Leica Cyclone REGISTER
The gold-standard for point cloud registration

Speed
Available automation features, friendly wizards and powerful algorithms provide unsurpassed office productivity - even for very large data sets. Auto alignment allows fast and automatic alignment of scans at import or post import. Users can also take advantage of registration options based on scan targets, scene features, overlapping points and/or survey data to speed the registration process.

Scale
Cyclone REGISTER is the industry’s best and most reliable solution to register large data sets. Whether you are working with a handful of scans or many thousand, Cyclone REGISTER is equipped to handle the task. Cyclone REGISTER accepts data from all your point cloud and imaging sensors with ease and lets you work with all your data simultaneously.

Simplicity
Cyclone REGISTER brings unparalleled simplicity to complex point cloud registrations. During or even post-import, users can improve their auto-alignment speeds and accuracies via SmartAlign by manually placing scans in their approximate positions or automatically connecting them by time captured or distance between scans. For users who prefer a graphical display of their data during registration, Visual Alignment allows them to position scans based on common geometry via an easily legible high-contrast visualised point cloud.

- when it has to be right
## Leica Cyclone REGISTER

**Auto Alignment**
Automatically creates cloud-to-cloud alignments and automatically creates and opens a registration workflow window.

**SmartAlign**
Place scan positions on your sitemap (whatever it is, satellite image, hand sketch, etc.) to enhance productivity and accuracy of Auto-Align results.

**Visual Alignment**
Includes the 2D thumbnail view and the Visual Alignment window.

**Target management**
Target-based registration; geo-reference data to survey control data; highly optimised wizard-driven capability.

**Constraint management**
Cyclone Object Database Technology provides fast, simple, scalable point cloud data management.

**Traverse management**
Office-side traverse management.

**Registration Diagnostics**
Overall accuracy reports.

**Import**
Point cloud data formats: XYZ, PTS, PTX, E57, ZFS, DP, FLS, SLW, DXF.

**Export**
Point cloud data formats: XYZ, PTS, PTX, E57, DXF, PCI/CWF, DBX.

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### SYSTEM REQUIREMENTS

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Windows® 7 [32 or 64 bit], Windows®® &amp; 8.1 (64 bit only), Windows® 10 (64 bit only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARDWARE</td>
<td>MINIMUM</td>
</tr>
<tr>
<td>Processor</td>
<td>2 GHz Dual Core processor or better</td>
</tr>
<tr>
<td>RAM</td>
<td>2 GB (4 GB for Windows 7)</td>
</tr>
<tr>
<td>Hard disk</td>
<td>40 GB</td>
</tr>
<tr>
<td>Large project disk option</td>
<td>RAID 5, 6, or 10 w/ SATA or SAS</td>
</tr>
<tr>
<td>Display</td>
<td>VGA or OpenGL accelerated graphics card (with latest drivers)</td>
</tr>
<tr>
<td>File system</td>
<td>NTFS</td>
</tr>
<tr>
<td>Note</td>
<td>Ensure that minimum requirements for both publishing and viewing are observed for best results.</td>
</tr>
</tbody>
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*See Leica Cyclone REGISTER 360 data sheet and flyer for more information on the product and interoperability with Cyclone REGISTER.


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Auto Alignment tool aligns point clouds together and creates and opens a registration automatically for fast and simple registration completion.

A scan thumbnail window provides the user with a clear view of all scans within a project. Scans can be viewed and aligned visually right after import.