



# The Trimble 3D Scanning Solution: Designed by Surveyors for Surveyors



TRIMBLE 3D SCANNING

Designed by surveyors for surveyors, the Trimble 3D scanning solution follows the surveying workflow you're familiar with, from the field to the office.

The Trimble® GX™ 3D Scanner is an advanced surveying instrument that uses high-speed laser and video to capture vast amounts of coordinate and image data. Portable, versatile, user-friendly and robust, the Trimble GX is the scanner that thinks like a surveyor.



## TRIMBLE GX 3D SCANNER

### A SURVEYING WORKFLOW

Quickly and easily adopt 3D scanning as part of your surveying portfolio. The short learning curve lets you immediately increase productivity, create new business opportunities, and enjoy significant returns on your investment.

### BUILT FOR THE FIELD

Achieve best performance and accuracy even in tough surveying conditions.

### PORTABLE

The scanner's size, robustness, and flexible power options make it easy to use in the field. The scanner can be easily carried in its dedicated backpack.

### SET UP ON A KNOWN POINT

Level the scanner just like a total station, then collect large volumes of coordinate data.

### FAST TARGET ACQUISITION

The Trimble GX automatically detects targets and offers innovative target data acquisition modes, so you can ensure maximum field productivity.

### LONG-DISTANCE-PRECISION LASER TECHNOLOGY

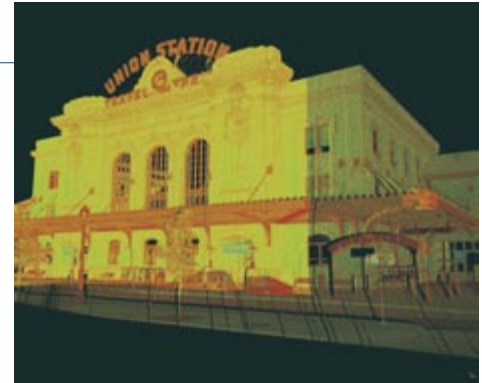
Even at long distances, achieve optimal precision.

## TRIMBLE 3D SCANNING OFFICE SOFTWARE

Trimble® RealWorks Survey™ office software is part of an integrated 3D scanning field and office software suite for surveyors and engineers. Taking advantage of the rich point cloud data provided by the Trimble GX, RealWorks Survey manipulates and manages large scan files to produce dramatic and compelling 2D and 3D deliverables. Certain to not only satisfy the needs of your clients, but also surpass their expectations.

The software also supports data collected using GPS and total station techniques, so you can coordinate and combine data from a surveying job in one project file for an Integrated Surveying™ solution. You can then easily export the resulting file to design software such as AutoCAD and MicroStation.

RealWorks Survey incorporates precision tools and empowering features ideal for applications such as civil survey, building, heritage, and forensic.



*Color-coded intensity on points for enhanced detail inspection of the scene.*



*Grey-scale intensity additional viewing mode. Ideal for 2D drawing over orthophotos.*



*Point cloud with true-color rendering: compelling visuals for your data archives.*

### AN INTEGRATED SURVEYING SOLUTION

Complement GPS and total station techniques and ensure maximum efficiency by having the right tools for each surveying job at your fingertips.

### UNIQUE REAL-TIME TILT COMPENSATION

Ensure high accuracy data through the scanner's active correction of instrument mislevelment.

### AUTOFOCUS AND SUPERIOR RESOLUTION

Acquire maximum and precise detail over shorter ranges.

### OVERSCAN™ TECHNOLOGY

When range is a priority, not detail, boost data acquisition range to up to 350 m. Scan larger objects or simply set up less frequently so your survey times are shorter. Ideal for longer range volume/surface calculations.

### ONBOARD VIDEO TECHNOLOGY

A real-time integrated color video with 5.5x optical zoom lets you see what's happening in the scan scene while you work. It also provides a full panorama snapshot of the scene for comparison with the scan itself.

