

MAPPING SOLUTIONS

Keep your projects on time and under budget. Topcon has the leading-edge hardware, software, and mobile solutions you need to increase efficiency, improve accuracy, and better manage your resources.

Our extensive industry knowledge and expertise help you get the job done right and stay on top. Benefit from accurate, flexible mapping solutions that:

- Reduce time in the field
- Collect significantly more accurate data
- Provide cost-effectiveness
- Increase safety

We offer mobile mapping systems that revolutionize the way you collect and manage field data. Along with fully integrated, intuitive software solutions and connectivity, we provide you with exceptional control.

Most importantly, you get peace of mind. All of our products are rigorously tested and easy to use, so you're up to speed quickly even in the most challenging of settings.

WITH YOU ALL THE WAY.





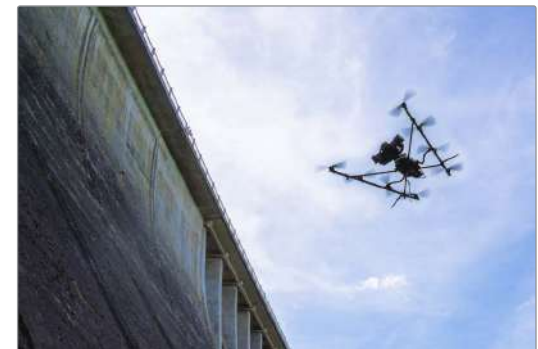


Inspection and Monitoring

Get ultimate safety, precision, and ease of use. For inspection and monitoring applications, our rotary wing remote-controlled UAS (Unmanned Aircraft System) is efficient and safe even in the most challenging environments.

Our UAS solutions provide stability and precise measurements for inspecting and/or monitoring:

- Industrial power plants
- Wind turbines
- Thermal and potentially combustible equipment
- Structures
- Sound barrier and walls
- Excavations
- Confined indoor spaces
- On and offshore oil or gas flares





Construction and Civil Engineering

Gain access to high elevations and hard-to-reach locations for ideal site views in complete safety.

Our UAS (Unmanned Aircraft System) solutions are ideal for taking aerial data into BIM models for tracking progress and project status updates, as well as for marketing purposes. Accelerate results with no need to set ground control points thanks to the portable functionality.

For ground data on large construction sites, you can drive through with our vehicle-mounted systems to quickly and easily collect point cloud data and imagery.





Quarries and Mines

Managing stockpiles and calculating volumes is made simple with the most accurate solutions for the automated mapping of a wide range of sites — regardless of terrain.

Our UAS (Unmanned Aircraft Systems) are a complete solution for safe, efficient mapping. Capture data even the most challenging environments with technology designed specifically for mining and quarry operations.

The lightweight, compact series of scanners we offer accurately capture a full 360° scene as well as high-resolution imagery out to 500 meters.





Mapping and Surveying

Perform every stage of mapping and survey projects faster, easier, and more efficiently.

You can rely on our integrated RTK automation and real-time communication features for land surveying, power line and pipeline inspection, as well as any mapping project. Save time by creating cut and fill analysis and as-built designs.

On high accuracy, large scale mapping projects, our compact systems capture detailed point cloud data along with high-resolution imagery at speed.

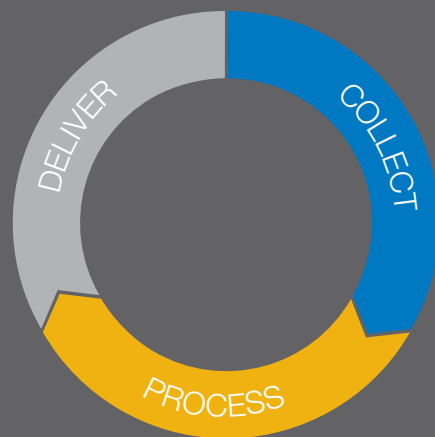
When your project requires precise high-resolution imaging in tight spaces and challenging environments, our aerial solutions are the one for you. They're safe, easy to use, and perfect for capturing all perspectives, oblique as well as nadir, while providing flexibility for immediate takeoff and soft landing.



