



## The Intersection of Infrastructure and Technology

Many companies are at the crossroads of growing infrastructure demands and having the technology to meet them. It's a growth opportunity for any company willing to adopt the new technologies needed to stay competitive.

Integrate the right digital solutions for you and your company. Together, we can efficiently build the infrastructure needs of today and tomorrow.

## Geopositioning Solutions

Keep your projects on time and under budget. Topcon has the leading-edge hardware, software, and mobile solutions you need to accomplish precise and accurate results in record time using advanced optical, laser, and GNSS technology.

From proposal all the way to inspection, our innovative solutions are engineered to drive your productivity.

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

- Provide unparalleled accuracy
- Connect field to office in real time
- Collect significantly more data, in less time

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







## Land and Topographic Survey

Measure with confidence, knowing that you are where you need to be. From reliable two-man optical setups, to fully robotic systems, as well as integrated GNSS receivers – our wide array of surveying products are powered by intuitive software solutions.

As job sites and conditions change, our GNSS receivers are versatile enough for any field requirement.

- Topography
- Cadastre
- Boundaries
- Parcels
- Stake out
- As-built

Using Hybrid Positioning™ technology that combines robotic total stations with GNSS receivers, known for speed and repeatability – leverages the best of both worlds to improve productivity and give you performance in any environment.





## Civil Engineering

Control data flow, protect integrity, and improve communication between field and office as design concepts come to life, and stakeout to transform models into reality.

Our partnerships with CAD solution providers across the globe allow design files to move quickly from engineers to your mobile workforce, improving information management throughout the design and build process.

For extremely accurate layout and quick grade checks, combine our GNSS receivers with a proven optical total station.







## Construction Layout

Get the job done right at each stage, from basic staking to project completion. Our software combined with field-ready GNSS receivers for rough stakeout and high-end optical equipment for precise work offer a broad array of positioning solutions for all of your construction layout needs.

While navigating to a design point, our software visually verifies when your custom tolerances have been met, and quick confidence checks prepare you for the next stage.

Close the loop between field and office while ensuring quality control through Topcon secure web services. Instantly generate customizable reports from the field that can be sent instantly to office personnel — a city, a county, or a country away.





## Infrastructure Network and Geoscience Applications

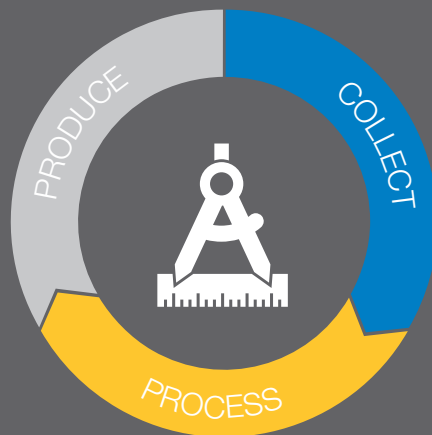
Track and use all satellite constellations and signals currently available as well as proposed. Our GNSS network systems are secure web services that are scalable and easily supported.

Whether you're installing a new system or upgrading an existing one, we help you build networks that you can rely on. You can easily meet requirements for reference networks and infrastructure monitoring applications as they surface with our full wave tracking technology for all GNSS signals including Galileo, BeiDou, and QZSS.



## A Better Way To Work

Modernize your workflow for field, office, and management teams with our MAGNET® Enterprise global web services. Easy connectivity with your field crews and equipment results in measured productivity that is custom built for you.



