TOPCON

GLS-2000 SERIES

MULTI-FUNCTIONAL
3D LASER SCANNER

GLS-2000S GLS-2000L

GLS-2000M

Complete GLS-2000 Solution

- Fast, precise scanning
- Full dome field-of-view (FOV)
- World's first – direct height measurement
- Surveyor-style backsight orientation

Capture reality on your terms

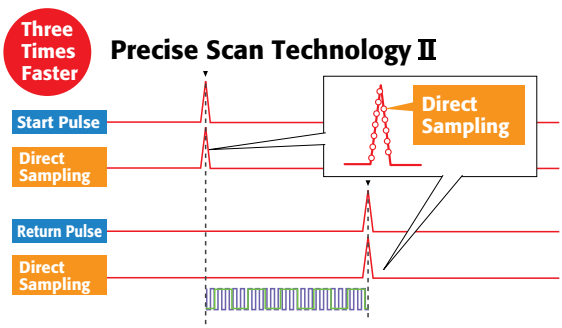
The GLS-2000 series of scanners is comprised of three comparable, yet distinct models: the GLS-2000S (short-range), GLS-2000M (medium-range), and GLS-2000L (long-range). Each model is a full-featured scanner that can be effectively deployed to capture existing, as-built conditions based on the measurement range requirements of the application. The innovative capabilities of the GLS-2000 combined with its field rugged design, provide users with a purposeful solution that will stand up to the most extreme work environments.

Versatile and adaptable

The GLS-2000 offers quick, simple and effective ways of capturing 3D point cloud data at high-speed without sacrificing the accuracy desired by today's demanding professionals. With one-button to start scanning, on-board enabled occupation and backsight orientation features, along with MAGNET® Collage software – the GLS-2000 portfolio provides a solution suited to any industry professional wanting the most value from their scanning investment.

Dual cameras – wide-angle and zoom

The GLS-2000 is equipped with dual 5 megapixel cameras – including a 170° wide-angle camera that obtains images at high speed, as well as a 8.9° telephoto camera that is coaxial with the measuring axis.



Precise Scan Technology II

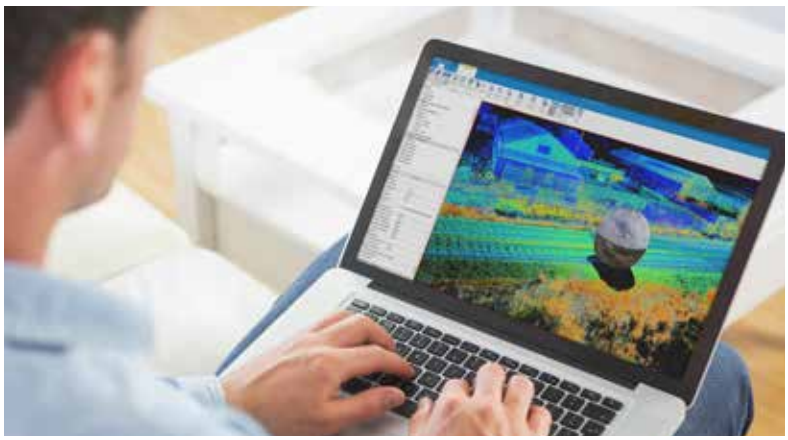
With three times faster (time-of-flight) pulse signals compared to previous GLS models, the GLS-2000 produces a clear signal waveform enabling more precise signal processing. Employing an ultra-high-speed ADC (analog-digital converter) along with a direct sampling technique, Precise Scan Technology II enables signal extraction resulting in reduced noise and high-accuracy data.


Built-in Wi-Fi
Rotating selectable laser
Internal cameras
Standard Topcon tribrach
On-board one-touch scanning
On-board batteries
SD card slot
TOPCON
TOPCON

System Performance	
Maximum Range (at 90% reflectivity)	
GLS-2000S	130 m (High Speed)
GLS-2000M	350 m (Standard)
GLS-2000L	500 m (Standard)
Single Point Accuracy	
Distance	3.5 mm (1-150 m), 1 sigma
Angle	6"
Tilt Sensor	
Type	Liquid 2-axis tilt sensor
Range	+/- 6'
Target Detection Accuracy	3" at 50 m
Laser Scanning System	
Type	Pulse (Time of-Flight); Precise Scan Tech. II
Laser Class	3R (High / Standard) 1M (Low Power)
Scan Rate	Up to 120,000 pts/sec
Spot Size	≤ 4 mm at 20 m (FWHM)
Field of View	360° H / 270° V
Color Digital Imaging	
Wide-angle	170° Diagonal
Telephoto	11.9° H / 8.9° V
Scanning Control	
Control System	On-board
Display	3.5" Touch Screen
Data Storage	SD Card
Physical and Environmental	
Operation Temp	23°F to 113°F (-5°C to 45°C)
Storage Temp	-4°F to 140°F (-20°C to 60°C)
Dust / Humidity	IP54
Weight	24 lbs. (11 kg) with batteries and tribrach

MAGNET Collage and MAGNET Collage Web

A powerful, yet simple way to process and combine mass data sets in one software environment, MAGNET Collage makes it easy to manage your point cloud data. MAGNET Collage Web is a web service for sharing and collaborating with 3D point clouds.



Processing point cloud data

After field work is complete, MAGNET Collage supports importing, viewing, and cleaning of collected point cloud data – providing multiple tools for registering, then geo-referencing scans to survey control.

Extracting objects

Tools for creating and editing objects such as polylines, meshes, edges, and planes are easily accessed. The region selection tool is especially useful for isolating surfaces such as roadways and building walls, floors, and ceilings.

Export to industry applications

Exporting clouds or objects to third-party design and analysis applications is simple. Topcon offers seamless workflows with third-party software.

TOPCON

For more information:
topconpositioning.com/gls-2000

7010-2152 E 3/19