A Better Way To Work

Speed up and streamline imaging and scanning projects for field, office and management teams with our mass data collection solutions. Whether a fixed-wing aerial solution that offers GNSS RTK, or rotary wing planes with triple redundancy safety systems, you can find the perfect flight solution for every application.

High accuracy terrestrial scanning solutions offer the highest level of accuracy for civil infrastructure and plant operations. Our compact IP-S3 mobile mapping system allows users to map vast areas quickly. Whatever your project requires, we have an easy and reliable solution for you.



COLLECT



Aerial Mapping

After assembly of the UAS, define an area of interest and desired ground sampling distance, then launch. Adjust settings mid-flight and check data in the field to save time and increase efficiency.

Mobile Mapping

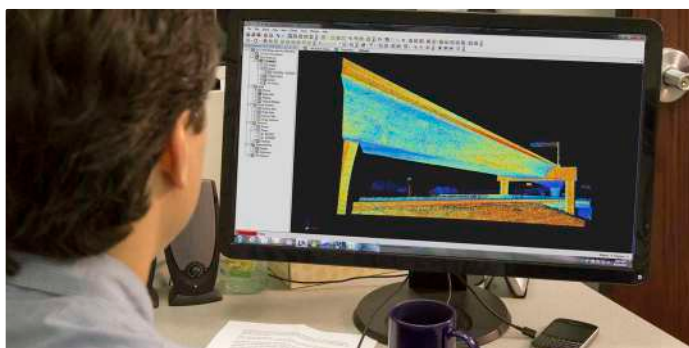
Fully integrated 3D laser and digital imaging from lightweight, easily mounted devices let you collect all roadside assets at normal travelling speeds.

Terrestrial Scanning

It's as easy as 1-2-3. Set your backsight, measure your HI (Height of Instrument), then press one button to capture images and scan the entire scene.

PROCESS

DELIVER



Aerial Mapping

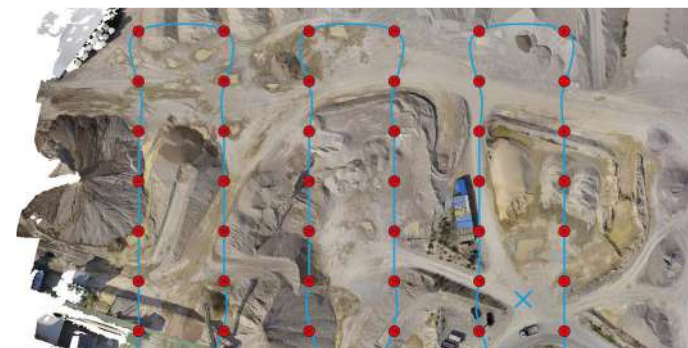
Aerial images from an on-board camera are stored automatically. After landing, photos are easily copied to desktop software for intuitive post-processing.

Mobile Mapping

Use Mobile Master Office software to process geo-referenced LiDAR and digital images into colorful 3D for export into a variety of industry file standards. A high-density point cloud with a geo-referenced, 360° image overlay lets you extract data repeatedly, eliminating revisits.

Terrestrial Scanning

ScanMaster software enables you to process, edit, and deliver point cloud data from our GLS-2000 Series of laser scanners.



Aerial Mapping

Generate high resolution DEMs and orthophotos, 3D models, 4D reconstruction, polygonal models, and point clouds.

Mobile Mapping

Project point clouds and images into an extensive list of coordinated systems. Extract features and export into CAD and GIS deliverables.

Terrestrial Scanning

Export objects or BIM-ready point clouds into third party applications. Streamline workflows with our widely accepted .CL3 format.