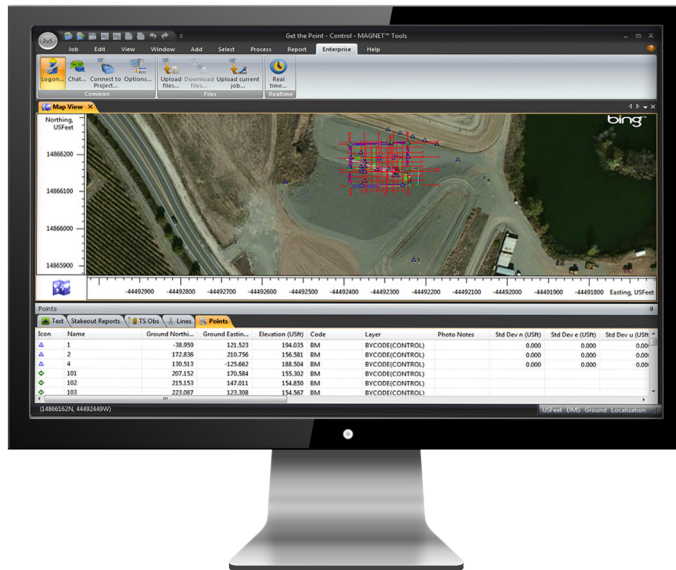
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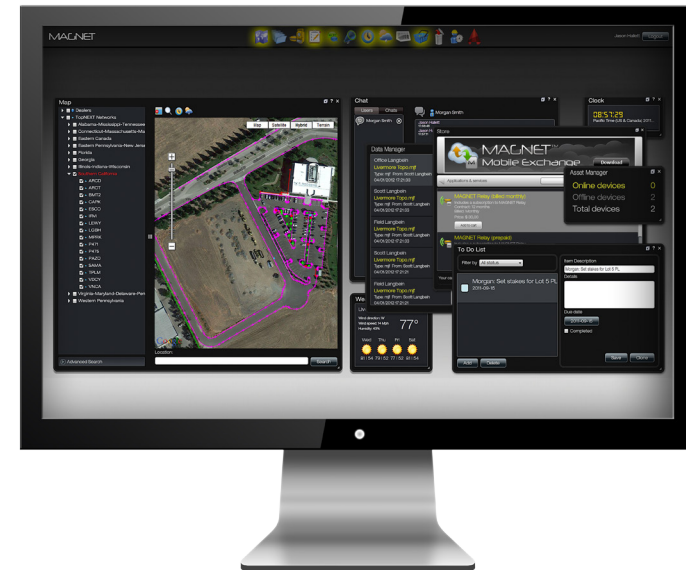
We provide you with the right solutions based on our years of experience in the field. You're in control where and when you need it with colorful and graphical software that supports a vast library of industry file formats.

PROCESS

PRODUCE



No project is an island, teamwork is what produces success – the MAGNET® system was designed with this in mind, bringing together field, office, and managers in a single secure environment. Instant data transfer from active job sites is the new normal for office staff to process and for management to oversee.



No matter what your role is in your company, the modern MAGNET® system has evolved with productivity in mind. Field crews move with confidence at the job site driving all the geopositioning hardware, office staff process and support with ease, while the managers keep an eye on time and budget.

## Network and GNSS Productivity

Multiple subscription based GNSS correction solutions are designed to provide productivity 24/7 with:

- TopNET*live* – premier network RTK correction service with centimeter-level accuracy instantaneously for maximum productivity. Available in more than 30 countries via cellular data link.
- TopNET Global – PPP Correction Service with multiple levels of service/price points provides up to centimeter level accuracy. Available globally via satellite data link.

## Universal Tracking Channels

Topcon patented Universal Tracking Channels™ technology provides the industry's most efficient approach towards identifying and using each and every satellite constellation and signal. Any constellation and any signal can be used in any available channel. Thus reaching maximum performance with a reduced number of channels.

Topcon GNSS receivers are the only ones to use Universal Tracking Channels™ technology, automatically ensuring optimum reception of all GNSS satellite signals.

## HiPer HR

### Advanced GNSS Receiver

Part of our Elite Survey suite, it's highly configurable and designed to grow with you. You can track every satellite signal above, and handle any job that comes your way.

- Next generation Fence Antenna® technology for superior reception
- Unique 9-axis TILT™ compensation
- Internal Wi-Fi and multi-spectrum Bluetooth®
- LongLink™ interference-free communication, up to 300 m range

## HiPer VR

### Versatile GNSS Receiver

Made versatile and rugged enough to deliver precise measurements in the most challenging of environments.

