

# Leica ScanStation P20

Industry's Best Performing  
Ultra-High Speed Scanner



- when it has to be **right**

**Leica**  
Geosystems

# Leica ScanStation P20

## Industry's Best Performing Ultra-High Speed Laser Scanner



### Quality Matters

As the pioneers of developing terrestrial laser scanners, Leica Geosystems has years of experience and deploys the best technology available to deliver the best quality. The Leica ScanStation P20 uses an optimal combination of angular and range measurements to deliver exceptional 3D point quality and product reliability.



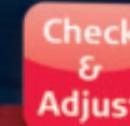
### Productivity Matters

Using time-of-flight range measurements enhanced by modern Waveform Digitising (WFD) technology, the Leica ScanStation P20 measures with an incredible speed of up to 1 million points per second using an eye-safe class 2 laser. This ultra-high speed, combined with fewer setups and targets, drastically reduces field time needed to convert real-world environments into rich digital 3D point clouds and increases your return on investment.



### Ruggedness Matters

Field conditions can be extreme and Leica ScanStation P20 is designed to master them. With an operating temperature range of  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ , Ingress Protection rating of IP54, and Leica Geosystems design and manufacture, downtime due to extreme environmental conditions is minimised.



### Certainty Matters

The Leica ScanStation P20 includes an onboard «Check & Adjust» routine that allows you to check and adjust instrument errors electronically. After performing a successful check & adjust procedure, you can be certain that your scanner is in optimal working condition.

#### In-field QA

All scans can be immediately viewed in the field to ensure optimal QA. By verifying complete scan coverage, costly site revisits are avoided.

#### Accurate Tilt Compensation

The integrated dual-axis compensator allows survey-grade traversing and resection to facilitate in-field registration and subsequently less office processing.

#### High-resolution Imagery

An integrated, auto-adjusting, 5 megapixel camera automatically captures images that can be applied to point clouds to enhance interpretation and speed deliverable creation.

#### Speed

Range	max. 120m
3D point accuracy	3mm at 50m
Target acquisition	up to 50m
Laser class	2
Angular accuracy	8" (horizontal/vertical)
Onboard storage	256GB SSD
Operating temperature	$-20^{\circ}\text{C}$ to $+50^{\circ}\text{C}$

# Leica ScanStation P20

## One Scanning Solution – from Start to Finish

### Operation

#### Intuitive Interface



With fully featured on-board software, using the Leica ScanStation P20 is both easy and powerful. Simple graphical menus guide users through tasks, while easy on-board set-up applications and field registration tools minimise office work.

#### Remote Control



With integrated WiFi, Leica ScanStation P20 can be remotely controlled by a Leica CS10/CS15 field controller or by an iPad, iPhone or similar Smartphone. Remote control ensures comfortable and safe use when the scanner is in a restricted environment and allows convenient display viewing.

#### All-in-One Portability



With fully integrated data storage and batteries, Leica ScanStation P20 is totally mobile. There is no need for separate data logging devices – internal data can be easily downloaded via USB or Ethernet interface. Hot-swappable batteries ensure continuous scanner operation.

#### High Resolution



An integrated auto-adjusting high-resolution camera delivers «photo-realistic» images that can be applied to point clouds to enhance interpretation and documentation.



### Workflow

#### Point Cloud Creation

With the simple press of a button, a high accuracy, 3D point cloud is generated for the area scanned. On-board set-up routines can automatically register and geo-reference each scan.

#### Model

The 3D point cloud can then be seamlessly imported into Leica Cyclone, Leica CloudWorx or other 3<sup>rd</sup> party modelling software to convert it into a model consisting of objects ready for final deliverable creation.

#### Deliverable Creation

Deliverables range from traditional 2D plans or simple ortho images to fully rendered 3D models and fly-throughs. Registered point clouds can also be directly delivered to stakeholders as scan data files or as intuitive, panoramic Leica TruView file sets. Leica Geosystems workflows provide complete flexibility.

### Applications

#### Process Plant & Marine

Capture complete, accurate as-built and as-fabricated information faster, more safely, and with less disruption – onshore or off-shore – even in extreme conditions.