Get the Complete Picture

You can choose from a variety of solutions to generate detailed maps with the accuracy you need. With intelligent integration between hardware and software you can build GIS databases efficiently, for on the spot decision-making. Keeping the future in mind, all the automated GIS positioning data solutions are scalable, with flexible accuracy options from 2-5 meters down to centimeter level repeatability.

Our mapping and scanning systems provide a continuous representation of reality, complete with images and point clouds. Quickly create DEMs volumes, contours, distance measurements, and slopes from collected data, eliminating site revisits.

For smooth workflow and increased productivity, take measurements and extract data with our software and easily export to GIS and CAD so that volumes and assets are visible to everyone on your team.

MAVinci Sirius Basic/Pro

Quickly cover large areas

Built of lightweight, yet sturdy material with a folding propeller for easy transport to project sites. Enjoy high accuracy aerial mapping just by defining the coverage area, altitude, and photo intervals you need.

Flights can be launched in almost any weather condition including rain, so you can create affordable maps any time, in any environment.

- Plan flights up to 50 minutes long
- Life cycle of roughly 200 landings from each device
- View results and modify flights with RTK and wireless communication



Falcon 8

Stable close-ups

A rotary wing UAS for inspection and monitoring that features high accuracy, reliability, and redundancy.

The Falcon 8 operates in wind speeds up to 12 m/s, even on the open sea if needed.

- Advanced flight planning
- Auto or assisted landing
- Swappable payloads



IP-S3

High-speed collection

Mobile mapping system providing high density, high precision point clouds and panoramic image overlays for easy data capture.

- Unparalleled ease-of-use
- Factory calibrated
- Full integration of point cloud and imagery data



GLS-2000 Series

Details from a distance

This compact, lightweight series of scanners accurately captures a full 360° scene including images in less than three minutes. As-built conditions for any application range.

- Selectable laser modes from Class 3R to Class 1M
- Multiple lens array setting quickly adjusts focal length



Mass Data Collection Software Solutions

Our mapping software features simplify projects with mobile options and desktop solutions to manage mass quantities of data.

From creating automatic flight plans to projecting 3D point cloud data to editing meshes, edges, and planes, our software solutions give you the tools you need for accuracy and efficiency.

MAVinci Desktop

Flight planning and optimization

Controls UAS (Unmanned Aircraft System) flight planning and interfaces with post-processing software, automating Sirius UAS workflows.

- Data coverage is checked automatically during flight planning
- Large area coverage data is automatically divided and reconnected in post-processing
- Reduces overlap, time, and costs



Agisoft Photogrammetric Kit- Professional Edition

Aerial data made easy

Simple, accurate post-processing for UAS imagery providing accurate, detailed results.

- Photogrammetric triangulation
- Dense point cloud editing and classification
- 3D model generation and texturing
- Digital terrain or surface model export



Mobile Master Office

Quickly cover large areas

View, process, project, and export 3D point clouds, trajectories and panoramic image data.

- View image overlays with point cloud data to extract features
- Process trajectories, optimize precision
- Automatically tally with ground control points
- Transform project data into defined coordinate systems



