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 a panoramic camera consisting of six individual 5 megapixel CMOS-sensors and a Trimble Applanix GNSS and inertial geo-referencing system, 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. Operators can do their project planning in the office and upload a kml file for more efficient data acquisition campaigns. Provided the tablet is connected to the internet, the operator can utilize a background map from Open Street Map to maximize data collection efficiency.

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 mobile imaging solution allows you to visit and inspect a complete job site or project area, capture all the required data and let's you produce deliverables and drive decisions at the comfort of your office chair using a selection of office software tools on hand.

The Trimble MX software completes the MX7 solution allowing you to easily organzie, visualize and interpret data and to efficiently extract information that can be integrated into a GIS or distributed within an organization or via the Internet.

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
- Operate the Trimble MX7 with ease and confidence on your own tablet with the Trimble Mobile Imaging software
- View and analyze panoramic images, measure and extract information and publish images over the internet within the Trimble MX software suite

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SOFTWARE

Applanix® POSPac MMS™ software

- Process GNSS / INS trajectory

Trimble Business Center Advanced

- Prepare Trimble MX7 data to use in Trimble MX

Trimble MX solution

TMX Content Manager

- Organize and archive project data
- Correct data
- Deliver content

TMX Asset Modeler Standard

- View and navigate through data
- Efficient feature extraction capabilities
- Make photogrammetric measurements that are directly written into a GIS Layer
- Multi-user data access through client/server technology available

TMX Blur and Erase QC

- Blur and erase parts of imagery

TMX Publisher

- Publish images 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 CMOS sensor)
Field of view	90% of full sphere
Spherical distance	Calibrated from 2 m to infinity
Operating temperature	0 °C to +35 °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)
Storage	2 TByte SSD

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	
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.

Contact your local Trimble Authorized Distribution Partner for more information

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