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 an eye-safe Class 2 laser, and time-of-flight range measurements enhanced by Waveform Digital Imaging (WFD) technology, the Leica ScanStation P20 measures with an incredible speed of up to 1 million points per second. 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°C to +50°C, ingress protection rating of IP54 and Leica Geosystems design and manufacture, downtime due to extreme environmental conditions is minimise.

Check & Adjust
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.

Certainty Matters
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 users to ensure perfect field alignment and subsequently less post-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
<table>
<thead>
<tr>
<th></th>
<th>Max 1 million pps</th>
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<tbody>
<tr>
<td>Range</td>
<td>Max 120 m</td>
</tr>
<tr>
<td>3D point accuracy</td>
<td>3 mm at 50 m</td>
</tr>
<tr>
<td>Up to 10 m</td>
<td></td>
</tr>
<tr>
<td>Laser class</td>
<td>2</td>
</tr>
<tr>
<td>Angular accuracy</td>
<td>8° (horizontal/vertical)</td>
</tr>
<tr>
<td>Onboard storage</td>
<td>256GB 5G0</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C to +50°C</td>
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</tbody>
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Leica ScanStation P20
One Scanning Solution – from Start to Finish

Operation

Intuitive Interface
With its fully featured onboard software, Leica ScanStation P20 is both powerful and easy to use. Simple, graphical menus guide users through tasks, while easy-to-learn setup and calibration tools minimize setup work.

Remote Control
With integrated Wi-Fi, Leica ScanStation P20 can be remotely controlled by a Leica CloudView Field controller or by an iPod, iPhone or similar Smartphone. Remote control ensures comfortability and safety even when the scanner is in a restricted area and allows convenient display viewing.

Workflow

Point Cloud Creation
With the simple press of a button, a high-accuracy, 3D point cloud is generated for the area scanned. Onboard setup routines can automatically register and georeference each scan.

Model
The 3D point cloud can then be seamlessly imported into Leica Cyclone, Leica CloudWorx or another 3rd-party modeling 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 CloudWorx scenes. 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 offshore – even in extreme conditions.

Architecture & BIM
Easily control all phases of building projects, including scanning, 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 archiving projects. The wide field of view and extended measurement range means 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. High-contrast measurement does not disturb the scene for on-site activities. Accurate site models aid in security pre-planning.

Civil / Survey
Also a full selection of surveyor-friendly workflows, quickly and safely capturing features such as land, infrastructure, bridges, power lines, and more. Complete, high-definition scan data can eliminate the need for sitework visits, while ensuring accuracy, topographic Maps, As-Built Surveys, and 3D Surveys.

All-in-One Portability
With fully integrated data storage and battery, 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 scanning operations.

High Resolution
An integrated, ultra-slim digital scanner delivers “photo realistic” images that can be applied as point clouds to manage interpretation and documentation.
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 organization of knowledgeable professionals with years of terrestrial laser scanning experience is available to provide valuable support if ever needed. Minimize 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 authorized technicians and workshops, Leica Geosystems offers unsurpassed technical service. From calibration and to 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 of Leica Geosystems customer portal provides a wealth of information 24/7.
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.