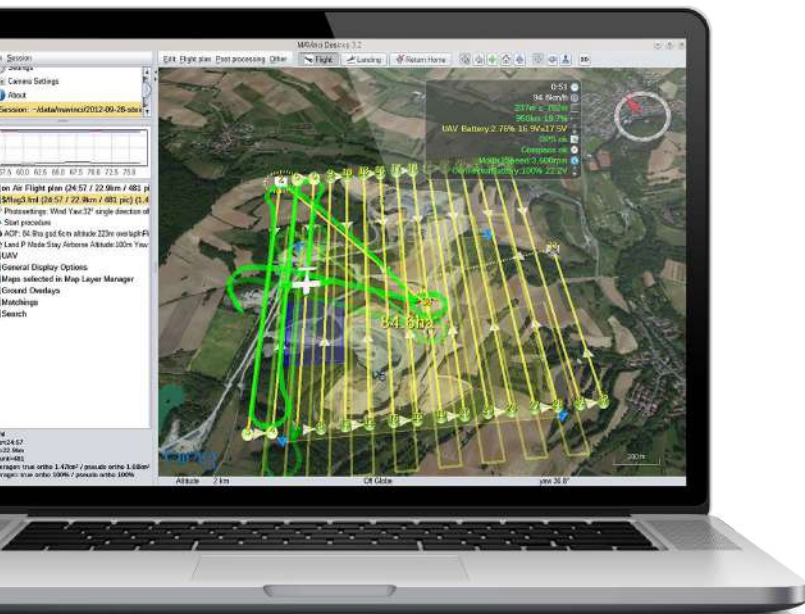
ScanMaster

Make sense of your data

Complete 3D point cloud software, including tools to process, edit, and deliver data from our GLS-2000 Series of laser scanners.

- View geo-referenced point clouds
- Create and edit polylines, meshes, edges and planes
- Export point clouds and objects out to a variety of industry file formats





