

# Trimble Total Stations



# The Most Advanced Stations. The Ultimate in Efficiency.



# FASTER, EASIER AND MORF PRODUCTIVITY

Our seven total stations, C3, C5, S5, S7, S9, S9 HP and the SX10; deliver even greater performance and more features than ever. Together, they offer a clear choice—between an all-in-one station for maximum flexibility, an everyday workhorse designed for basic surveying, and an extremely precise model for specialized needs. They're all backed by Trimble's legendary training, service and support.

At Trimble, we're constantly focused on making the day-to-day job of surveying faster, easier and more productive. All of our total stations' features, functions and software components are designed to boost efficiency in the field and in the office without compromising performance and accuracy.

Our EDM technology enables faster in-field measurements with fewer setups while enhancing scanner performance. SurePoint™ technology reduces aiming errors and costly re-measurements. Our proven field software, Trimble® Access™, ensures quick data capture in the field. Trimble SureScan technology boosts accuracy, ensures repeatability, and cuts the time necessary to return to the field to collect additional data.

It doesn't stop there. Data processing is easier and faster using Trimble Business Center software to integrate all of your geospatial collected data.

The conclusion is clear: Trimble Total Stations offer the ultimate in efficient, reliable performance.



# Trimble Total Stations: trusted today, designed for tomorrow.

For more than a decade, on countless jobs all over the world, Trimble Surveyor Total Stations have delivered superior performance, reliability and efficiency. But at Trimble, we are always pushing the envelope, innovating—improving.



#### Rely on Trimble Total Stations to:

- ► Deliver surveying, imaging and 3D scanning in one powerful solution
- Capture data faster and more accurately
- ► Give the advantage of Trimble VISION™ technology for video robotic control, scene documentation and measurements
- ► Improve accuracy, even over long distances, with Trimble DR Plus and Lightning 3DM
- ► Create enhanced 3D models
- ► Enable quick data processing with Trimble Business Center office software
- Locate your equipment in real-time with L2P and manage your equipment with Trimble InSphere™ Equipment Manager



# **SX10 Scanning Total Station**



# MERGE ALL OF THE GEOSPATIAL SKILLSETS IN YOUR WORKFLOW

The Trimble SX10 is the world's first scanning total station that truly merges high-speed 3D scanning, enhanced Trimble VISION imaging and high-accuracy total station measurements in a single instrument.

Designed from the ground up to provide maximum accuracy, efficiency and detail, this scanning total station features Trimble's trusted MagDrive™ and Autolock® technologies for industry-leading durability and reliability. And the SX10's powerful new Lightning 3DM has the capabilities you need to handle any survey project.

### Boost productivity, save money and get greater versatility

The Trimble SX10 captures rich point cloud data at 26,600 Hz and at a range of up to 600 m.

When you get back to the office, the scans register automatically, so you spend less time preparing data and

more time creating results. And, since Trimble Access and Trimble Business Center allow operation of the SX10 within familiar survey workflows, there's no need for specialized training, dedicated 3D scanners and personnel.

The Trimble SX10 delivers reduced costs and greater versatility to expand to new applications, all with a single investment.

#### A foundation of superior 3D scanning

At the heart of the Trimble SX10 are fully integrated 3D scanning capabilities. Trimble's Lightning technology allows the Trimble SX10 to measure dense 3D scan data at high speeds while maintaining high precision over the full measurement range.

You can choose your level of scan density, based on your project. Since registration is automatic, the data you gather drops right into your survey coordinate system.