- Signal scrubbing Fence Antenna® to provide ultimate signal lock
- Highest accuracy positioning for RTK, network, and more
- Multiple communication configurations for your various project scenarios
- LongLink™ interference-free communication, up to 300 m range



## HiPer SR

### Site Receiver

The most compact fully-integrated RTK receiver on the market. This versatile, affordable cable-free system is just right for small or contained job sites.

- Integrated cellular modem option
- Dual SIM cellular card support
- LongLink™ interference-free communication, up to 300 m range
- Ideal for Hybrid Positioning™ solution with robotic total stations



## R4T-BT

### External Radio

The R4T-BT is an innovative external radio designed to offer superior RTK performance with GNSS receivers. This is a unique solution with integrated batteries and features Bluetooth® communication.

- Wireless modem configuration and data transfer via Bluetooth®
- Light, weighing only 400 g
- Long operational time
- Receive Mode: 20 hours
- Transmit Mode: 6 hours at 1 W
- IP67 Rating



## MR-2

### Modular GNSS Receiver

A rugged GNSS modular receiver that delivers Vanguard Technology™ and HD2 technology in a compact, easy to integrate package. The MR-2 offers easy system integration and setup.

- Future-proof tracking of major satellite signals
- 226 Universal Tracking Channels™
- Precise RTK positioning at up to 50 Hz



## NET-G5

### GNSS Reference Receiver

Born to perform within a reference station network. If there is a navigational satellite up above, this receiver tracks and uses it. Ideal for when you're installing a new GNSS network infrastructure or upgrading an existing one, the NET-G5 is future-ready.

- Efficient signal tracking across the entire GNSS spectrum
- Built-in Bluetooth® and Wi-Fi connectivity
- Integrated web interface for remote management



## Precision + Usability

Get precise, consistent results every time. We offer the first and only optical robotic communication systems featuring dual-optical reflectorless operation, on-board Windows®, and wireless remote data collection.

Our legendary optics and durability combined with leading communication technology improve measurement performance every day. Get superb prism tracking with built-in security as a standard feature on the most powerful optical total station systems available.

## GT Series

### Robotic Total Station

The GT series of robotic total stations are a trimmed down, high-performance solution that's ready to impress today, yet still grow with you into tomorrow. You get the efficiency of a single-operator robotic system, the power of long range reflectorless measurements, and the ability to perform as a hybrid positioning solution. All in a compact system that's a third smaller and twice as fast.

- UltraSonic Direct Drive motors
- 30% smaller and lighter, with more functionality
- TSshield™ global service



## MS Series

### High-accuracy Measuring Station

When your project demands measurement without compromise, turn to the MS AX motorized total station for guaranteed performance.

- Angular accuracy option of either 0.5" or 1"
- Reliable distance accuracy at 0.5 mm
- Rapid and customizable 2D monitoring
- Autocollimation accuracy of 1"
- Automated Matrix Detection and Target Acquisition





## DS-200i

### Auto-pointing Total Station

The DS series knows no boundaries, with a built in camera, 600 m communications distance, the highest environmental rating, and a powerful EDM capable of returning measurements to any surface, out to 1000 m.

- Confident, constant prism tracking
- Remote control with long reach communication
- Rugged IP65 environment rating
- TSshield™ global service



## OS Series

### On-board Total Station

Built for on-the-go tasks with a far reaching, precise firing EDM, extended use batteries, and data collection software right on the instrument.

- Modern, intuitive MAGNET® Field on-board data collection software
- Convenient EDM trigger key with minimal disturbance
- Color graphical display
- TSshield™ global service



## GM-100 Series

### Manual Total Station

This powerful, cost-efficient manual total station was designed from the ground up to deliver the latest technological advantages in a small, sleek design.