Sirius Basic/Pro + MAVinci Desktop

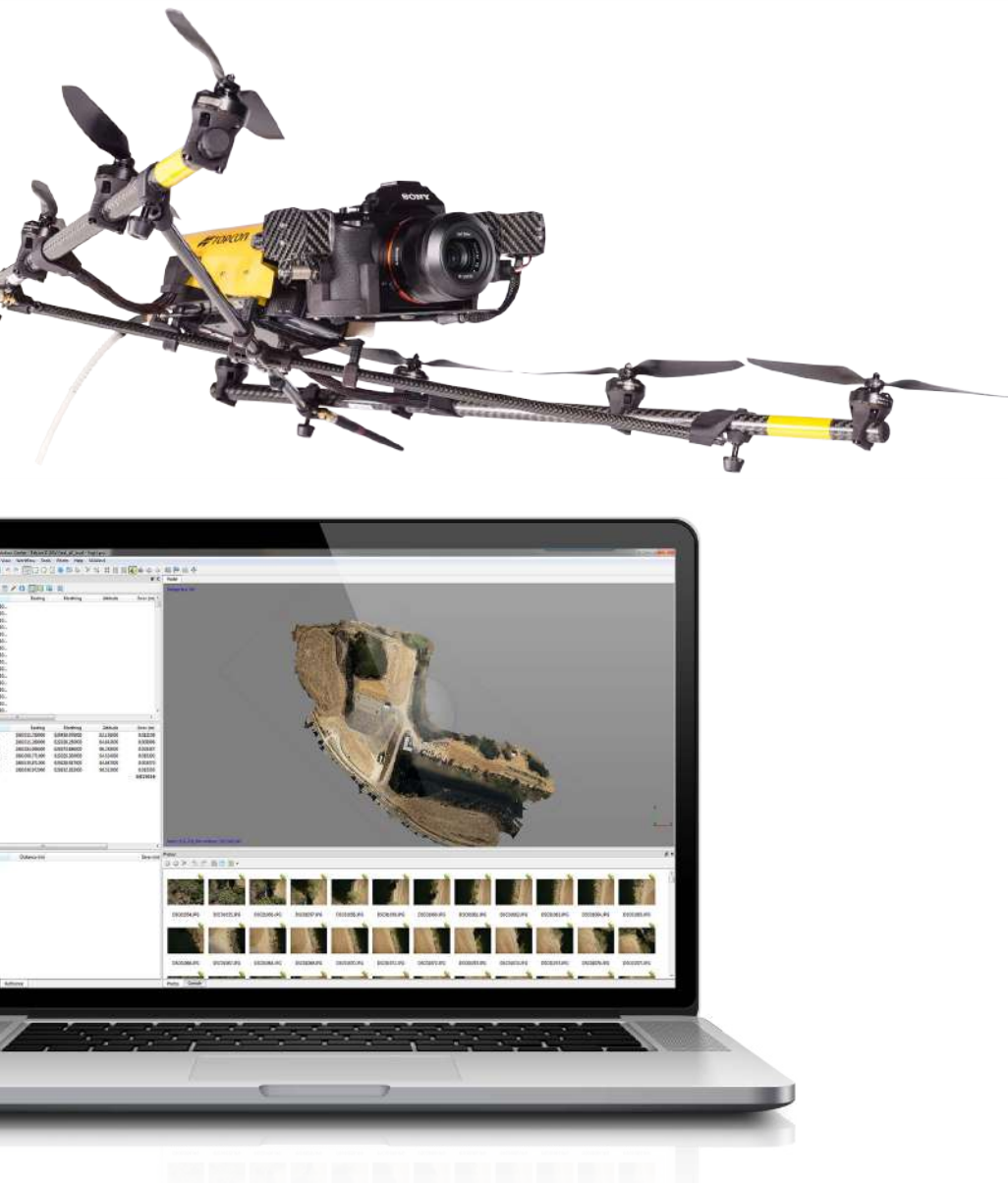
Get high accuracy with this lightweight but robust solution. GNSS RTK on-board the Sirius Pro provides accurate real-time positioning, so image capture locations are instant. Save up to 50% of total project time and avoid ground control point establishment and positioning.

