With the latest generation of the Trimble® GX™ 3D Scanner, you can collect millions of points for photo-realistic resolution, or you can collect exactly the number of points you need. It’s up to you: Trimble® SureScan™ patented technology lets you scan smarter—and faster.

Trimble SureScan automatically adapts your scanning parameters to the geometry of a scanned object, and controls scanning movement to keep a constant user-defined space between points in 3D. This unique, innovative function maintains the equal density of points even for target objects such as roads and tunnels, where distances to points vary. You won’t capture too many points at short distances and too few points at longer distances—you also won’t capture measurements you don’t need.

Being more efficient in the field operation translates directly into faster and easier data processing.

The Trimble GX 3D Scanner is an advanced surveying and spatial imaging sensor that uses high speed laser and video to capture coordinates and image data. The powerful capabilities of the Trimble GX 3D Scanner and its supporting system increase your competitiveness today and open doors to new business opportunities.

CONTROL WITH TRIMBLE ACCESS

Control with Trimble Access on Trimble Tablet and produce deliverables in the field

Trimble SureScan patented technology for fast, smart scanning

Real-time true-color acquisition for better visualization

Immediate target acquisition methods for faster observations

The Trimble GX 3D Scanner includes Trimble® VISION™ technology for digital image streaming and capture. Using a digital image on the controller screen, users can quickly identify and capture relevant data with a simple point-and-click; the image can then be transferred with the data. This process makes project handover to colleagues simple—the image helps identify and orient the points. Data processed immediately in Trimble Access, or with Trimble RealWorks can then be delivered to your clients in compelling 2D and 3D.

The Trimble GX 3D Scanner is just one advanced component of a superior surveying and Spatial Imaging solution that lets you capture, extract, and analyze spatial data. Comprising the Trimble GX itself, Trimble Access software on Trimble Tablet, and the powerful Trimble RealWorks™ office software, the complete system enables surveyors and geospatial professionals to generate compelling deliverables for clients.

Trimble RealWorks can take the millions of points captured in a single scan and convert them into a usable form for processing in Trimble RealWorks or your favorite CAD package. Trimble RealWorks automates each step from data capture to client-ready deliverable—it’s powerful but extremely easy to use.

Trimble Access is a dramatic field software designed to make the Trimble GX system easy to use. It also makes it easy to share deliverable results with others while still in the field.

Surveyors who are familiar with scanning will find the approach to the observation workflows very refreshing due to the Total Station-like interface. Those who are unfamiliar with scanning will find their learning curve is remarkably short.

Trimble Access software is run on the Trimble Tablet PC, a very rugged unit designed for outdoor use. It has a large, clear touch screen which is easy to read in all lighting conditions.

Trimble Access has specialized applications options that allow users to produce final deliverables, right on the Trimble Tablet and right in the field, for immediate transfer over a standard Internet connection.

CATCH AND SHARE THE VISION

The Trimble GX 3D Scanner includes Trimble® VISION™ technology for digital image streaming and capture. Using a digital image on the controller screen, users can quickly identify and capture relevant data with a simple point-and-click; the image can then be transferred with the data. This process makes project handover to colleagues simple—the image helps identify and orient the points. Data processed immediately in Trimble Access, or with Trimble RealWorks can then be delivered to your clients in compelling 2D and 3D.
TRIMBLE GX 3D SCANNER

PERFORMANCE
Range (typically, under standard clear conditions1,2):
- 350 m to 90% reflective surface3 (w/ OverScan)
- 200 m² to 35% reflective surface
- 155 m to 18% reflective surface

Scanning speed: up to 5000 points per second
Standard deviation: 1.4 mm @ ≤50 m; 2.5 mm @ 100 m; 3.6 mm @ 150 m; 6.5 mm @ 200 m
Single point accuracy: position = 12 mm @ 100 m; distance = 7 mm @ 100 m
Hz angle = 12° (60 µrad); Vt angle = 14° (70 µrad)

Target acquisition: std dev. <1 mm (Trimble targets)

Scanning speed: up to 5000 points per second

SYSTEM SPECIFICATIONS
Laser: type: pulsed 532 nm, green
Class: IEC 60825-1 – Class 3R; 21 CFR §1041.10; Class 2
Field of view: ±360° x 60° continuous single scan

Scanning advantages:
- Video-based remote instrument control
- Sophisticated display:
  - Real-time 3D visualization, pan and zoom, even while scanning
  - Live video streaming
  - True color or intensity mapped point cloud display
  - Simulated surface rendering and environmental lighting
  - Visualization of instrument location

Efficient Survey workflow:
- Fast framing on video, point cloud, panorama or image
- Rectangular and polygonal framing
- Video-based remote instrument control
- Scanning advantages:
  - Trimble SureScan technology
  - Pre-set or custom scan settings
  - Single survey point measurement
  - Automatic target recognition
  - Target re-check
- Refined framing capabilities:
  - Full frameing on video, point cloud, panorama or image
  - Rectangular and polygonal framing
  - Video-based remote instrument control

Trimble Access includes specialized applications that allow users to create deliverables directly in the field on the Trimble Tablet controller. Users may also continue to use PointScape control software on a laptop PC as well as PocketScape on TSC2 controllers.

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Specifications subject to change without notice.

1 Standard clear: No haze. Overcast or moderate sunlight with very light heat shimmer.
2 Range and precision depend on atmospheric conditions, size of targets and background radiation.
3 Kodak Gray Card, Catalog number E1527795.
4 Specifications on precision are valid within this optimum range.
5 Figures (typical values at 99% albedo) given for standard data capture of four shots, on distance measurement.
6 TSC2 is compatible with Trimble GX Advanced only. 7 The Trimble GX Standard instrument does not offer SureScan technology.

www.trimble.com

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Optics: patented scanning optical system
Data transfer: USB link for available extensions
Digital imaging: real-time integrated color video with 5.5x optical zoom
Status indicators: system ready, laser on, comm. status

PHYSICAL
Servo-Driven 3D Laser
Scanner: dimensions: 322 D x 343 W x 404 H mm
weight: 13.0 kg (28.7 lb); power consumption: <100 W
Power supply: super compact unit. AC 90–240 V, 50–60 Hz; DC 24 V nominal
dimensions: 169 D x 65 W x 37.5 H mm
weight: 0.7 kg (1.5 lb)

Instrument case: rugged and portable, rolling:
dimensions: 645 D x 490 W x 435 H mm
weight: 14.2 kg (32.4 lb)

Environmental: operating temp: 0 °C to 40 °C, storage temp: –20 °C to 50 °C
light: fully operational under all light conditions
sealing: IP52 (I.E.C.); shock: IEC 60721-3-2; 2M2 (scanner)
2M3 (scanner in case) transportation compliant
humidity: non-condensing atmosphere

Standard accessories: rolling instrument case;
super-compact power supply unit with AC cables;
Trimble tribrach; ethernet cable for connection of scanner to data collector; 50 adhesive flat targets;
Trimble 3D Scanner Field Software installation kit

Optional accessories: Trimble® Tablet, TSC2 special extended caps for wired connection; PocketScape field software;
Trimble 3D scanner backpack, car battery cable kit;
target kits (planar, spherical); batteries; wireless unit