- Up to 6,000 m prism range  
1.5 mm accuracy
- Easy-access USB memory with 32GB storage
- Up to 1" angle accuracy encoder system with exclusive IACS
- Rugged, waterproof/dustproof magnesium-alloy housing
- 28 hour battery life (eco mode)
- TSshield™ global service



## GM-50 Series

### Manual Total Station

This versatile manual total station was designed from the ground up with the core technology needed in a compact design.

- Up to 4,000 m prism range  
1.5 mm accuracy
- Easy access USB memory with 32GB storage
- Up to 2' angle accuracy encoder system with exclusive IACS
- Rugged waterproof/rustproof housing
- 14 hour battery life (eco mode)



## Versatility + Connectivity

From pocket-sized to tablet, alphanumeric keys to touch screen, we have the field controller to fit your needs.

Our controllers are fully loaded to meet the demands of today's modern job site. Each offer durable sunlight-readable displays in a rugged housing. For direct connectivity at your job site, integrated cellular modems provide internet access into either MAGNET® Enterprise or Sitelink3D™ global web services – a complete project management solution. Managers are consistently informed, office staff is a click away, and field crews stay productive while on the move.

Further, the pipeline of information has now expanded to include more than simple text files. Each field controller offers a digital camera that is used within MAGNET® Field or data collection software. Simply aim, point, and snap. Detailed photos are then automatically added to any field measurement and are fully accessible further along your custom workflow.

## FC-5000

### Unbridled Power

Get all of the processing power and functionality needed in today's market. The FC-5000 is ready for complex 3D road layout, topographic work, feature and attribute collection, and more.

- 7 inch sunlight-readable display
- Intel® Atom™ Z3745 Processor
- Full-feature usage in either portrait or landscape orientations
- Windows® 10 Professional, embedded
- Front and rear facing digital cameras



## FC-500

### Maximum Processing Power

With the same touchscreen technology available on smartphones, the FC-500 field controller has a crisp and sunlight-readable display that delivers in any condition. Put maximum processing power in your hands with internal GPS and an optional camera, running your choice of Topcon field software.

- 4.3 inch sunlight-readable display
- Rugged, MIL-STD-810G and IP68 certified
- Optional 5 MP digital camera and 3.5G cellular modem
- Internal GPS accessible from MAGNET® Field software
- Bluetooth® and Wi-Fi wireless connectivity



## Allegro 2

### Hourglass Tactile Controller

Designed for all-out data collection, the Allegro 2 features a full QWERTY and numeric keyboard, an Overtime Technology™ battery, Sun-to-Shade™ high-visibility display, and is 20% larger than the previous Allegro, which makes it easy to view in both glaring sunlight and shady conditions.

- Full numeric + QWERTY keyboard for rapid data entry
- Backlit, ergonomic design for maximum efficiency
- Outstanding battery life runs 20+ hours
- Operates in extreme temperatures from -22° F to 140° F (-30° C to 60° C)



## T-18

### Rugged and Compact

An entry-level, high-performance field controller in a compact design that delivers results with the Topcon MAGNET® software family. The rugged T-18 handheld controller is waterproof (IP65) with an integrated cellular modem and Bluetooth® allowing the user to easily connect to GNSS receivers cable free for network correction or MAGNET® Relay.

- Windows® Embedded Handheld
- Internal GPS with 2-5 meter accuracy
- Integrated Bluetooth®, Wi-Fi, and cellular modem
- Integrated 5 megapixel camera
- Waterproof IP65



## Connectivity + Integration

Connect your projects and entire teams from field to office, in real time. Our software productivity suite simplifies your project process and allows your team to work seamlessly. From CAD data integration capabilities, to real-time data exchange between office and field, and so much more.

Combining our software and GNSS and optical products streamlines the workflow for surveyors, contractors, engineers, and mapping professionals.

## MAGNET® Field

Powerful and intuitive field application software that enables you to collect survey-mapping data. Field and office teams can exchange files and communicate in real time.

- Graphical intuitive software with low learning curve
- Direct connection to secure company account
- Microsoft Bing Maps® for satellite image background



## MAGNET® Enterprise

Get field results to managers and supervisors in real time. Create geo-referenced projects for team-based collaboration and log in from any browser to see the site in action.