The powerful features in MAVinci Desktop software place you in control of advanced Sirius UAS flight plans and give you a single-click link to image post processing. Monitor your flights in 3D, adjust flight plans mid-flight, and verify the quality of collected data within minutes.

- Simple hand launch, no catapult necessary
- Automatically adapts to elevation models
- Divides sections to cover large areas, and reconnects after post processing
- In-flight software displays the status of the RC link state, GPS status, position, and battery level

* Use of the Topcon Sirius UAS (Unmanned Aerial System) is subject to local rules and regulations governing UAS products in your country.





Falcon 8 + Agisoft Photogrammetric Kit - Professional Edition

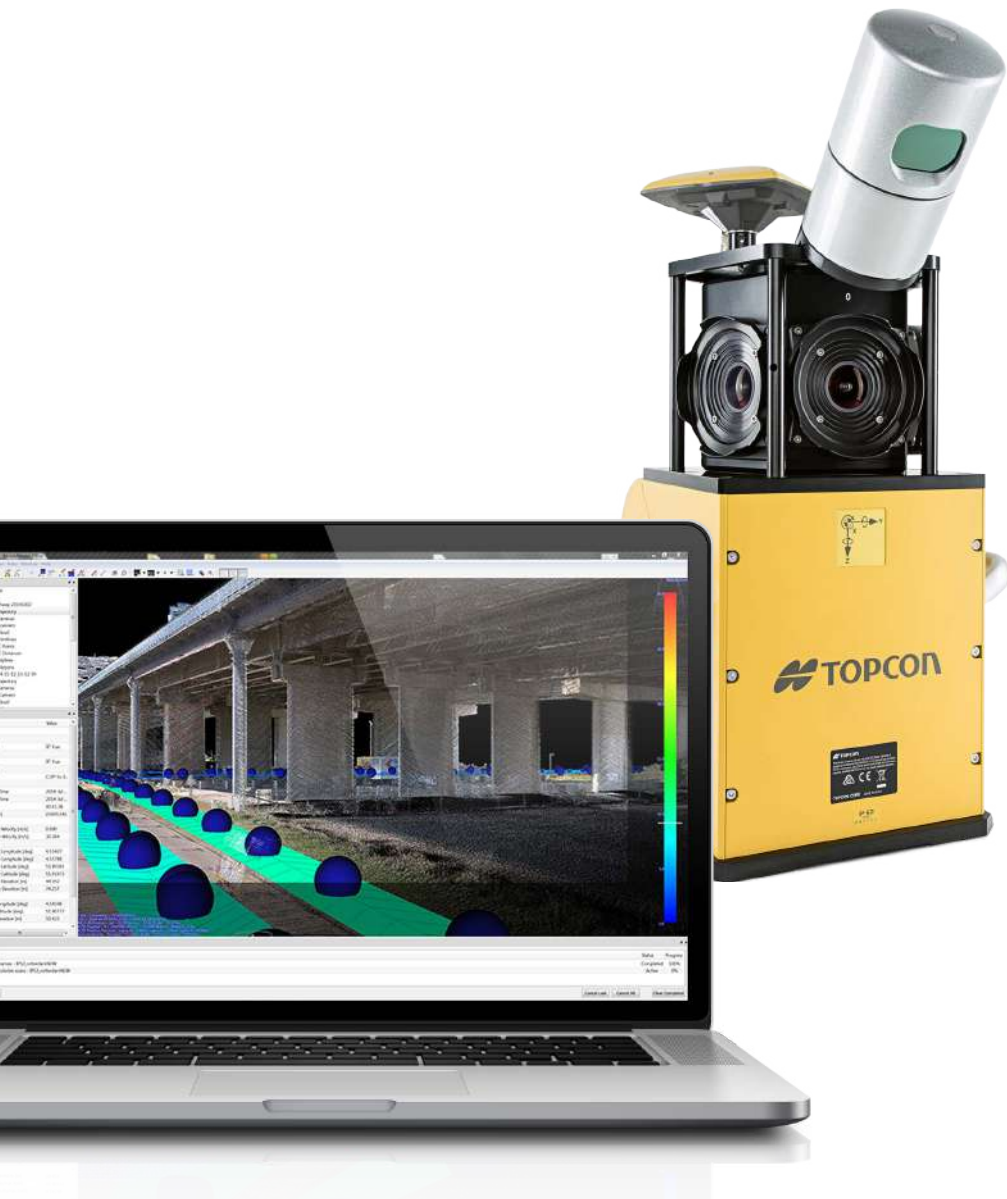
From inspection and monitoring to survey and mapping, the Falcon 8 is a precise, reliable aerial solution. This eight-propeller UAS (Unmanned Aircraft System) features first in class sensors, vibration damping, and compensating camera mounts. The Falcon 8 reacts to external conditions even before you're aware of them.

