Street Level Mapping
360-Degree Imagery

Mobile Imaging is a fast and cost-effective way to map & manage assets

- Public Works
- Utilities
- Engineering
- E-911
- GIS
- Road & Bridge
- Railway
- Mining
- Oil and Gas
- Communications
- Large Scale Mapping
- Construction Documentation
The Mobile Mapping Imaging Solution is a fast, safe, and cost-effective way to map and manage detailed assets and document site conditions for public works and utilities with geo-referenced images, relative metrics and attributes.

**Rapid Collection of Geo-Referenced Images**

CompassData utilize a vehicle-mounted photogrammetric system (Trimble MX7 and MX2) Mobile Imaging System that makes it easy to quickly and completely capture road and site infrastructure information. Capture 360-degree, 30-megapixel geo-referenced images, with integrated GNSS and IMU sensors, at highway speeds to rapidly reduce project field time.

**Analyze, Extract, & Share**

CompassData uses the Orbit Mobile Mapping Software Suite to analyze, manage, extract, and share the collected 360 degree imagery. Through this Orbit Suite you can bundle your raw mobile mapping data into manageable projects, extract features, attribute feature measurements, take image snapshots, publish content to the web and mobile devices or integrate your workflow into popular GIS and CAD systems.

**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 Orbit Suite allows you to visually observe and capture the job site, then produce deliverables in the office later using the full flow that Orbit systems provides as a powerful solution, giving you the ability to extract additional data and features without having to re-visit the site.

**Total Project Solution**

CompassData is offering the Mobile Mapping Solution with the quality you’ve come to expect at a surprisingly affordable price through this disruptive Trimble technology. The Orbit Suite is the ideal solution for organizations looking to enter the world of mobile imaging with a smaller investment. No matter what industry, CompassData provides services based 100% on customer’s needs.
THE TECHNOLOGY

The Trimble MX-7 Mobile Imaging System is a vehicle-mounted photogrammetric system that performs advanced field data collection. Utilizing six 5-megapixel cameras and built-in Trimble Applanix GNSS and IMU sensors, the MX-7 rapidly collects 360-degree 30-megapixel geo-referenced panoramic images. Mobile Mapping is the fastest and most cost-effective method of infrastructure asset management.

High Performance Technology

✓ Rapid 360° Geo-Referenced Image Documentation
✓ Precision Positioning Using GNSS and Inertial Measurement Unit
✓ Rugged, Reliable, Lightweight Design
✓ Easy Installation and Operation
✓ Onboard Hard Drive
✓ Increase Safety and Efficiency
✓ Integrate with Trimble Mobile Imaging Software

Quality Imagery, Accurate Data

The Trimble MX7 utilizes six high quality 5-megapixel cameras for crisp, clear photospheres with auto adjusting camera parameter settings to ensure quality images in all lighting conditions. The MX7 has integrated Trimble Applanix GNSS and IMU sensors to ensure accurate geo-referenced photo locations and orientation. When used with Applanix POSPac MMS Suite software, this system is capable of providing location accuracy down to the centimeter level.

Easy Installation and Operation

This compact, lightweight, and rugged sensor and included aluminum rail can be mounted on any vehicle with a standard roof rack. Setup is a breeze with only 3 cables and utilizes the vehicle’s 12v accessory plug for a power source. The entire system can be installed and initialized quickly to allow maximum time for data collection. System control and data recording functions are controlled wirelessly through any Wi-Fi enabled PC or tablet device., allowing the operator to rapidly set system parameters and manage data recording.

Enhance Safety and Efficiency

The Trimble MX7 collects highly detailed and accurate field data in a fraction of the time of traditional survey methods. Capable of collecting blur-free images at highway speeds, the MX7 can be operated by a single user and capture hundreds of miles of data in a single day. A 1-terabyte onboard hard drive ensures you have ample storage for even the most data intensive projects. The MX7 drastically improves safety and efficiency over traditional field collection techniques, reducing the exposure of field crew to high-risk areas, such as roadways, and eliminates the need for traffic control.
Mobile mapping operations collect massive data sets very quickly. It is important to have the right software tools to simplify data organization, feature extraction, and customer collaboration. Orbit 3DM Suite for Mobile Mapping makes mobile mapping data processing and project management simple and efficient.

**Applanix POSPac MMS**

CompassData uses Applanix Mobile Mapping Suite (MMS) for the post-processing procedures that integrates the raw GNSS and IMU data collected by the Trimble MX7 along with nearby base station data to enhance the accuracy of the geo-referenced MX7 location and associated imagery. Image location accuracies down to the centimeter level are possible with this technology.

**Trimble Trident Imaging Hub**

Great for viewing Mobile Mapping data, making measurements, image snapshots, and completing inventory assessments.

- 360° imagery and vector data visualization
- Database connectivity
- GIS Layer Form creation
- Photogrammetric feature addition
- 3D measurements
- Image snapshot attribute addition
- Image converter
- SHP/DXF import and export

**Trimble MX Software Suite**

The choice for those looking for advanced measurements, ability to edit Mobile Mapping data, quickly inventory multiple types of assets, and to share data either via a network or the Web.

**Limitless Imagery, Point Clouds**

- Supports a variety of mobile mapping data
- Organize runs, and bundle raw data into manageable projects
- Control positional accuracy

**Maintain Standard Workflows**

- Access mobile mapping content from popular GIS and CAD systems such as ArcGIS, AutoCAD, Microstation, and more.

**Publish to the Web and Mobile Devices**

- Publish mobile mapping content and extracted features to the web and mobile apps for easy collaboration.

**Measure, Overlay, Extract Assets, Profiles, Volumes, Clash Detection, Blurring**

- Extract feature measurements, overlays, asset inventory workflows, clash detection, profiles and cross-sections, and volumetric analysis.

**Navigate Terabytes With Ease**

- Optimized performance to easily examine terabytes of mobile mapping data
Next generation, industry-leading software for Direct Georeferencing of mobile mapping sensors using GNSS and inertial technology
✓ Post-processed Trimble CenterPoint RTX trajectory processing (PP-RTX)
✓ Automatic base station survey using static PP-RTX
✓ "Know before you go" Quality Control licenses for GNSS processing in the field

AN INDISPENSABLE STEP IN THE 3D MAPPING DATA CHAIN
✓ organize & manage, catalog & archive
✓ improve & optimize image and point cloud data
✓ QA/QC, document and report independent
✓ deliver ready-made projects after capture | upload to share online

THE TOOLS FOR A PROFESSIONAL 3D MAPPING BUSINESS
✓ complete mapping unit for Image, LiDAR and DSM mapping
✓ process features and results in semi- or full automated mode
✓ document assets, centralize data management
✓ roles and permissions for team work

MORE DATA. MORE CONTENT. MORE USERS.
✓ share 3D mapping content online
✓ supports 360 degree or planar imagery, and point clouds
✓ define user credentials, multiple publications, server pool
✓ share on the web, mobile devices, and integrate using SDK

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