TOPCON

GLS-1500 – LASER SCANNER

An advanced Laser Scanner that functions like a Total Station

- Stand-alone operation
- Integrated camera
- 500 m maximum range
- Fast, easy setup
- Class 1 eye safe laser
- Upto 30000 points per second

Capture Reality – Coordinate your world. Topcon's latest imaging sensor allows you to define your world point-by-point, pixel-by-pixel. Work from the part to the whole to accurately and quickly detail your site in 3 Dimensions.

Get Laser Scanning with the GLS-1500. Our field ready laser scanner lets you sample your site precisely at up to 30,000 points a second. Robust, portable, compact and independent surveying. A unique tool with clean design that no-serious practitioner should be without.

The GLS-1500 – A Laser Scanner

The GLS-1500 is a pulse based laser scanner designed to manage with the practical aspects of the job site. With a scan range up to 500 m the GLS is a versatile tool that lets you get laser scanning in many different work environments.

The stand-alone capability of this instrument ensures Topcon has a unique solution that can manage with the extremes of the measurement world. Building, antenna, span, earth, historically difficult to measure subjects are recorded at the press of a button.

The instrument is designed for stand-alone operation. It´s quick, simple and effective, emphasising the benefits of laser scanning on site, you are not tied to a PC, you do not have to worry about power, site work is easy because you are only dealing with one box and one tripod, just as you would a Total Station. However – if you want to operate your scanner in the traditional way you can always connect to the PC and see the data as it is being collected, or for the best of both worlds run with your pocketable tablet and the ScanMaster Field software. Ultimate productivity and practical useability.

Get Laser Scanning with our robust, portable solution that builds on our proven Total Station heritage to provide you with the ultimate scanning tool.

The Topcon GLS-1500 gives high quality observations with effective field operation

Eye-safe and efficient

Use the GLS-1500 anywhere without worrying about your liability or damaging the eyes of a passerby. The GLS-1500 uses an invisible class one laser, so it's completely eye-safe. Scan near airports, rail, busy traffic and populated areas without a flashing laser.
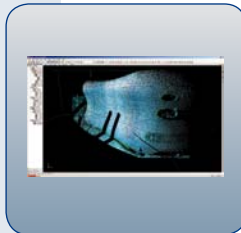

High Accuracy Measurements

This robust scanner sends out a laser beam that measures up to 30,000 points per second. It measures distances up to 500 m away. A sophisticated lens mechanism ensures consistent 4 mm accuracy through the scanner's range up to 150 m.

Survey Work-Flow

The GLS-1500 is class leading design. It has the ability to input, occupy and backsight known real world coordinates on board. This means that for operation, the user does not need to bring a Total Station to locate positions for point cloud registration later in the office. With the ability to input known points, elevations and a backsight, the point cloud collected is registered in the field.

ScanMaster software

– The GLS-1500's ScanMaster software is well suited for the way you work, with all the features you'll need.
– Features include: Scanning control, 3D visualization and automated modeling.
– Export scan data in a wide variety of file formats for superior compatibility.
– ScanMaster software controls and registers using surveying and modeling tools. It's a modern software that simplifies a traditionally difficult process.

Power-, computer- and cable-free

With internal batteries and computer, Topcon's GLS-1500 is lightweight at 16 kg, has a quick setup time and is cable-free. Transportation is user-friendly.
While other laser scanners take two people to unload, setup, operate and load, the GLS-1500 is truly a one man instrument.

Compact – Portable – Robust – Independent

The GLS-1500 pulse laser scanner brings you the latest in terrestrial laser scanning instrumentation.
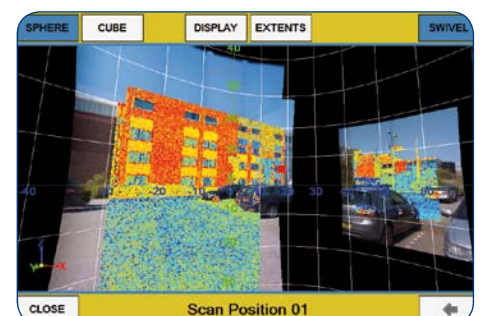
1	Integrated coaxially aligned 2.0 Mega pixel digital camera	**4**	SD Card slot	**7**	360 x 70 Field of View	**9**	WiFi Connectivity
2	Quicksight / Mirror mechanism	**5**	USB connectivity	**8**	Compact, streamlined instrument housing	**10**	Hot-swappable Internal power
3	On-board control interface	**6**	Jog shuttles for smooth manual pointing				

Digital camera

An integrated digital camera collects and records images from the scanning location. The camera and laser are co-axially aligned by the mirror mechanism. Use Topcon's photogrammetry algorithms to calculate additional points between the scanned points.

ScanMaster

ScanMaster Field version is a stripped-down implementation designed for use on Tablet PC, this graphical interface allows you to work with typical survey work-flows whilst viewing your data in 2D spherical view or 3D data view."

It's time.

The Leader in Positioning Technology...

Topcon offers positioning products that deliver unparalleled site-wide performance and integration. Topcon's history of technological advances and our reputation for superior reliability means there's no other company positioned to provide you with a better "Total Positioning Solution."

From survey to inspection Topcon, through our dealer network, provides the innovative technology that gives surveyors, civil engineers, contractors, equipment owners and operators the competitive edge by addressing such critical issues as increasing profits, quality craftsmanship, improving productivity, lowering operating costs, and enhancing job site safety.

Full positioning integration field-to-finish: That's the goal of Topcon. When it's time for you to step up to the next level, it's time to turn to Topcon.

CAPTURE REALITY

The Leader in Customer Satisfaction...

To ensure that your Topcon instrument maintains peak performance, your local Topcon dealer offers factory trained and certified service technicians. If service isn't available in your area, our European Service Center offers a repair and return policy second to none.

SPECIFICATIONS

	GLS-1500
SYSTEM PERFORMANCE	
Maximum range at specified reflectivity	500 m at 90 %, 223 m at 18 % * (* in Long mode)
Single Point Accuracy	
Distance	4 mm at 150 m, 7 mm at 500 m
Angle	6" (Vertical) / 6" (Horizontal)
Target Detection Accuracy	3" at 50 m
LASER SCANNING SYSTEM	
Type	Pulsed
Colour	Invisible (Eye Safe Laser)
Laser Class	Class 1
Scan Rate	Up to 30,000 points / second (maximum pulse rate)
Scan Density (Resolution)	
Spot Size	6 mm at 40 m
Maximum Sample Density	1 mm at 25 m
Field-of-view (Per scan)	
Horizontal / Vertical	360° (maximum) / 70° (maximum)
Colour Digital Imaging	2.0 Mega pixel digital camera
ELECTRICAL	
Power Supply	On-Board Li-Ion battery BT-65Q x 4
Power Consumption	< 25 W
Maximum operation time	Approx. 4.0 hours per 4 pcs
Hot-swappable battery	Hot-swap (2 by 2)
ENVIRONMENTAL	
Operating Temperature	0 ºC to 40 ºC
Storage Temperature	−10 ºC to 60 ºC
Dust / Humidity	IP52
PHYSICAL	
Dimensions	240 mm x 240 mm x 566 mm
Weight	17.6 kg Total operational weight
SCANNING CONTROL	
Equipment for controling	On-Board computer (stand-alone) or PC
Communication method for PC	Wireless LAN, USB
Display unit	LCD 20 characters x 4 lines
Keyboard	21 keys
Data storage	SD Card

TOPCON

www.topcon.eu

Your local authorised Topcon distributor is:

graffit-werbeagentur.de