

# MobileMapper™ CX



Map anything. Anywhere. In any way.



# A Universal GIS Solution



## MobileMapper™CX

MobileMapper™CX is a highly flexible, accurate, affordable and rugged handheld GPS receiver for universal GIS use. Compatible with Windows CE based GIS applications, the MobileMapper CX provides real-time sub-meter and even sub-foot accuracy in post-processing. Support of wireless technologies (Bluetooth and Wi-Fi), DGPS networking capabilities, huge storage capability, field-replaceable all-day battery, built-in alphanumeric keypad, and a design that can withstand extreme outdoor conditions ensures that the MobileMapper CX delivers uncompromised performance and productivity.

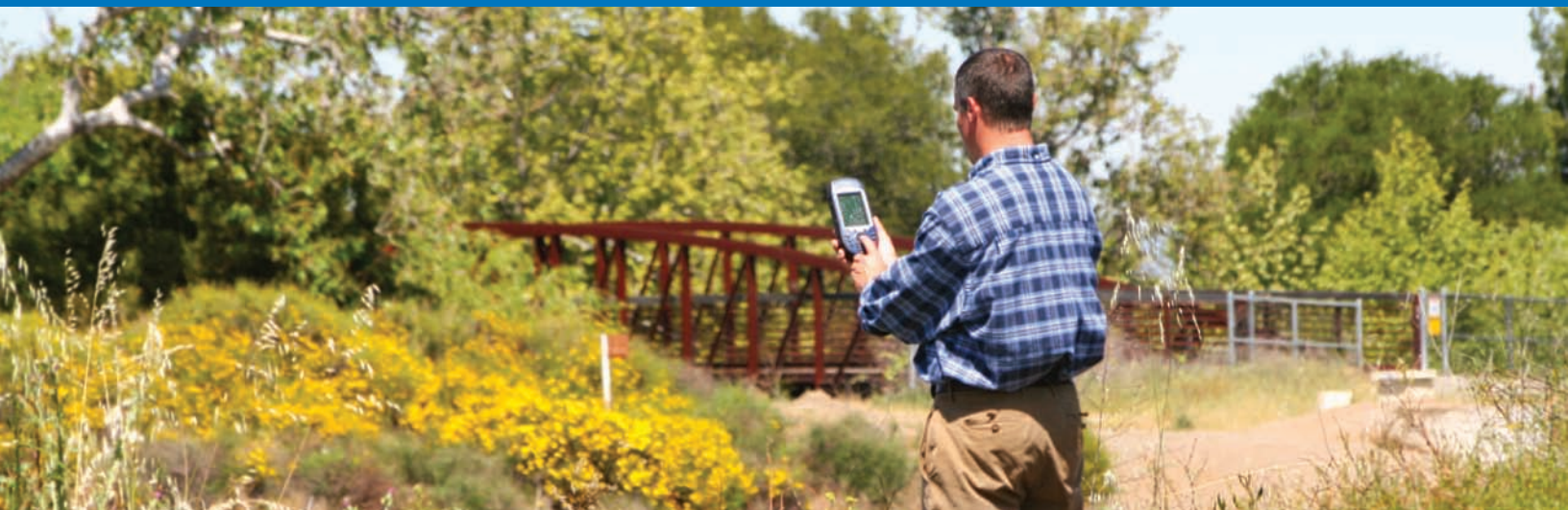
Together with Magellan's Mobile Mapping application, MobileMapper CX offers a turn key solution for all your GIS needs. The software is intuitive, making proficient use quick and easy with minimum training, and includes the GPS features you really need without the burden of overly complicated, rarely used functions.

Driven by the powerful office support software, MobileMapper Office, MobileMapper CX provides clear and simple data display, editing and export capabilities. MobileMapper CX makes creating or updating maps for analysis and storage in any Geographic Information System quick and easy.

### High performance features

- Real-time sub-meter and sub-foot post-processed GPS accuracy
- Open platform based on Windows CE .NET 5.0
- Multiple DGPS modes: SBAS, Beacon, NTRIP, Direct IP, and RTCM
- Support of Bluetooth and WLAN technologies
- Removable SD card memory (up to 4 GB)
- Rugged and waterproof design
- Field replaceable all-day battery
- Built-in alphanumeric keypad





## Flexibility

The open platform design of the MobileMapper CX allows you to choose the right GIS application you need: Magellan's easy-to-use Mobile Mapping application, or a large choice of GIS and navigation software offered by our Authorized Business Partners.

With the option of using Bluetooth or wireless LAN technology, transferring or backing up your data is no longer a hassle. When there's no time to transfer your files, the MobileMapper CX gives you the freedom to store them on SD cards up to 4GB.

## Accuracy

The MobileMapper CX offers the most versatile GIS/ GPS system, using multiple operating modes and configurations to ensure accurate positioning whenever and wherever you use it.

