Leica Cyclone BASIC 8.1

Comprehensive laser scan software utility for field & office



Powerful yet affordable 3D point cloud visualization, measurement, markup, and data exchange software for professionals.

Leica Cyclone BASIC provides professionals with a set of tools for efficiently managing and executing laser scanning/High Definition Surveying (HDS) projects. Professionals can collect and analyze laser scan data, while collaborating for better informed project decisions.

In the field, Cyclone BASIC operates time-of-flight and phase-based Leica Geosystems scanners. Users can manage scan parameters; scan target acquisition; field QA; digital imaging; geo-referencing and more depending on scanner capabilities.

In the office, Cyclone BASIC provides viewing and navigating of point clouds and 3D models, as well as measurement and markup/redlining. Cyclone BASIC is a versatile "back-office" data exchange module, supporting imports and exports of a wide range of formats.

Features and Benefits

- Operates time-of-flight and phase-based Leica Geosystems scanners
- Powerful, smooth 3D fly-through navigation
- Measurements between scan points and/or modeled surfaces
- Markup scan images with redline tools
- Field geo-reference, auto-registration, traverse, resection, and known point setup*



Leica Cyclone BASIC 8.1 Point cloud scanning, visualization, measurement, markup and data exchange





Leica Cyclone BASIC operates time-of-flight and phasebased Leica Geosystems scanners with a laptop control option: HDS2500, HDS3000, HDS4500, HDS6000, HDS6100, HDS6200, HDS7000, ScanStation, ScanStation 2 and ScanStation C10.

Powerful 3D Navigation and Visualization

Leica Cyclone BASIC lets users work efficiently with rich laser scan data sets and associated models. Users can smoothly fly through and around point clouds, as well as pan, zoom, and rotate views. Cyclone's Level of Detail graphics display engine provides highly efficient 3D visualization and manipulation of even the largest point clouds and models.

For improved comprehension of point clouds, advanced visualization modes allow users to see "through" walls, apply shaded rendering, enhance edge display, and more. Additional visualization tools such as layers and 3D Limit Boxes allow users to efficiently focus on specific areas of laser scan and model data.

Scan Data Management, Measurement and Markup

Import scan data from virtually any scanner and export in popular formats as needed. After import, users can access a rich set of tools for measuring directly between selected scan points and/or modeled surfaces. Measurements stored during one "session" can be recalled later and managed. Users can also easily markup scan images with redline tools to effectively communicate with others. "Redline Manager" allows users to handle multiple markups at once; including providing appropriate view points for individual redlines.

Comprehensive Scanner Control Plus Versatile Field Survey Options

Leica Cyclone BASIC offers simple and advanced scanner control. Smart-Scan Technology™ provides fully adjustable, horizontal and vertical scan density control. Scripting allows different parts of a scene to be automatically scanned at different scan densities. Traditional traverse methods are supported including side shots. Traverse editor supports non-sequential station setups and full reconfiguring and management of traverse data in the field and office. Targets are recognized and extracted and QA checked.

Leica Cyclon	e BASIC 8.1 Specifications*	Hardware and System Requirements
Controls	Vertical & horizontal scan density control Scripting capability for automatic sequencing of scans	Minimum Specifications Processor: 2 GHz Dual Core processor or better
Workflow Control data Camera	Automatic target acquisition, Traverse & Resection Auto compare control data to scan data In-field data geo-referencing Acquire and display digital image (scanner with internal or external camera)	RAM: 2 GB (4 GB for Windows Vista or Windows7) Hard disk: 40 GB Display: SVGA or OpenGL accelerated graphics card (with latest drivers) Supported Operating Systems: Windows XP (SP2 or higher) (32 or 64)***, Microsoft Vista** ***, Windows 7 (32 or 64), or Windows 8 & 8.1 (64bit only) File system: NTFS Recommended Specifications Processor: 3.0 GHz Quad Core w/ Hyper-threading or higher RAM: 32 GB's or more 64 bit OS
Viewing	Full 3D fly, pan, zoom, rotate; panoramic, full-dome viewing options Control color mapping using intensity, true-color, gray scale, color by elevation, etc.	
Hardware	Calibration check, Dual Axis Compensator management Control of: Leica HDS2500 and HDS3000 HDS4500, HDS6000, HDS6100, HDS6200, HDS7000, Leica ScanStation, ScanStation 2 and ScanStation C10	
Import	Data from CAD via COE (Cyclone Object Exchange) Control data from ASCII formats & X-Function DBX	Hard disk: 500 GB SSD Drive Large project disk option: RAID 5, 6, or 10 w/ SATA or SAS drives
Export	Point data in standard formats: XYZ, PTS, PTX, DXF, X-Function DBX, Land XML, etc. Point data in special formats: PTZ, ZFS, TOPO pci & cwf Image and model data: COE, BMP, JPEG, TIFF	Display: Nvidia GeForce 680 or ATI 7850 or better, with 2 GB's memory or more Operating system: Microsoft Windows 7 - 64bit File system: NTFS

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- Reference the Leica Cyclone 8.1 Technical Specifications document for a complete listing of product specifications.
- ** Some systems may not support Windows Vista's Desktop Windows Manager (DWM) with Leica Cyclone and must be operated in Windows Classic Look.
- *** Can only borrow or be a floating license client.