### REAL-TIME TRUE-COLOR ACQUISITION

Acquire color information during the scan to allow enhanced rendering in office software for easy viewing and scene comprehension.



Unique features allow the Trimble GX 3D Scanner to adapt to each survey's individual requirements. This versatility ensures your investment is always working for you.

**With Trimble 3D scanning, increase your efficiency in traditional applications and open doors to new business opportunities.**

### **TRIMBLE 3D SCANNING FOR TRADITIONAL AND NEW SURVEYING APPLICATIONS ...**

Trimble 3D scanning proves its value in numerous applications: civil survey and infrastructure, architectural and building, urban topography, mining and quarrying, just to name a few. In fact, almost anywhere you need large amounts of data in a short amount of time, Trimble 3D scanning is the right surveying tool for the job. And by partnering with Trimble in the world of 3D scanning, you gain the tools to bid for jobs in new applications such as industrial surveying, cultural preservation, forensics and more.

Whatever your survey application, Trimble 3D scanning hardware and software enable you to produce classic and enhanced deliverables such as 2D drawings, 3D as-builts, inspection monitoring, clash detection, and volume/surface calculations.



*Survey any object or scene to obtain high-fidelity replicas.*



*Broaden your business with new applications such as industrial surveying, for example, with clash detection, inspection, dimensional control, or as-builts in the industrial environment.*



*Point clouds with true-color rendering assist in capturing accident or damage data for forensic analysis and court reference.*



*On traditional survey jobs the Trimble GX provides enriched data for future reference and faster deliverables. Additionally, DR technology reduces safety hazards for you and the public; capture dense data at a safe distance from the scene; this is ideal for civil infrastructure...and no lane closures required.*



*Trimble GX enables real-time progress monitoring on a construction site with volume and surface computations. For large sites, OverScan™ technology provides greater range.*





## MORE APPLICATIONS, MORE BUSINESS OPPORTUNITIES

### ... IN A SURVEYING WORKFLOW YOU KNOW

The Trimble GX 3D Scanner lets you work with familiar surveying routines, such as known point and resection station setup techniques. Station setup routines can be used to establish traverse control on the survey site.

Multiple surface scans measured from a traverse allow survey data to be fully referenced, reducing office processing time and ensuring that data integrity and quality has been achieved. Surveyors can also assess the data quality and make additional measurements if necessary before leaving the site, greatly reducing survey time and any unnecessary cost for additional survey information. The easy setup and familiar surveying techniques allow you to quickly reap the benefits of the Trimble GX.



#### TRIMBLE POINTSCAPE AND POCKETSCAPE FIELD SOFTWARE

In the field, Trimble offers two field software options: Trimble® PointScape™ for use on a Notebook PC and Trimble® PocketScape™ for controllers such as the Trimble Recon or TSC2<sup>1</sup>.

**PointScape** field software controls the Trimble GX instrument when capturing point cloud data. The software offers an intuitive surveying workflow and advanced scanning functionality to provide complete control of your scanning parameters.

**PocketScape** field software is designed to run on the Microsoft® Windows Mobile™ for Pocket PC operating system, so it can be used in combination with any other complementary Pocket PC programs, even Pocket Word or Excel. PocketScape also offers surveying functions and workflow on a familiar, easy-to-learn interface.



*The industry-standard Microsoft Windows and Windows Mobile operating systems ensure PointScape and PocketScape are very easy to learn and use. Screen, menus, and software tools are familiar and intuitive. In addition, you can run other specialized software on your device to enhance your field work and productivity.*

<sup>1</sup> Subject to availability.