- Plan project tasks and visualize completed work
- Keep pace with each project's progress
- Secure web service with real-time exchange



## MAGNET® Tools

Data processing software that generates final coordinates from measurements taken using MAGNET® Field and Pocket 3D software driving any of our total stations, digital levels, and GNSS solutions.

- Process GNSS and total station field measurements
- Visualize field work in Google Earth, 3D orbital view, CAD view, and more
- Create code libraries and generate customized reports



## MAGNET® Survey

Produce finished surveys with customizable drafting, design, and processing tools for property plots, subdivision design, and land development projects.

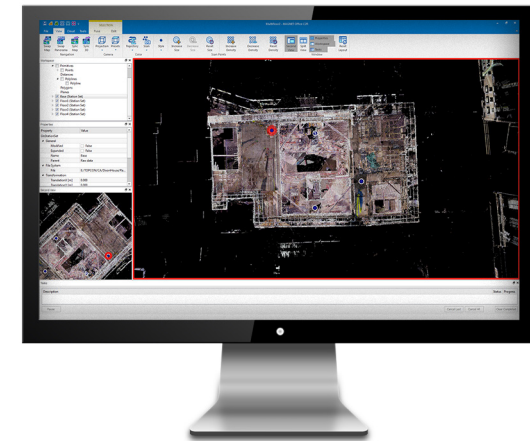
- Full sub-division design tools
- Contour and surface creation, volumetrics, and automated pad design
- User-defined title blocks, symbols, and linetypes



## MAGNET® Collage

MAGNET® Collage provides data processing of otherwise disparate data sets into one 3D environment that can accommodate laser scanners, mobile scanning and mapping, road resurfacing scanners, and photogrammetric point clouds.

- Combine mobile and static scan data into one immersive 3D environment
- Faster point cloud processing and mass data handling
- Publish data sets to the web with Collage Web

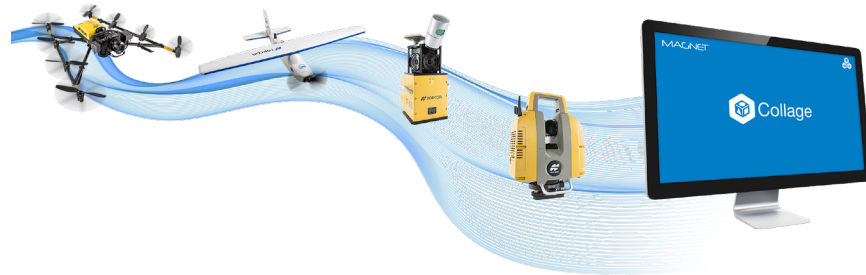


## Aerial Mapping and Mass Data Collection

Our range of solutions in mass data capture opens the door to entirely new workflows. Capture data once, quickly, then interrogate the data at your leisure. From original topo, to pre-construction inventories, to as-built documentation, our solutions deliver above and beyond the call.

## Single Environment Software Solution

Process, combine, and analyze point clouds and images in one familiar, powerful application. MAGNET® Collage offers a single environment, post-processing solution for a wide variety of mass data collection tools. Captured point clouds and photos processed by MAGNET® Collage Office can be published to Collage Web for sharing and collaborating.



## GLS-2000 Series

### High-speed Laser Scanners

The GLS-2000 series of scanners is composed of three comparable, yet distinct models: The GLS-2000S (short-range), GLS-2000M (middle-range), and the GLS-2000L (long-range). Each model is a full featured scanner that can be effectively deployed to capture existing, as-built conditions for any application range. The compact, lightweight series of scanners accurately captures a full 360° scan including images in less than three minutes.