MobileMapper CX delivers sub-meter accuracy in real-time using many different DGPS modes such as SBAS, Beacon, NTRIP and Direct IP. With the help of a Magellan external precision antenna and our MobileMapper Office tool, the MobileMapper CX can achieve sub-foot accuracy in post-processing.

## Affordability

Along with its ease of use and high-performance features, the MobileMapper CX is a cost-efficient GIS solution offering the best price-to-performance ratio in the market.

With competing products almost twice the price of the MobileMapper CX, you can provide personnel with more valuable equipment, getting the job done faster, getting the job done better.

## Ruggedness

The harshest terrain and extreme conditions are no match for the durability and performance of the MobileMapper CX.

Able to withstand whether conditions that would leave consumer-grade products, such as PDA's, damaged, and rugged enough to come out of a fall without a scratch the MobileMapper CX is ready for any environment.

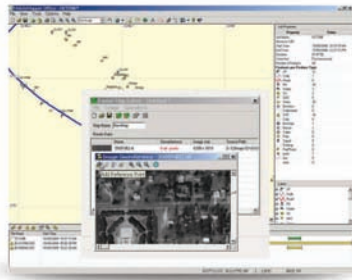
MobileMapper CX is perfectly suited for all GIS field uses: public safety, federal and local agencies, utilities, environmental monitoring, natural resources and any other industry where field asset mapping and management is critical.



## Mobile Mapping Field Software

**Mobile Mapping field software offers you a powerful office tool with easy-to-use features such as:**

- GIS feature libraries for logging feature descriptions
- Point, line and area mapping from an easy to learn and use menu structure
- Area calculation in the field for real-time area determination. Area data can be post-processed in the office to enhance accuracy
- Supports Raster and Vector map formats
- Offset function for logging hard to reach features. This function eliminates the need to physically occupy a feature, you simply need to input the distance and bearing to the feature
- Nesting function for logging features without closing other features already being logged, e.g. inserting a telephone pole while mapping a road
- Repeat feature function for rapid logging of features with identical descriptions, e.g. poles along a road
- Grid mapping utility for collecting evenly distributed measurements (water depth, chemical concentration, etc.) required for contour map generation
- Software feature for collecting raw data for post-processed differential correction



## MobileMapper Office

**MobileMapper Office links the receiver to the GIS base system and provides convenient features such as:**

- Full feature library generation
- Preparation of job files for field data collection
- Creating and editing lists of features and attributes for describing GIS assets in the field
- Quick and easy display, editing and exporting of data. Includes support for .SHP, .MIF, .DXF and .CSV files
- Uploading or creating of vector background maps for use in the field
- Post-processing of code and phase data recorded with the field receiver

## Become a Software Business Partner

Magellan is actively building Business Partnerships for software development and is focused on customer needs for complete GPS/ GIS solutions.

These GPS/ GIS applications, integrated into the MobileMapper CX platform, provide customers with simple all-in-one GIS solutions, allowing them to focus on the task at hand rather than device configuration.

Become a Software Business Partner and expand your business through joint marketing, demand generation and close collaboration with Magellan.





## Natural Resources/ Environment

A highly sensitive GPS receiver means you will get high performance even in dense canopy cover. Area and boundary mapping is easy with intuitive mapping applications. Wetland delineation, environmental protection or land parcel measurements are easily and accurately completed in the field with the MobileMapper CX.

## Oil and Gas

In conditions that are not always the most pleasant the MobileMapper CX stands up and performs without problem. Field mapping is made simple with the wide array of software applications and the easy to use controls. Its rugged enough to get dirty right along side you.



## Utilities and Local Government Agencies

Connecting field and office GIS is made easy with the MobileMapper CX. Modifications to GIS files are easily made in the field and updated in the office. Managing assets is made simple and precise. With added vehicle navigation entire job routes can be calculated and executed making efficient use of time.

## Agriculture

Ideally suited for agricultural applications, MobileMapper CX gives you the power to make accurate area and boundary measurements on native, fallow or cultivated parcels of land. MobileMapper CX is an excellent tool for mapping fields that may be eligible for subsidies such as European Union aid payment or US crop insurance.



## Public safety

The rugged exterior and versatility of software applications make MobileMapper CX the first choice for Public Safety planning. Creation of first-response plans, mapping fire boundaries, crime location, disease incidence and storm damage mapping are conveniently done with one simple tool.