Turn your images into vital data with Agisoft Photogrammetric Kit. The software provides an easy to use, integrated workflow for the Falcon 8. You get complete control over the results and detailed accuracy reports generated at the end of processing.

- High definition imaging, thermal and RGB stills, as well as real-time video
- Maximum safety with integrated triple redundancy systems
- Operates reliably even in the most challenging weather conditions
- Simple, accurate post-processing with Agisoft Photogrammetric Kit

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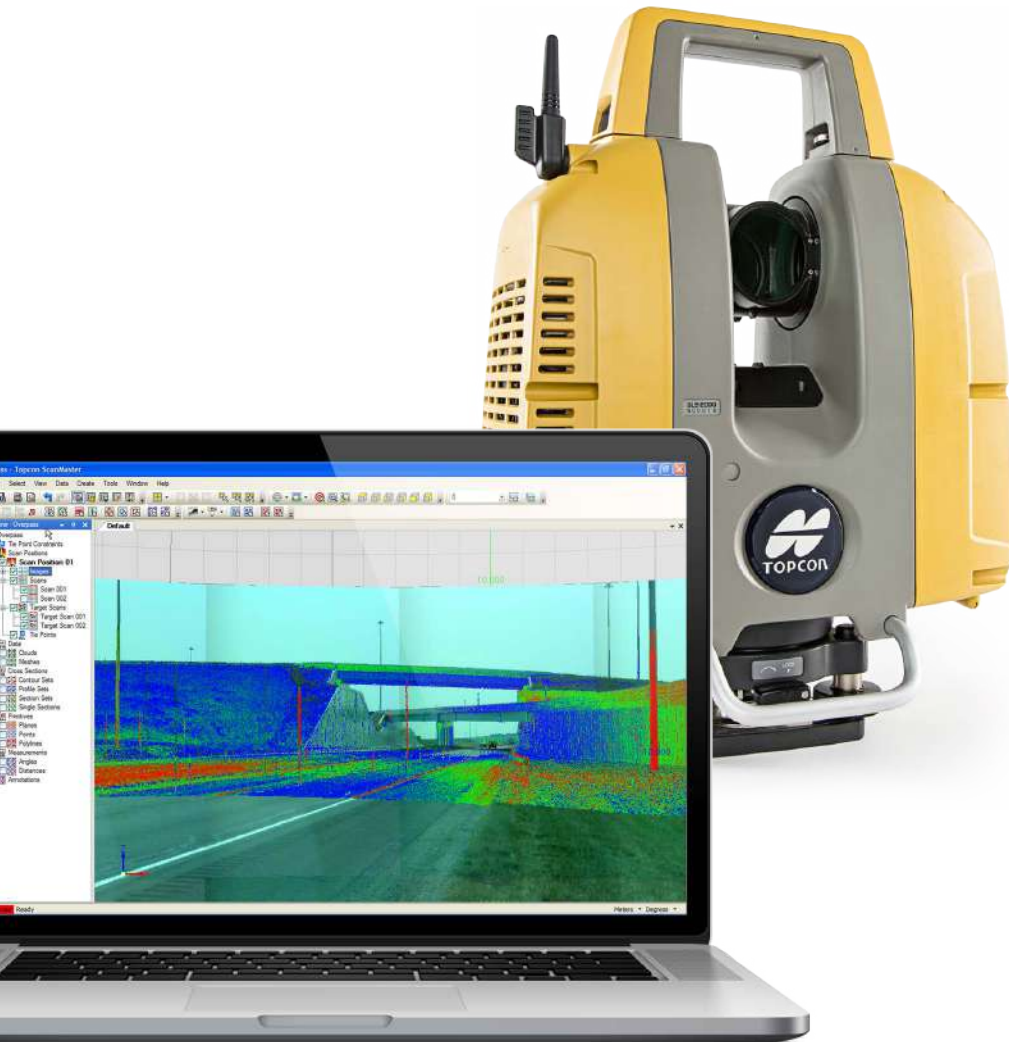
IP-S3 + Mobile Master Office

The fully integrated IP-S3 mobile mapping system with 3D laser and digital imagery brings a new level of performance to mass data collection projects. Collect all roadside assets at normal vehicle speeds to create a high-density point cloud with a geo-referenced 360° image overlay, for easy feature recognition.

Using Mobile Master Office software makes it easy for you to streamline workflows and accelerate the mapping process. You have the power to combine, view, project, and work with data collected by the sensors of our IP-S3. Your data comes to life with a satellite image background map, 3D view, panoramic view, or a combination of these modes.

- Integrated, turnkey solution
- Ultra compact design
- Multiple lasers minimize scanning shades
- Process, optimize data, and export scans to GIS or CAD





GLS-2000 Series + ScanMaster

The compact, lightweight GLS-2000 Series of scanners accurately capture a full 360° scan including images in less than three minutes.

Choose from three models: The S (short-range), M (middle-range), and the L (long-range). Each model is a full-featured scanner that can be effectively deployed to capture existing as-built conditions for any application range.

All of our GLS-2000 Series laser scanners come with ScanMaster software. Use this full-featured 3D software for graphical processing, object extraction, and exporting out to a variety of industry file standards including our .CLR and .CL3.

- Selectable laser modes from Class 3R to Class 1M
- Easy-to-start scanning, on-board enabled occupation, and backsight orientation
- Cloud-to-cloud, target scans, and tie-point registration
- Multiple import / export data formats





With You All The Way

No matter what size your company is, what role you have, or what phase of a project you are working on — we've got the solutions and services to help you get the job done right the first time.

Topcon Enterprise

We're dedicated to helping you solve your workflow challenges, and get the most out of your Topcon solutions.

Topcon Enterprise gives you access to a large collection of online materials, software and firmware updates, current publications, tech tips, and guidance from the experts - all from your computer or mobile device.





www.topconpositioning.com