- Enhanced performance for MEP, HVAC and road surfaces
- Multiple lens array system – quickly switches focal length settings
- Auto temperature adjustment – consistent accuracy throughout the work day
- Precise Scan Technology – signal processing including wave form for the ultimate in precision data



## IP-S3

### Integrated Mobil 3D Mapping

The IP-S3 mobile mapping system offers high-density, high-precision, point clouds combined with high-resolution panoramas from a system that is compact, lightweight and easy to handle.

IP-S3's positioning system is an integration of an Inertial Measurement Unit (IMU), GNSS receiver (GPS and GLONASS) and a vehicle odometer. It provides precise positioning and attitude in a dynamic environment.

- Integrated turnkey solution
- Ultra-compact design
- Multiple lasers minimize scanning shades
- Full integration of cloud and images



## Sirius Pro

### Fixed-wing UAS

Send a custom flight plan to the Sirius Pro with MAVinci software, then simply hand-launch the unmanned aircraft system (UAS).

- Automatic flight planning
- Simple hand launch and autopilot-assisted manual control
- High-accuracy GNSS RTK mapping eliminates the need for GCP's
- Fully operational up to wind speeds of 50km/h and gusts of 65 km/h
- High resolution 16MP Fujifilm X-M1 camera onboard
- Advanced post-processing and evaluation software



## Intel® Falcon™ 8+ Drone – Topcon Edition

### Rotary-wing UAS

This rotary-wing UAS (Unmanned Aircraft System) features first-in-class sensors, active vibration damping, and compensating camera mounts for solid performance. Perfect for capturing all perspectives, oblique as well as nadir, while providing flexibility for immediate takeoff and soft landing.

- High-definition imaging, thermal and RGB stills
- Maximum safety with triple redundancy
- Fully automated flight routes in 2D and 3D
- Easy to deploy and operate
- Browse and annotate inspection photos with MAGNET® Inspect



## Delta Solutions – Deformation Monitoring System

Topcon Delta Solutions consist of Delta Link, Delta Log and Delta Watch. Delta Link provides hardware support for autonomous operation of total station and environmental sensor data in the field. Communication options include Ethernet, Wi-Fi and a globally approved integrated cellular modem. Delta Log is accessed via a secure web portal and provides an intuitive interface to manage observations, target types and measurement scheduling. Delta Watch software allows data from robotic total stations, GNSS receivers, leveling devices and a variety of geotechnical and structural sensors to be processed and analyzed individually or as a network-adjusted solution.

## Geosensor Networks Made Easy

- High-flexibility through the recording and processing of motorized total station and environmental sensor data
- Integrated communications for remote connectivity
- Network adjustment and analysis with automated quality control including elimination of outliers
- Scalable and robust hardware
- Reporting, visualization and alarm features

## Topcon Delta Link

Delta Link provides hardware support for autonomous operation in the field. Communications options include Ethernet, Wi-Fi, and a globally approved integrated cellular modem (data SIM provided by third-parties). A 110/240 VAC standard power supply with an external battery backup allows operation during short power outages. An external battery and solar panel can also be used when main power is not available. Delta Link manages each power source, maximizing system availability.





## Topcon Delta Log

Accessed via a secure web portal, Delta Log provides an intuitive interface to manage observations, target types, and measurement scheduling.

Delta Log provides a simple platform for advanced functionality – unique Topcon features such as matrix detection are instinctively controlled through the software.

## Topcon Delta Watch

Delta Watch software provides a modular solution to monitor, manage and evaluate automatic and/or manual monitoring data as well as optionally trigger alarms. Data from robotic total stations, GNSS receivers, leveling devices, and a variety of geotechnical and structural sensors can be processed and analyzed individually or as a network-adjusted solution.

As standalone software, Delta Watch delivers accurate and reliable data in a variety of reporting formats to best fit a project's needs. Alternatively, Delta Watch can feed processed data to third-party visualization software to provide system integration capability in large monitoring projects.



## Topcon MS and Data Continuity

Delta Log will continue to operate the total station should communication with the Delta Watch database fail. Once communication has been restored, data are synchronized and the main database is updated.

No loss of data ensures continuity in the representation and reporting of deformation information. With complete data sets, a thorough understanding of the asset in focus can be determined.

