

Compact High-speed Laser Scanner



- Highest Accuracy with Precise Scan Technology
- High Speed 360° Dome Scanning
- Long Range
- Dual Camera
- Eye Safe - Selectable Laser Technology
- Compact, Lightweight Rugged Design

GLS-2000 Compact High-speed Laser Scanner

Capture Reality.

Topcon's GLS-2000 laser scanner allows you to quickly and accurately capture 3D data at any project site.

An industry leading laser scanner no-serious practitioner should be without, the GLS-2000 can be utilised at any job site. Powered by user selectable dual laser capability, the operator is able to choose between a Class 3R and Class 1 laser according to the job site conditions.

With a scan range of over 350 metres the GLS-2000 is a versatile tool that lets you get laser scanning in many different work environments. The stand-alone capability of the scanner combined with its rugged design provides technology that will stand up to the most extreme outdoor work sites.

Intuitive and Efficient

Historically difficult to measure subjects such as buildings, antennas and spans are recorded at the press of a button. The scanner is a quick, simple and effective way of capturing 3D data at high speed but without sacrificing the accuracy required for today's demanding professionals.

The usability of the GLS-2000 provides one-touch operation for the non-specialist but also satisfies the survey professional with occupation and backsight operation. Instrument height measurement and the dual on-board digital cameras provide for ultimate productivity and practicality when dealing with point clouds.

The GLS-2000 laser scanner together with ScanMaster software provides the ultimate package for people who want the quick, easy and cost-effective route into laser scanning.

A Laser Scanner for all Users and Markets

The technology embodied in the GLS-2000 laser scanner provides the features that make it the ultimate tool for all users. The class leading specifications of the scanner make it an ideal tool for the BIM environment. Scan to Bim and 'as built' projects will benefit from the precision and productivity provided by the GLS-2000.



Small Size, Big Performance

The rugged, compact scanner is ideally suited for the demands of outdoor work sites. The dual cameras provide maximum flexibility whilst user selectable lasers allow scanning in any environment.



High Speed Scanning

The ultra high speed scanning of the GLS-2000 provides time saving benefits to users without compromising accuracy. The scanner will collect a full 360° scan of your work site in under 3 minutes including images.



One Touch Scanning

Scanning has never been so easy with one touch scanner operation. Utilise pre-set scanning parameters to save time and increase efficiency. On-board checking of scanned data ensures correct coverage of project.



Seamless Workflow with ScanMaster

Data workflow is completed with ScanMaster software. Features include shape matching, auto edge extraction and orthophotos. File format compatibility ensures integration with 3rd party software.



PRIMARY FEATURES



Eye Safe Laser

The GLS-2000 has user-selectable lasers that provide options for every job site. The scanner provides the option to select a Class 1 eye-safe laser that can be used in populated areas without adverse effects.



KIT COMPONENTS

GLS-2000 Package Contents

- GLS-2000 Instrument
- Carry Case
- 4x Batteries and 2x Chargers
- Tribrach
- Cleaning Kit and Lens Cover
- Tooling Kit
- SDHC Memory Card



SPECIFICATIONS

System Performance

Maximum range at specified reflectivity	
Standard Mode	350m at 90%
High Speed Mode	210m at 90%
Low Power Mode	210m at 90%
Single Point Accuracy	
Distance	3.5mm (1-150m), 1sigma
Angle	6"
Dual Axis Compensator	
Resolution	1"
Accuracy	4"
Range	-/+ 6'
Target Deflection Accuracy	3" at 50m

Laser Scanning System

Type	Pulsed Precise Scan Technology
Laser Class	3R (High Speed / Standard) 1M (Low Power)
Scan Density (Resolution)	
Spot Size	<11.2mm(1-150m, FWHM)
Maximum Sample Density	3mm at 10m
Field of view (per scan)	
Horizontal:	360°
Vertical:	270°
Color Digital Imaging	5M pixel, Dual (170°/8.9°)

Scanning Control

Control System	On-board
Display	VGA Color Touch Display
Keyboard	3 Key
Data Storage	SD Card

Environmental

Operation Temperature	-5°C to 45°C
Storage Temperature	-20°C to 60°C
Dust/Humidity	IP54

Physical

Dimensions	152 x 293 x 412mm
Weight	11kg
Keyboard	21 keys

For more specification information:
www.topconpositioning.com

SOFTWARE

ScanMaster Software

The Topcon GLS-2000 laser scanner leaves nothing behind – except the competition. Paired with ScanMaster Office software you become more proficient and productive.

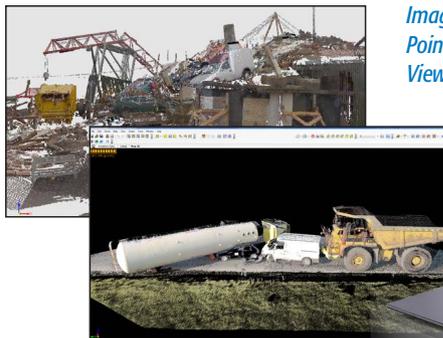


Image and
Point Cloud
Views

Registration - Easy registration of scans using shape matching.

Industry standard file formats - ScanMaster now features compatibility with E57 and FLS file formats for increased ease of use.

Engine - High-performance point cloud engine radically improves performance and saves time.

Cleanup and Region Selection Tools - Powerful filtering of isolated measurements from point clouds and region select tools automates the cleanup of noisy data.

Edges - Automatically extract advanced edge sets from scans. Merge the sets to automatically draft complex buildings. Produce 3D solids to send directly to CAD.

Polylines - Tools to create and edit polylines, these will allow you to quickly produce deliverables for your clients.

Planes - Edge extraction from plane intersections allows the user to produce precise edges at the intersection of two or more planes. Great for drawing building lines. Orient view to plane command assists with data cleanup and producing orthoimages.

Volumes - Calculate based on a mesh-to-mesh or mesh-to-plane surface comparison, also extract volume region boundary area volume region centroid.

Regions - Region selection is another incredible tool for data cleanup and isolating specific surfaces of interest. Also, to isolate road surfaces, building walls, and many other uses.

Orthophotos - Orthophoto export.



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