#### Key features of SX10 Total Station

The Trimble SX10 Scanning Total Station enables familiar, easy and efficient survey workflows, from the field to the office. Here's how:

- ► Combines surveying, imaging and high speed 3D scanning in one revolutionary Scanning Total Station
- ► The new Lightning 3DM combines high accuracy survey measurements with high speed scanning
- ▶ Utilizes Trimble Lightning Scanning technology to scan up to 26,600 points per second—captures a full dome scan in as little as 12 minutes
- ▶ Boosts precision, versatility, and efficiency with improved VISION technology. Allows users to manage total station, imaging and 3D scan data efficiently using Trimble Business Center software, making it easy to create results
- Offers an industry-leading 3D scan range of 600 m while also boasting the smallest spot size in the industry—a mere 14 mm at 100 m
- ► Provides a horizontal 360° x vertical 300° field of view with scanning and imaging to cover your entire setup



# **SX10 Scanning Total Station**



#### ADVANCED VISION TECHNOLOGY THAT HELPS YOU DELIVER SUPERIOR RESULTS

The VISION technology onboard the Trimble SX10 makes it easy to direct surveys via live video on the controller.

VISION offers varying levels of imaging capabilities and resolutions, so you can collect just the right amount of data to fit your needs, whether you're documenting your site or capturing additional visual detail on your DR observations.

Back in the office, Trimble VISION data gives you the option of making additional measurements or delivering 360-degree panoramas.

### Unparalleled Precision That's the Trimble SX10

The Trimble SX10 Scanning Total Station sets a new standard for accuracy, capability and performance. Whether you're performing a typical job or your most challenging survey projects, the SX10 delivers the confidence to do it all and do it well.

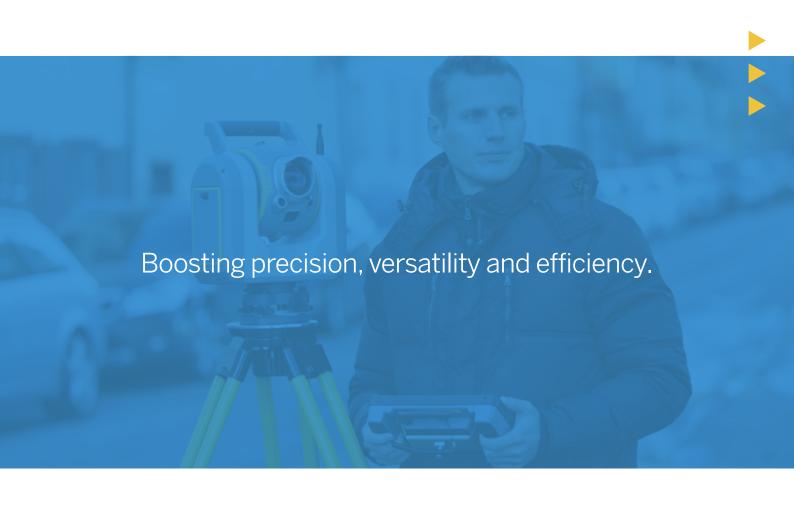
# FAMILIAR TRIMBLE ACCESS AND TRIMBLE BUSINESS CENTER WORKFLOWS

Combined with Trimble Access software, the SX10 efficiently and reliably collects the most complete dataset from the field. While in the field, it allows you to:

- ► Measure the desired level of detail
- Integrated scanning workflows
- ► Efficient data management

In the office, Trimble Business Center seamlessly integrates your project data and provides a virtual surveying environment enabling:

- ► Efficient 2D and 3D topographic and façade map creation
- ► Earthwork, volumetric and corridor workflows
- Quickly measure any forgotten or complex field information





### SX10 Applications

- ► Topographic Survey/General Survey
- Roadway/Corridor Survey
- Volumetric Survey
- ► Infrastructure As-Built
- ► Building As-Built
- Utility Design Survey
- ► Power Line Inspection/Clearance
- Forensics
- ► Mine/Quarry Survey
- ► Tank Calibration/Inspection
- Dimensional Control



## **S9 and S9 HP Total Stations**



# GET THE PERFORMANCE AND ACCURACY YOU NEED FOR SPECIALIZED APPLICATIONS

We took our best field technologies, added our highest level of accuracy, and then included all of our specialized engineering features. The result is the Trimble S9 and S9 HP, our premium-performance Total Stations designed for your most-challenging projects.

Whether it's for tunnels, monitoring, mines, or other difficult applications, rely on the S9 Total Stations to combine scanning, imaging and surveying into a single, precise solution.