Topcon MS AXII features:

- Angular accuracy option of either 0.5" or 1"
- Reliable distance accuracy of 0.5 mm
- Automated matrix detection and target acquisition
- TSshield™ total station management system





## Precision Hybrid Positioning

GT Series total station systems are a powerful asset to any field measurement project. Simply add a powerful, rugged GNSS receiver like the HiPer HR and you now have the no compromise solution of Hybrid Positioning.

For maximum efficiency, pre-installed MAGNET® Field data collection software helps you to seamlessly switch between GNSS and robotic mode options.

Hybrid Positioning™ systems perform faster in the field than stand-alone robotic systems, with more versatility than RTK-only solutions. You get added productivity at every phase of a project, regardless of job site conditions.





## Elite Survey Suite

Make your jobs faster, easier, and more profitable with our Elite Survey Suite hybrid positioning solution – the GT Series robotic total station, HiPer HR advanced GNSS receiver, FC-5000 field computer, and MAGNET® software.

This is one powerful Hybrid Positioning™ solution. Measurements are easier and faster, you'll move and capture from point to point more quickly than ever before. Your controller interface is easy to read and navigate with a better communications range so you can do more work with fewer setups.

And you're backed by powerful software that simplifies your project process while securely connecting field to office. Whether your company uses Autodesk, Bentley, or Topcon, the integration is seamless.





## Training and support

myTopcon provides direct access to a comprehensive library of training and support content available in a mobile friendly format. With single sign-on access you can browse by product for informative quick guides and training video content.

View the latest webinar or E-learning to advance your professional knowledge and stay on top of the productive digital workflows that advance your business. Visit [mytopcon.com](http://mytopcon.com) today.

## Available materials



Quick  
Guides



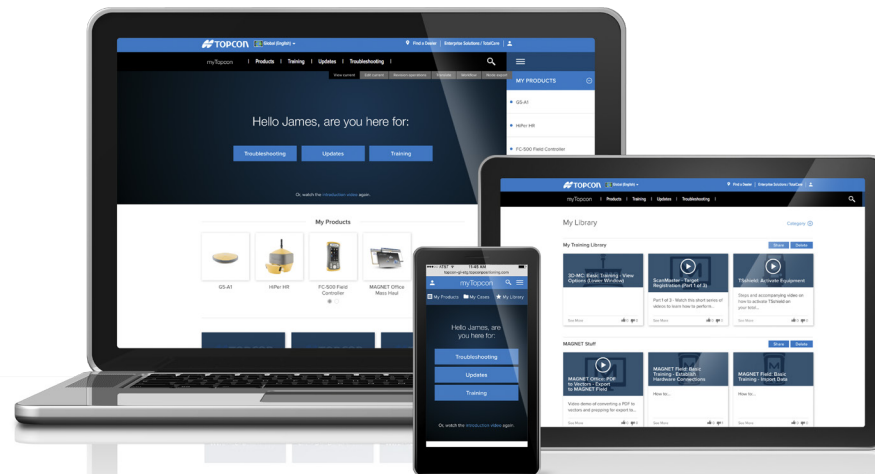
Product  
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Instructional  
webinars

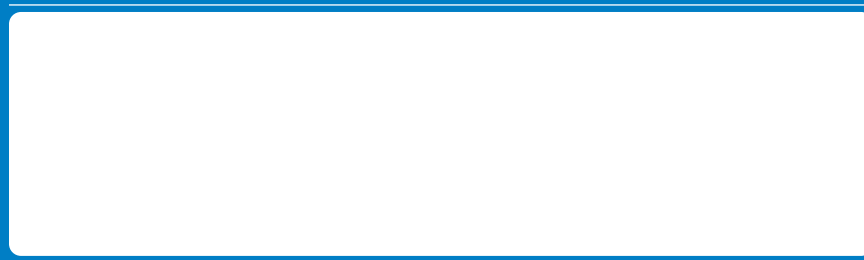


E-learning





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