# MobileMapper CX Technical Specifications

## GPS Characteristics

- 14 parallel channels
- Integrated SBAS (WAAS, EGNOS, MSAS)
- L1 C/A code and carrier
- Update rate: 1 Hz
- Protocol: NMEA 0183 v 3.0
- RTCM SC-104 version 2.3 (9.2 & 1.2)

## Accuracy Specifications

### Real-Time Performance (RMS)

- Sub-meter accuracy with SBAS<sup>(1)</sup>, Beacon, NTRIP, Direct IP or other RTCM corrections

### Post-processing Performance (RMS)

- Sub-foot accuracy (30 cm)<sup>(2)</sup>

## Operating System

- Microsoft Windows CE .NET 5.0
- ARM920T based processor
- GPS Utilities - provides initialization and setup, mission planning and configuration of optional beacon differential receiver
- Bluetooth Manager - full-featured Bluetooth connectivity configuration utility
- Microsoft WordPad, Internet Explorer®, Windows Explorer, Terminal, ActiveSync®, Windows Media Player and Inbox
- Microsoft File Viewers: Excel, Word and Image Viewers
- Inbox - e-mail client
- Wireless LAN Driver<sup>(3)</sup>

## Physical Characteristics

### Size and Weight

- Size: 19.5 cm x 9 cm x 4.6 cm (7.7 x 3.5 in x 1.8 in)
- Weight: 0.48 kg (1.05 lb) with battery

## User Interface

- Full color, daylight readable, advanced TFT liquid crystal display (LCD) with backlight
- 320 x 240 pixels resolution with 262,144 colors
- Resistive touch panel
- Alphanumeric keyboard with backlight: 18 buttons
- Audio: built-in loud speaker

## Memory

- 128 MB SDRAM, 128 MB NAND Flash memory
- Removable SD card memory: up to 4 GB (non-HC SD)

## Interface

- Integrated Bluetooth wireless technology
  - Specification 1.2 compliant
  - Point-to-point and point-to-multipoint
  - Profiles: serial port, OBEX, dial-up networking
- Lemo coaxial external antenna connector
- USB: host and slave
- RS232

## Environmental Characteristics

- Operating Temp: -10°C to 60°C (14°F to 140°F)
- Storage Temp: -20°C to 70°C (-4°F to 158°F)
- Weather: IP 54 Standard
- Shock: 1.5 m (4.9 ft) drop to concrete

## Power Characteristics

- Battery type: 3.7 V lithium-ion, 3900 mAh
- Battery life: 8 hour run-time with GPS
- Removable, rechargeable battery
- External power port for extended operation time

## Language Support

- Microsoft Windows CE operating system language support such as English, French, German, Spanish, Dutch, simplified Chinese and Japanese

## Accessories

### Standard Accessories

- Clip-on I/O module with external power, USB and serial ports
- Universal A/C adapter
- Removable, rechargeable lithium-ion battery
- 128 MB Secure Digital memory card
- USB data cable
- Carrying case
- Hand strap
- Stylus pens (2)
- MobileMapper CX companion CD includes supported international language fonts and Getting Started Guide

### Optional Accessories

- MobileMapper Beacon - Bluetooth enabled beacon differential correction receiver
- External antenna
- Power cable with cigarette lighter adapter
- 3.7 V lithium-ion rechargeable battery
- External battery charger
- Stylus pens
- Carrying case
- Car bracket
- Clip-on I/O module with external power, USB and serial ports

## Emissions Certification

- Immunity (EN 55022 Class B)
- Susceptibility (EN 50082-1)
- FCC and CE certified

## Mobile Mapping Software Options

### Mobile Mapping Software

- Point, line and area logging
- GIS feature libraries
- Offset function
- Raster and Vector map support
- Nesting function
- Repeat feature function
- Grid mapping utility
- Raw data collecting

### Language support

- English, French, German, Spanish, Italian, Portuguese, Swedish, Dutch, Finnish

### MobileMapper Office

- Feature Library Editor
- Background Map Creation
- Job Creation and Editing
- Differential Correction
- GIS Data Display and Editing
- GIS Import/Export: ESRI .SHP, MapInfo .MIF, and AutoDesk .DXF import/export and .CSV export

### Language support

- English, French, German, Spanish, Portuguese, Russian, Chinese, Japanese

### System Requirements

- Windows 2000 / XP / Vista
- Pentium 133 or higher
- 64 MB RAM mini, 128 MB RAM recommended
- 200 MB disk space required for installation

### Optional Modules

- GPSDifferential Module for post-processing<sup>(4)</sup>
- Software Development Kit (SDK) and GPS Application Programming Interface (API)<sup>(5)</sup>

<sup>(1)</sup> Accuracy assumes open sky environment, #SVs > 5 and PDOP < 4

<sup>(2)</sup> Assuming GPSDifferential Module and GPS precision antenna are used for raw data capturing

<sup>(3)</sup> Compatible with a specific USB Wi-Fi accessory (USR805421 from US Robotics)

<sup>(4)</sup> For SW Integrators only

<sup>(5)</sup> When a Business Partner Agreement has been approved

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