Here are just some of the powerful features and options available for the Trimble S9:

- ▶ 0.5" or 1" accuracy
- ► Specialized modules for tunnels, monitoring, or mines for dedicated workflows
- Optional Trimble SureScan and VISION technology
- ► Trimble SurePoint
- ▶ DR HP EDM in the Trimble S9 HP
- ► Monitor projects—both real time and post-processed to rapidly detect critical structural movements, with Trimble 4D Control™ software
- Additional engineering-specific features include Trimble FineLock™ technology and our Class 3R laser pointer. Trimble FineLock detects targets without interference from surrounding prisms and LongRange FineLock extends that functionality; both provide critical support for high precision applications in close quarters, such as rail alignment, deformation monitoring and tunneling. The Class 3R laser pointer visually mark points at greater range in tunnels or underground mines



### **S7 Total Station**



## FULLY LOADED FOR MAXIMUM FLEXIBILITY AND PERFORMANCE

Imagine needing just one total station on your job site to perform all of the data capture. Imagine just one powerfully equipped total station to handle scanning, imaging and surveying, to create 3D models, to process highly accurate visual site documentation and point clouds, and to do much more. That total station is the Trimble S7.

### Work Faster with Integrated Scanning and VISION

With Trimble SureScan you collect and process data faster by focusing on collecting the right points, not just more points. SureScan patented technology maintains a user-defined, equal density of points so you won't capture too many points at short distances or too few points at longer distances.

The S7 is equipped with Trimble VISION technology. Use it to direct your survey through live video images on the controller. Back in the office, you can use your Trimble VISION data for measurements, or to process 360-degree panoramas and high dynamic range (HDR) images for even clearer deliverables.

### Enhance your Accuracy with Trimble DR Plus

The S7, equipped with DR Plus, delivers enhanced scanner performance with fewer instrument setups. Our DR Plus range measurement feature also dramatically extends the range of Direct Reflex measurement without a prism. Trimble DR Plus makes for quick and easy measurements without compromising accuracy.



#### THE ULTIMATE TOTAL STATION

The Trimble S7 is a powerful total station with all of the features and tools you need to maximize efficiency in the field and in the office. Other technologies you'll find standard:

- ► MagDrive, for exceptional speed and accuracy, reduce wear and tear, and smooth, silent operation
- ► FineLock, which detects targets without interference from surrounding prisms, ensuring target lock over long distances, and eliminating errors caused by interference
- ➤ **SurePoint,** ensures precise pointing and measuring by staying on target through virtually any situation, from windy weather to vibrations
- ► Locate2Protect technology and InSphere Equipment Manager
- Industry-leading field and office software for fast data collection and processing no matter the Trimble instrument

## INCREASE PRODUCTIVITY WITH TRIMBLE SURESCAN

Trimble SureScan technology is a true productivity-booster that saves you time in the field and in the office. It allows you to easily and quickly define a single framed area and set a consistent resolution. This means cleaner, more usable initial data sets, which minimizes the amount of point data and the number of setups required while facilitating office data processing.

With SureScan, you can efficiently capture everything you need to create digital terrain models (DTMs) and volume calculations. Plus you can perform topographic measurements faster than traditional surveying methods.





Standard scanning grid

SureScan scanning grid



### **S5 Total Stations**



# THE RELIABLE, EFFICIENT, TRUSTED PERFORMER

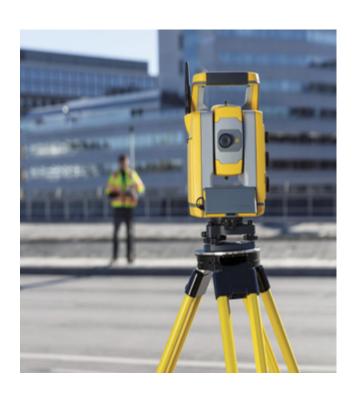
The Trimble S5 offers the ideal package of exclusive Trimble features and proven technology to help you work efficiently and accurately, project after project, year after year.

