The right choice

Whether you want to digitally explore an archaeological excavation or research historic monuments in 3D, when recording and analysing heritage and archeology projects for future generations, it is imperative to collect data with the cleanest and most accurate results. The new ScanStation laser scanners from Leica Geosystems are the right choice, because every detail matters.

Reduced downtime

The Leica ScanStations deliver highest quality 3D data and HDR imaging at an extremely fast scan rate of 1 mio points per second at ranges of up to 270m. Unsurpassed range and angular accuracy paired with low range noise and survey-grade dual-axis compensation form the foundation for highly detailed 3D colour point clouds mapped in realistic clarity.

Complete scanning solution

Leica Geosystems offers the new Leica ScanStation portfolio as an integrated part of a complete scanning solution including hardware, software, service, training and support. 3D laser scanner data can be processed in the industry’s leading 3D point cloud software suite, which consists of Leica Cyclone stand-alone software, Leica CloudWorx plug-in tools for CAD systems and the free Leica TruView.
Leica ScanStation P30/P40 Product Specifications

SYSTEM ACCURACY

Accuracy of single measurement

| Range accuracy | 1.2 mm + 10 ppm over full range |
| Angular accuracy | 8° horizontal; 8° vertical |
| Target acquisition | 2 mm standard deviation at 50 m |

Dual-axis compensator

Liquid sensor with real-time onboard compensation, selectable on/off, resolution 1°, dynamic range ± 5°, accuracy 1.5°

DISTANCE MEASUREMENT SYSTEM

Type

Ultra-high speed time-of-flight enhanced by Waveform Digitising (WFD) technology

Wavelength

1550 nm (invisible) / 658 nm (visible)

Scan rate

Up to 1,000,000 points per second

HDR

Yes

Resolution

Minimum range 0.4 m

Maximum range at reflectivity

120 m: 18% 180 m: 8% 270 m: 1% 34% Scan rate

Up to 1,000,000 points per second

Range noise

0.4 mm rms at 10 m

0.5 mm rms at 50 m

Field-of-View

Horizontal: 360°

Vertical: 290°

Data storage capacity

256 GB internal solid-state drive (SSD) or external USB device

Communications/Data transfer

Gigabit Ethernet, integrated Wireless LAN or USB 2.0 device

Onboard display

Touchscreen control with stylus, full colour VGA graphic display (640×480 pixels)

Laser plummet

Laser class 1 (IEC 60825-2014)

Check & Adjust

Field procedure for checking of angular parameters, tilt compensator and range offset

Onboard target acquisition

Target selection from video or scan

Onboard user interface

Switchable from standard to advanced

One button scan control

Scanner operation with one button concept

Scan area definition

Scan area selection from video or scan; batch job scanning

Double scan

Automatic removal of point cloud noise introduced by moving objects

CONTROL OPTIONS

Full colour touchscreen for onboard scan control.

Remote control: Leica CS10/CS35/C220/C535 controller or any other remote desktop capable device, including iPad, iPhone and other SmartPhones; external simulator.

FUNCTIONALITY

Survey workflows and onboard registration

Quick orientation, Set azimuth, Known backsight, Traverse (4 and 6 parameters), Traverse Check & Adjust

Onboard target acquisition

Target selection from video or scan

Onboard user interface

Switchable from standard to advanced

One button scan control

Scanner operation with one button concept

Scan area definition

Scan area selection from video or scan; batch job scanning

ORDERING INFORMATION

Contact your local Leica Geosystems representative or an authorised Leica Geosystems dealer.

All specifications are subject to change without notice. All accuracy specifications are one sigma unless otherwise noted. * At 78% albedo. ** Algorithmic fit to planar HDS 4.5° B/W targets. Scanner: Laser class 1 in accordance with IEC 60825-2014 Laser plummet: Laser class 1 in accordance with IEC 60825-2014

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Leica RTC360 3D Reality Capture Solution

Leica Cyclone REGISTER

Leica Cyclone MODEL

- when it has to be right

Your Trusted Active Customer Care
Active Customer care is a true partnership between Leica Geosystems and its customers. Customer Care Packages (CCPs) ensure optimally maintained equipment and the most up-to-date software to deliver the best results for your business. The myWorld® Leica Geosystems customer portal provides a wealth of information 24/7.