For 2D & 3D civil/survey projects

Leica Cyclone SURVEY combines high performance with a rich set of survey-specific tools for analysing laser scan data and converting the data into deliverables.

Cyclone SURVEY (a lower cost, survey-specific version of Leica Cyclone MODEL) boasts powerful visualisation and point cloud navigation plus a complete tool set for High Definition Surveying (HDS) applications in engineering, construction and asset management.

Cyclone SURVEY provides unmatched office productivity by automating many time-consuming tasks and even letting multiple users work on the same data sets simultaneously – thanks to Leica Cyclone’s Object/Database foundation. Finally, Cyclone SURVEY reflects the data quality & accuracy advantages that users worldwide expect from Leica Geosystems.

Features and Benefits

- New! Floor Flatness/Floor Levelness tool that automatically calculates a report according to ASTM1155 standard
- Import project data from Leica Pegasus systems
- Direct import from DotProduct handheld scanner solutions
- iSTAR and Spheron panoramic camera support
- Breakline generation from feature coded templates
- SmartPicks and Points on Grid
- Virtual Surveyor data collector emulation
- Contours, cross-sections, profiles
- TIN/Mesh creation, including grid option
- Volumes & areas
- Clearances
- Texture mapping with Auto-Align panos to scans, supporting iSTAR, Spheron, and Nodal Ninja workflows
- Texture mapping with HDR Tone Map editor
- Full set of import/export utilities
- Fly Mode for smooth, 3D fly-through navigation, including 3D mouse support

Leica Cyclone SURVEY 9.1
Processing laser scans into civil/survey deliverables
Efficient point cloud manipulation & navigation

Leica Cyclone SURVEY has many features that let users work efficiently with rich laser scan data sets. Cyclone’s Level of Detail (LOD) graphics display and visualisation modes allow users to “see through” walls, apply shaded rendering, or enhance edges for improved comprehension of dense point clouds. Texture mapping tools allow users to accurately “drape” photos of the scanned scene onto point clouds for an even more realistic viewing experience. Cyclone SURVEY’s friendly key plan and TruSpace panoramic viewing modes provide intuitive navigation and viewing options.

High-performance geometric processing

Accurately produce a selected geometry type, such as planes and topographic surfaces. Least-squares fitting and quality-of-fit statistics ensure reliable results, while Cyclone’s advanced memory management provides high performance.

Rich tool set for civil/survey and other applications

For excavation and grading, Surface Deviation tools provide accurate quantity calculations. Volume and area for cut and fill are precisely calculated. Output options include volumes, contours, and/or tables including elevation differences at a user-specified grid sample. A Clearance tool even finds and reports absolute minimum vertical and horizontal clearances for overpasses, bridges, interchanges, and overhead sign structures. A Virtual Surveyor tool emulates a data collector for creating topographic maps. An all new Alignment/Station Manager has the ability to generate templates to easily create breaklines, cogo points, and cross section lines. Also new is SmartPicks and Points on Grid to enhance the tool set for Civil/Survey deliverables.

Leica Geosystems HDS software family

Cyclone SURVEY is part of a full software family for managing laser scan data. Check the web address below for additional information.

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Ground surface TINs and other meshes are easily created and offer great value. Here is an automated report analysing cut and fill quantities using before-and-after scan data of a ground surface.

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**Leica Cyclone SURVEY Specifications**

**Hardware and System Requirements**

<table>
<thead>
<tr>
<th>Minimum Specifications</th>
<th>Recommended Specifications</th>
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</thead>
<tbody>
<tr>
<td>Processor: 2 GHz Dual Core processor or better</td>
<td>Processor: 3.0 GHz Quad Core w/ Hyper-threading or higher</td>
</tr>
<tr>
<td>RAM: 2 GB (4 GB for Windows 7)</td>
<td>RAM: 32 GB’s or more 64 bit OS</td>
</tr>
<tr>
<td>Hard Disk: 40 GB</td>
<td>Hard disk: 500 GB SSD Drive</td>
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<tr>
<td>Display: SVGA or OpenGL accelerated graphics card (with latest drivers)</td>
<td>Large project disk option: RAID 5, 6, or 10 w/ SATA or SAS drives</td>
</tr>
<tr>
<td>Supported operating systems: Windows 7 (32 or 64 bit), Windows 8 &amp; 8.1 (64 bit only), Windows 10 (64 bit only)</td>
<td>Display: Nvidia GeForce GTX 680, Quadro K4000 or ATI Radeon 7850 or better, with 2GB’s memory or more</td>
</tr>
<tr>
<td>File System: NTFS</td>
<td>Operating system: Microsoft Windows 7 – 64bit</td>
</tr>
<tr>
<td>File system: NTFS</td>
<td><strong>store in JetStream ProjectVault</strong></td>
</tr>
</tbody>
</table>

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*Reference the Leica Cyclone 9.1 Technical Specifications document for a complete listing of product specifications.

**Enabled if Generator is licensed and configured correctly on JetStream ProjectVault