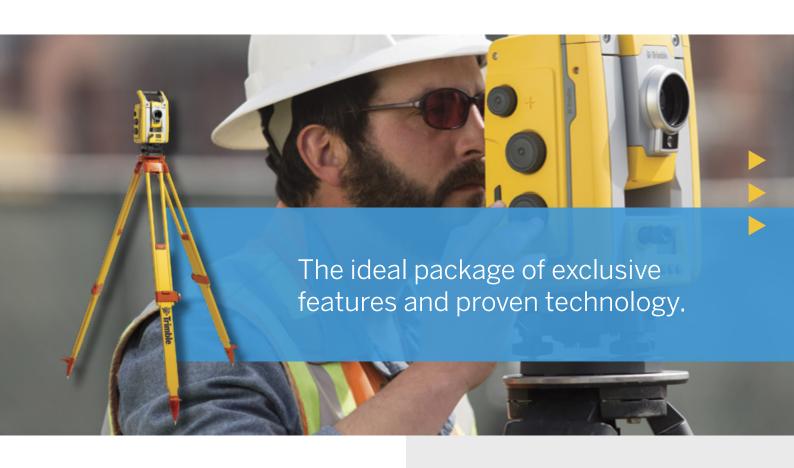
This is the economical, proven performer that makes your job easier both in the field and in the office. And it's backed by the world-class support—including service and training—you expect from Trimble.

#### Measure Farther and Faster with the S5

The S5 can include a complete package of Trimble technology to deliver solid, reliable results, on a full range of projects:

- ► DR Plus EDM for measuring at greater distances with fewer instrument set-ups, while enhancing scanning performance
- ► Your choice of 1", 2", 3", and 5" accuracy
- MagDrive™ servo technology, SurePoint, L2P and InSphere Equipment Manager standard





#### STAY ON TARGET

#### Trimble MultiTrack

The Trimble MultiTrack™ target provides versatility to track both active and passive targets. Up to eight active targets



can operate simultaneously on the same site with no risk of tracking the wrong target, ensuring accuracy and completeness of work with no loss in productivity due to false target lock.

# MANAGE YOUR EQUIPMENT 24/7

Know where your total stations are 24 hours a day with Trimble L2P technology. See where your equipment is at any given time and get alerts if your instrument leaves a job site or experiences unexpected equipment shock or abuse.

Save time managing all of your instruments firmware, software and maintenance requirements with our web-based Trimble AllTrak™ Cloud application. Now you can view usage and keep up-to-date on all of your total stations in one location.





### **Trimble C-Series**



You work in demanding environments and require reliable and efficient equipment that will work as hard as you do.

# THE NEW CLASS OF MECHANICAL TOTAL STATIONS

The Trimble C-Series mechanical total stations are durable, efficient, highly precise instruments that work as hard as you do. By combining superior optics and autofocus with a rugged, lightweight, user friendly design, the C-Series stations deliver exceptional performance, making field work faster and more productive.

With these mechanical total stations, onboard data collection software ensures smooth and efficient workflows.



### **C3 Mechanical Total Station**



# MAKING YOUR JOB EASIER, DAY AFTER DAY.

The Trimble C3 mechanical total station is lightweight and compact. So it's easy to store, transport and operate. Setup is simple, too—just as you'd expect from a Trimble total station. Onboard data collection software ensures smooth, efficient workflows.

### Wherever Works Takes You, Take the Trimble C3.

The Trimble C3 is lightweight and compact, simplifying storage, transport and setup. Users can work as long as they want without getting tired. And it's tough. It delivers exceptional results, whatever the conditions, wherever you take it.

