



Trimble MX7

MOBILE IMAGING SYSTEM

ENTER THE WORLD OF MOBILE IMAGING

The Trimble® MX7 mobile imaging system is a vehicle-mounted photogrammetric system that makes it easy to quickly and completely capture road and site infrastructure information. Capture 360-degree, 30 megapixel geo-referenced images at highway speeds to rapidly reduce project field time. Then, use the Trimble MX solution to extract and analyze your collected data. The Trimble MX7 is the ideal solution for organizations looking to enter the world of mobile imaging.

Rapid Collection of Geo-Referenced Images

Capture a 30 megapixel panoramic image of the surrounding environment in static or mobile—up to highway speed—modes with the Trimble MX7. Equipped with six, 5 megapixel cameras and Trimble Applanix® GNSS and inertial geo-referencing modules, the Trimble MX7 enables you to manage assets—such as bridges, buildings, roads, highways, and power stations—and document site conditions with geo-referenced images. This compact, lightweight, and rugged sensor can be mounted on vehicles of all sizes.

System control and data recording functions are controlled wirelessly through any WiFi enabled PC or tablet device. Trimble Mobile Imaging Software is available with the system and offers a clear, intuitive user interface—making it easy to use—allowing the operator to rapidly set system parameters and manage data recording.

Capture Now, Measure Later

Avoid site rework and benefit from increased quality control and data validation by capturing the data now and measuring later. The Trimble MX7 allows you to visually observe and capture the job site, then produce deliverables in the office later using Applanix POSPac MMS™, Trimble Business Center and Trimble MX solutions.

Trimble MX completes the MX7 solution allowing you to easily visualize, interpret and extract information. Make the most out of your data by distributing it throughout your organization and sharing insights with all co-workers. Trimble MX solution provides you with the ability to share data via web and use GIS and CAD environment for feature extraction.

Key Features

- ▶ Versatile system offers significant operational flexibility
- ▶ Six 5 megapixel cameras provide rapid 360-degree image documentation
- ▶ Precision positioning using tightly coupled GNSS and inertial referencing system
- ▶ Deploys on all sizes of on-road vehicles
- ▶ Use with Trimble Mobile Imaging Capture software and Trimble MX solutions for data capture, extraction and analysis



Trimble MX7 MOBILE IMAGING SYSTEM

SOFTWARE

Applanix POSPac MMS software

- ▶ Process GNSS / INS trajectory

Trimble Business Center

- ▶ Prepare Trimble MX7 data to use in Trimble MX

Trimble MX solution

TMX Content Manager

- ▶ Organize mobile imaging data
- ▶ Correct mobile imaging data
- ▶ Deliver mobile imaging content

TMX Asset Modeler Standard

- ▶ View and navigate through data
- ▶ Advanced feature extraction procedure
- ▶ Make photogrammetric measurements, attach them to attributes and export them into GIS layers
- ▶ Client/Server license is available

TMX Blur and Erase QC

- ▶ Blur and erase parts of imagery

TMX Publisher

- ▶ Publish via web
- ▶ Use AutoCAD Map, QGIS and ArcGIS Plugins to share data into GIS and CAD environment

PERFORMANCE AND SPECIFICATION

SYSTEM SPECIFICATION	
Resolution	30 MP (5 MP x 6 sensors)
Field of view	90% of full sphere
Spherical distance	Calibrated from 2 m to infinity
Operating temperature	0 °C to +40 °C
Power	12 V to 24 V DC (typical 100 W)
Weight	11.3 kg
IP rating	IP65 (MX7 sensor head) IP20 (MX7 power box)

POSITIONING SUB-SYSTEM (RMS ERROR) ¹	
Type	Trimble AP15 GNSS-Inertial System
Technology	Advanced Applanix IN-Fusion™ GNSS-Inertial integration technology
# of GNSS channels	220
Inertial measurement unit	Applanix IMU-69 (non ITAR) with 200 Hz data rate
Position (m): No GNSS outages ^{2,4} 1 km or 1 minute GNSS outage ^{2,4}	0.02–0.05 (post-processed) ² 0.2–0.8 (post-processed) ²
True Heading (deg): No GNSS outages ^{2,4} 1 km or 1 minute GNSS outage ^{2,4}	0.08 (post-processed) ³ 0.2 (post-processed) ³

OPTIONS	
Analysis	Applanix POSPac MMS
Positioning	Distance measurement indicator (DMI)
Orientation	GNSS Azimuth Measurement System (GAMS)

1 Typical performance in a standard road vehicle with appropriate initialization and dynamics. Actual results are dependent upon satellite configuration, atmospheric conditions and other environmental effects.
 2 Typical mission profile, max RMS error.
 3 POSPac MMS.
 4 With DMI option.

Specifications subject to change without notice.



NORTH AMERICA
 Trimble Inc.,
 10368 Westmoor Drive
 Westminster CO 80021
 USA

EUROPE
 Trimble Germany GmbH
 Am Prime Parc 11
 65479 Raunheim
 GERMANY

ASIA-PACIFIC
 Trimble Navigation
 Singapore PTE Limited
 3 HarbourFront Place
 #13-02 HarbourFront Tower Two
 Singapore 099254
 SINGAPORE