#### Architecture & BIM

Easily control all phases of building projects, including seamless Building Information Modeling (BIM) integration. Accurate as-built information aids construction planning & QA and facilities management tasks.

#### Heritage & Archaeology

Capture accurate, detailed geometry of heritage sites without disturbing them for restoration or archive projects. The wide field of view and extended measurement range ensures fewer set-ups to complete the task.

#### Forensics & Public Safety

Within a matter of seconds, have an accurate 3D record of crime and accident scenes that can be used for subsequent reconstructions. Non-contact measurement does not disturb the scene or on-site activities. Accurate site models also aid security pre-planning.

#### Civil / Survey

With a full selection of surveyor-friendly work-flows, quickly and safely capture tunnels, roads, intersections, bridges, power lines, and more. Complete, high-definition scan data can eliminate the need for site re-visits, while ensuring accurate Topographic Maps, As-Built Surveys and Title Surveys.

# Leica ScanStation P20

## Your Trusted Solution

### Your Trusted Product Family

Leica Geosystems provides the most comprehensive portfolio of terrestrial laser scanners, with scanners that suit your application and business needs. Compatibility with standard survey equipment and accessories helps ensure efficient and flexible product deployment.

### Your Trusted Software

As a pioneer of both laser scanners and point cloud software, Leica Geosystems today offers an unmatched suite of software that lets you efficiently extract the deliverables that you need from high-definition point clouds. This includes powerful Leica Cyclone stand-alone software, convenient Leica CloudWorx plug-in solutions, and free Leica TruView software. Leica TruView lets anyone easily view, measure, and mark-up laser scans – even over the internet.

### Your Trusted Support

Leica Geosystems expansive organisation of knowledgeable professionals with years of terrestrial laser scanning experience is available to provide valuable support if ever needed. Minimise downtime with an expert readily available to guide you back to full productivity.

### Your Trusted Training

Leica Geosystems offers a complete portfolio of training solutions specifically designed to meet your requirements and schedule. Delivered by industry experts, training can be conducted online, in a classroom or one-to-one. Get the most out of your Leica Geosystems equipment at your own pace and convenience.

### Your Trusted Service

With a network of authorised technicians and workshops, Leica Geosystems offers unsurpassed technical service. From calibration and maintenance to repairs, your equipment is quickly returned in optimum condition ready to resume productive deployment.

### Your Trusted Active Customer Care

Active Customer Care is a true partnership between Leica Geosystems and its customers. Customer Care Packages (CCP) 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.





Scan the code to play the video!

Whether you're designing a modification to a complex refinery piping system, surveying a site or documenting a historic building, you need reliable measurements. Scanning systems and software by Leica Geosystems provide you with exact data of what's there. When your as-built information has to be right, rely on Leica Geosystems.

Leica Geosystems is best known for its pioneering scanning technology and trustworthy, total solutions: versatile, accurate laser scanners, industry standard point cloud software, and a full complement of accessories, training and support.

Precision, quality and service from Leica Geosystems.

**When it has to be right.**

**Swiss Technology**  
by Leica Geosystems



**Total Quality Management** – our commitment to total customer satisfaction.

Ask your local Leica Geosystems dealer for more information about our TQM program.

**Laser plummet:**

Laser class 1 in accordance with IEC 60825-1 resp. EN 60825

**Scanner:**

Laser class 2 in accordance with IEC 60825-1 resp. EN 60825

iPhone and iPad are trademarks of Apple Inc.



Illustrations, descriptions and technical data are not binding. All rights reserved. Printed in Switzerland – Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2013. 795795en – II.13 – galledia



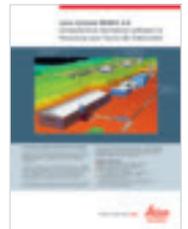
**Leica Scanstation C5**  
Product information and specifications



**Leica Scanstation C10**  
Product information and specifications



**Leica Cyclone REGISTER**  
Product information



**Leica Cyclone MODEL**  
Product information

For more detailed information, please visit [www.leica-geosystems.com/scanstation\\_p20](http://www.leica-geosystems.com/scanstation_p20)