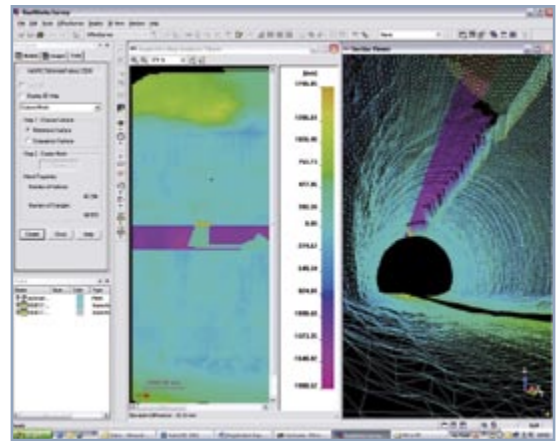
Partnering with Trimble places the right tools and techniques at your fingertips in the field and office. Trimble surveying systems seamlessly integrate via shared workflows and technologies, making your everyday job site a place where the whole is greater than the sum of its parts; this is the Connected Survey Site model.

## TRIMBLE REALWORKS SURVEY OFFICE SOFTWARE

Once a scan is complete, the files are transferred to RealWorks Survey office software, where you can register, visualize, explore, and manipulate as-built or scene point cloud data. The software displays compelling 2D and 3D deliverables for immediate output or export to your preferred CAD package. With numerous **innovative** and **unique** features, Trimble RealWorks Survey software is exceptionally **easy to learn, easy to use, intuitive, and versatile**.

**RealWorks Survey** provides large database management; multiple point-cloud registration options; advanced inspection tools; progressive multi-ortho projection; contour, cross section and profile generation — using the acclaimed EasyProfile™ and other tools; volume and surface calculation; feature code management, and more.

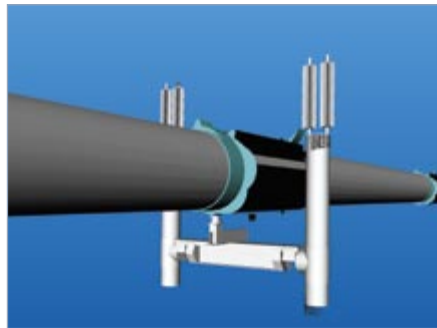
**RealWorks Survey** is complemented by **RealWorks Survey Lite** and **RealWorks Viewer**. These packages enable your clients to view and partially edit survey and engineering data.



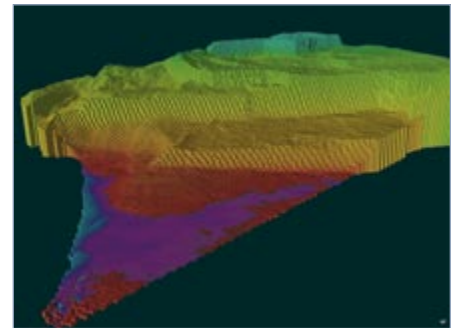
Perform multiple inspection tasks with RealWorks Survey's powerful tools: twin surface, surface-to-model, and surface-to-curve. Generate and visualize inspection maps using the customizable color bar.



Bridge surveyed using OfficeSurvey™. Measure, inspect, and monitor with the RealWorks Survey extensive tool set for civil infrastructure applications. Produce deliverables directly in RealWorks Survey or export to AutoCAD or MicroStation software.

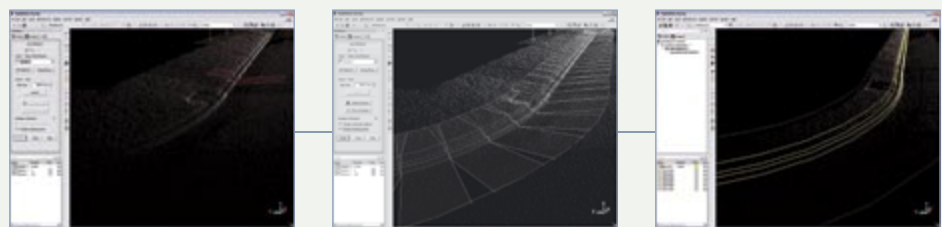


Pipeline modeling based on measured points. Put Trimble 3D scanning software to work in industrial applications for impressive results.



Volume and surface computations are exceptionally easy with RealWorks Survey. For earthworks and stockpile applications in construction or mining, compute direct from the point clouds for fast accurate results.