### Get a Lot Out of It. Because We Put a Lot Into It.

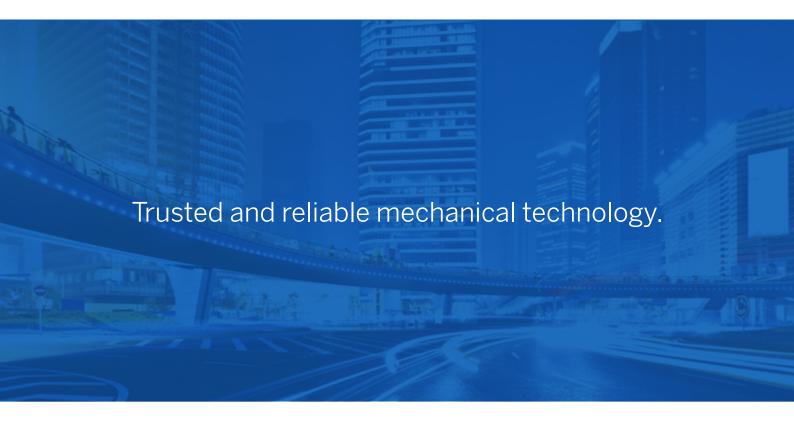
When you work with the Trimble C3, your results are always accurate and true, which ensures greater productivity back

in the office. There's no need to return to the field, because you get it right the first time. Key features include:

- Autofocus that enables precise, quick focus
- Superior Nikon optics for crisp, bright sightings even in low light conditions
- ► PIN code security
- ► Full dual-face displays for use with onboard software
- ▶ 1", 2", 3", and 5" accuracies
- ► Hot swappable batteries that last all day and let you charge one battery while you're working with the other



### **C5 Mechanical Total Station**



## THE EFFICIENT, ACCURATE WAY TO WORK

The Trimble C5 mechanical total station completes the industry's top portfolio with productivity-boosting, timesaving features that make fieldwork easier and faster.

The Trimble C5 is tough and reliable with a user-friendly design, limiting user fatigue even as it stands up to the toughest worksite conditions. It quickly captures accurate measurements and virtually eliminates downtime, providing the peace of mind and security that come with L2P-ready location technology.

### Get the Job Done Right the First Time. Every Time.

The Trimble C5 makes fieldwork productive and efficient with the proven fast Trimble setup process and an array of features that include:

- ► New autofocus that delivers quick, precise focus on the anticipated distance
- Superior Nikon optics for crisp, bright sightings even in low light conditions

#### Tough and Easy to Use Wherever you Use it.

The C5 is lightweight and compact, simplifying storage, transport and setup. It's easy to handle, so users can work as long as they want without getting tired. It delivers exceptional results, whatever the conditions, wherever you take it.

#### Work Fast. Stay Productive. Stay Precise.

Fully charged, the Trimble C5 batteries have enough power to last all day. And they're hot-swappable, reducing downtime. The new C5's dual high resolution touch screen displays enable the use of Trimble Access onboard. And the C5 is available in 1", 2", 3", and 5" accuracies. So, whatever the task, it's equipped and ready to deliver the high level of efficiency and productivity—the improved workflows—you expect from Trimble.





#### C5 Kev Features

- Compact, lightweight and rugged system design
- Autofocus enabling precise and fast focus
- ► PIN code security
- ► L2P location technology
- Powerful long range EDM
- Dual color high resolution touchscreen displays



### **Trimble Access Software**



# STREAMLINE YOUR EVERYDAY WORKFLOWS

Designed to support your everyday work, including topographic surveys, staking, control, and more; Trimble® Access™ offers a familiar, easy-to-use interface delivering increased productivity and saving you money.

#### Trimble Access for General Survey

Improve worksite efficiency with functionality in Trimble Access for General Survey:

- ► Designed to support your everyday survey workflows
- One-tap easy-to-use feature coding
- Powerful COGO routines
- ► Graphical staking of points, lines, arcs, and alignments from active maps
- Integrated Surveying technology combines optical, scanning, and GNSS data plus images in the same job

#### Specialized Applications for Increased Productivity



SDK available for personalized development



See more at apps.trimbleaccess.com

## **Trimble Business Center Software**



# STREAMLINE THE PROCESS WITH TRIMBLE BUSINESS CENTER

Trimble Business Center brings all the data together in a desktop environment. In a single software package you can efficiently work with GNSS, total station, level, scanning, terrestrial and aerial data. Trimble Business Center offers topographic map creation workflow, earthwork operations, corridor operations, bringing the field environment to the office.

