @ 20 °C with GNSS on<sup>3</sup>
- Charging time: 3 hours
- External power: 9-28 VDC

## Multimedia & Sensors

- Camera 3MPixels
- E-Compass
- G-Sensor
- Speaker
- Microphone

## Software Options

- Ashtech MobileMapper Field and Office Software
- Post-processing feature available for Ashtech MobileMapper Field software
- ESRI® ArcPad® software bundle (USA only)

## Standard Accessories

- Integrated stylus
- Docking station:
  - Unit charging
  - RS232 Interface
  - USB Host and Device
  - Additional battery charging slot
- Universal A/C adapter
- USB data cable

## Optional Accessories

- External GPS + GLONASS L1 precision antenna with cable
- Pole bracket

<sup>(1)</sup> Including all available options.

<sup>(2)</sup> Handheld accuracy performance achieved in good conditions with PDOP <4 and more than 5 satellites in view. Accuracy specifications may be affected by atmospheric conditions, signal multipath, satellite geometry and corrections availability and quality.

<sup>(3)</sup> Loaded at time of purchase – no further OS language modification is possible.

<sup>(3)</sup> No BT or WLAN. Backlight as default settings.



## Become a Business Partner

Ashtech is actively recruiting Business Partners worldwide and focused on customer needs for complete and dedicated GPS/GIS solutions. As a third-party developer and partner, you will be able to take advantage of the Business Partner Software Libraries, including various development tools. Contact us today to learn how you can easily integrate your GIS software and hardware with MobileMapper products to build valuable solutions for your customers.

## PHM Survey Equipment

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