EasyProfile technology uses the matched profile to track through the cloud in both directions. Natural features are then automatically extracted according to break points in the guide profile. Get one step closer to fully automatic creation of 2D drawings out of 3D data. EasyProfile enables the automatic extraction of rail track, sidewalks, street profiles, road median barriers, and virtually any other linear object.







**MAKE THE CONNECTION**

### **INTEGRATED SURVEYING SOLUTION**

Trimble's 3D scanning systems support Integrated Surveying and are an important part of the Connected Survey Site model. Trimble addresses your unique business needs by offering diverse tools that are designed to work together. This means that whatever your application you can have access to the right Trimble equipment for the job. And each tools' flexibility ensures maximum return on investment.

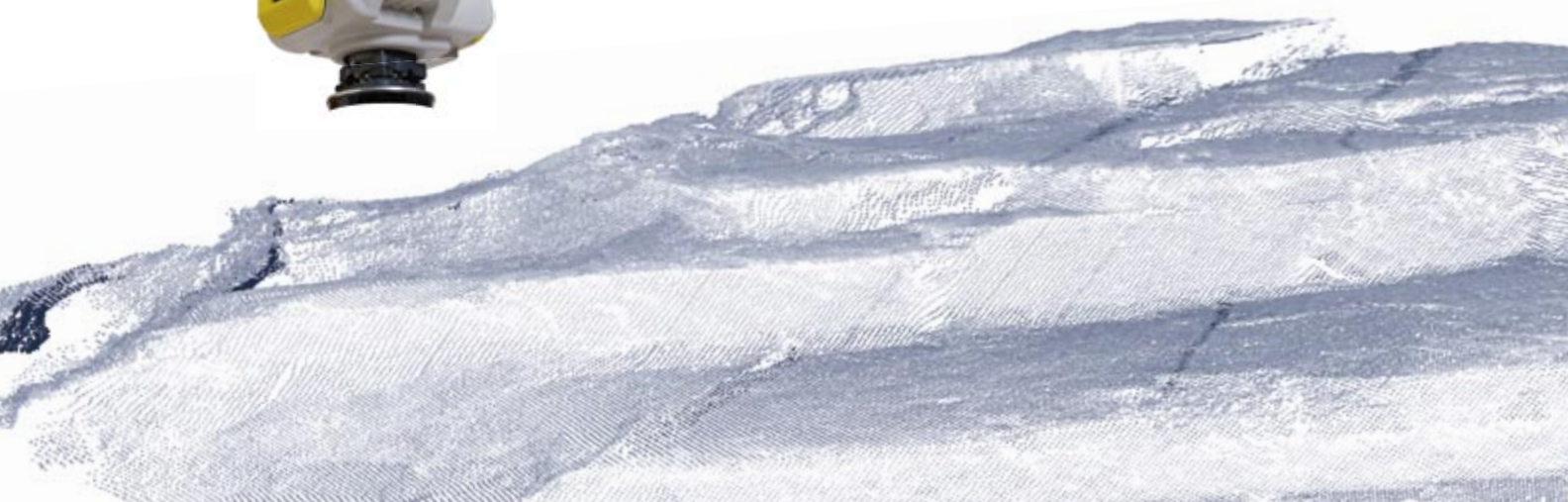
On a survey site, you can combine surveying techniques and tools to complete the job's requirements. For example, set up a traverse using the Trimble® S6 Total Station, then on the control point, scan the survey area using the Trimble GX. In the office, transfer your scan data to RealWorks Survey for onward processing and editing. The software also supports GPS and optical total station data, so all your information from a survey site can be combined in one project file.



*Put the power of Trimble 3D scanning to work on the Connected Survey Site and experience all the benefits that this new and advanced system has to offer you and your business.*



*Every Trimble solution plays an important part in the Connected Survey Site. When you need to pull diversified data sets together to produce superior deliverables, look to Trimble for seamless solutions.*





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