- ► Network and Traverse adjustment workflows for accuracy and confidence
- Survey CAD environment for end to end deliverables
- ► Point cloud tools for visualization, registration, clean up, and automated classification
- ► Topo and surface modeling with precise volume calculation and contour creation
- ► Data traceability with raw measurement visibility and chronological history
- ► GIS integration and compatibility for seamless integration





Trimble Total Station Configurations									
Instrument	Angular Accuracy	EDM Technology	EDM Accuracy	Servo	Trimble Vision	Prism Tracking Technology	Scanning Technology   Speed	FineLock	Additional Features
Trimble C3	1", 2", 3", or 5"	DR	2.0 mm + 2 ppm Prism 3.0 mm + 2 ppm DR						Autofocus
Trimble C5	1", 2", 3", or 5"	DR	2.0 mm + 2 ppm Prism 3.0 mm + 2 ppm DR						Tracklight/ Autofocus
Trimble S5 Total Station	1", 2", 3", or 5"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic or Autolock		Autolock			Tracklight
	1", 2", 3", or 5"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic or Autolock		Autolock or MultiTrack			Tracklight
Trimble S7 Total Station	1", 2", 3", or 5"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic or Autolock	Single Camera	Autolock or MultiTrack	SureScan   15pps	V	
Trimble S9 Total Station	0.5"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic	Single Camera	Autolock or MultiTrack	SureScan   15pps	V	
	0.5"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic		Autolock or MultiTrack		V	Long Range FineLock
	1"	DR PLUS	1.0 mm + 2 ppm Prism 2.0 mm + 2 ppm DR	Robotic or Autolock		Autolock or MultiTrack		V	Long Range FineLock
Trimble S9 HP Total Station	0.5"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic		Autolock or MultiTrack		V	Long Range FineLock
	0.5"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic or Autolock		Autolock or MultiTrack		V	Tracklight
	0.5"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic	Single Camera	Autolock or MultiTrack		V	
	1"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic or Autolock	Single Camera	Autolock or MultiTrack		V	
	1"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic or Autolock		Autolock or MultiTrack		V	Tracklight
	1"	DR HP	0.8 mm + 1 ppm Prism 3.0 mm + 2 ppm DR	Robotic or Autolock		Autolock or MultiTrack		V	Long Range FineLock
Instrument	Angular Accuracy	EDM Technology	EDM Accuracy	Servo	Trimble Vision	Prism Tracking Technology	Scanning Technology   Speed	Scanning Range	Range Noise
Trimble SX10 Total Station	1"	Lightning 3DM	1.0 mm + 1.5 ppm Prism 2.0 mm + 1.5 ppm DR	Robotic	Multi- Camera	Advanced Autolock	BandScanning   26.6kHz	600 m	1.5 mm @ 50 m 1.5 mm @ 120 m

Contact your local Trimble Authorized Distribution Partner for more information

#### NORTH AMERICA

Trimble Inc. 10368 Westmoor Drive Westminster CO 80021 USA

#### **EUROPE**

Trimble Germany GmbH Am Prime Parc 11 65479 Raunheim GERMANY

+49-6142-2100-0 Phone +49-6142-2100-550 Fax

#### ASIA-PACIFIC

Trimble Navigation
Singapore PTE Limited 3 HarbourFront Place #13-02 HarbourFront Tower Two Singapore 099254 SINGAPORE +65-6871-5878 Phone +65-6871-5879 Fax

© 2015–2019, Trimble Inc. All rights reserved. Trimble, the Globe & Triangle logo and Autolock are trademarks of Trimble Inc., registered in the United States and in other countries. 4D Control, Access, FineLock, InSphere, MagDrive, MultiTrack, SurePoint, and VISION are trademarks of Trimble Inc. All other trademarks are the property of their respective owners. PN 022516-168G (06/19)

