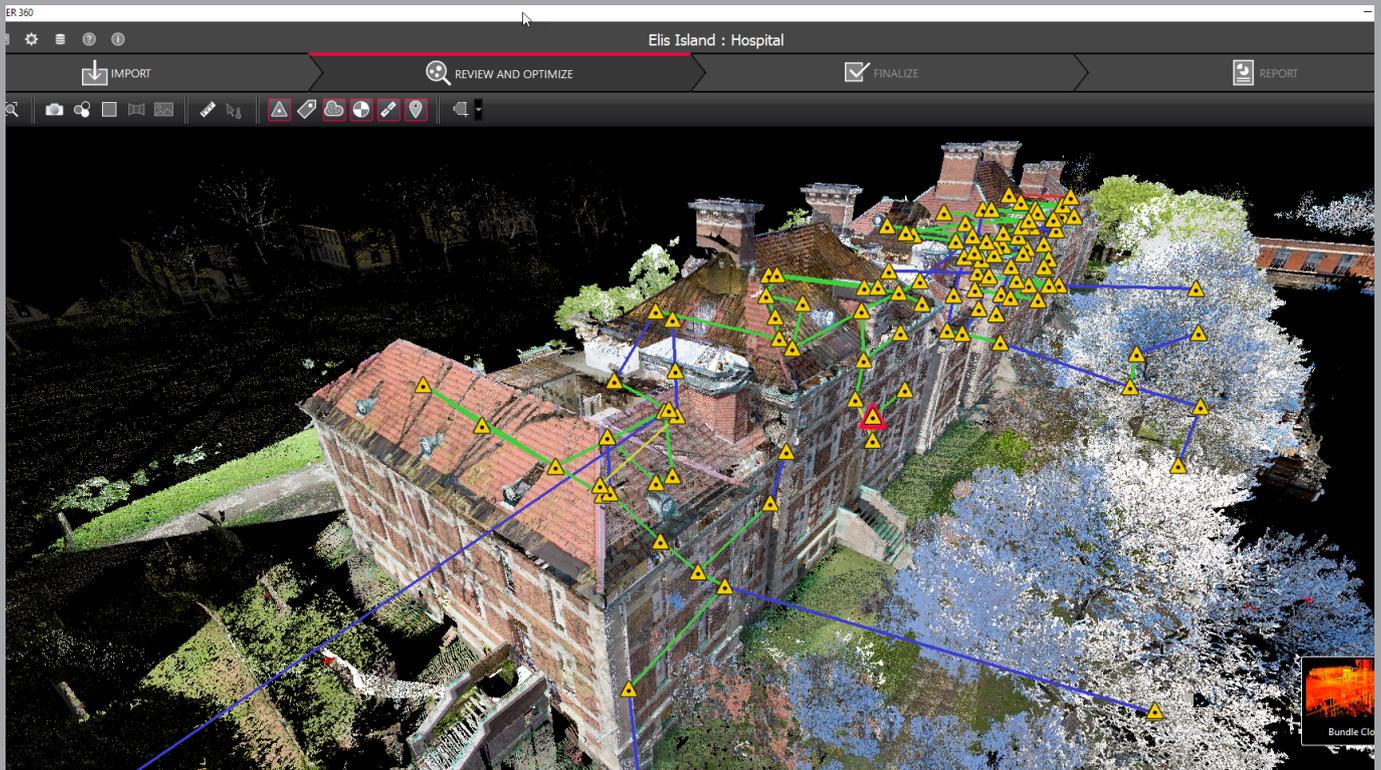


# Leica Cyclone and Leica CloudWorx Technical Specifications



Valid as of August 2018

leica-geosystems.com



- when it has to be **right**

**Leica**  
Geosystems

PART OF  
**HEXAGON**

| Key |  |
|-----|--|
| 1   | These types can be created using best-fit methods  |
| 2   | As delivered in database, cannot modify  |
| 3   | Enabled if licensed copy of CloudWorx is installed on the same machine   |
| †   | These types can use catalog tables.  |
| 4   | No grip editing for size. Enabled with a Cyclone PUBLISHER Pro or Cyclone JetStream PUBLISHER license  |
| 5   | Requires TruView Enterprise or Cloud license   |
| 6   | Finished registrations are imported as a unified point cloud, unfinished registrations are imported as separate scan worlds into an unfinished registration. |
| 7   | Requires Cyclone JetStream PUBLISHER license   |
| ◇   | Requires Cyclone PUBLISHER Pro or Cyclone JetStream PUBLISHER or Cyclone TruView PUBLISHER license   |
| 8   | Not in Cyclone REGISTER 360  |
| *   | Requires Cyclone TruView PUBLISHER or Cyclone PUBLISHER Pro license  |
| x   | Requires Cyclone JetStream PUBLISHER or Cyclone PUBLISHER Pro license  |
| #   | Requires Cyclone MODEL VR PUBLISHER license  |
| +   | Requires Cyclone PUBLISHER Pro license   |

# Leica Cyclone Technical Specifications

| REGISTRATION, VISUALISATION, MODELLING & QUERY TOOLS                                  | BASIC          | REGISTER 360 | REGISTER       | MODEL | SURVEY | IMPORTER       | Free VIEWER       |
|---|----------------|--------------|----------------|-------|--------|----------------|-------------------|
| 3D navigation, Pan, Zoom, Rotate  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| 3D mouse support  |                |              | ◆              | ◆     | ◆      |                | ◆/0               |
| Panoramic view mode   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| Align to surface view mode  |                | ◆            |                |       |        |                |                   |
| Cloud Level of Detail for fast visualisation  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| Model Level of Detail for fast visualisation  | ◆              |              | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| Decimation of point clouds  | ◆              |              | ◆              | ◆     | ◆      |                |                   |
| Selectable levels of point cloud density  | ◆              |              | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| Quickly show/hide point clouds  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆                 |
| Point Cloud Color map viewing options   |                |              |                |       |        |                |                   |
| Intensity mapping   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆ <sup>2</sup> | ◆/0               |
| Greyscale   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆ <sup>2</sup> | ◆/0               |
| Image Color mapping   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆ <sup>2</sup> | ◆/0               |
| Infrared  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆ <sup>2</sup> | ◆/0               |
| Elevation Based Color Mapping   | ◆ <sup>2</sup> |              | ◆ <sup>2</sup> | ◆     | ◆      | ◆ <sup>2</sup> | ◆ <sup>2</sup>    |
| Color clouds per setup  |                | ◆            |                |       |        |                |                   |
| Color clouds per bundle   |                | ◆            |                |       |        |                |                   |
| Gradient Background   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆/0               |
| Manually map external digital photo to point clouds (Texture cube map, not pano)      | ◆              |              | ◆              | ◆     | ◆      |                |                   |
| Create Multi-image from cube-mapped images  | ◆              | ◆            | ◆              | ◆     | ◆      |                |                   |
| Multi-image blending  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              |                   |
| Texture map colours onto point clouds   | ◆              | ◆            | ◆              | ◆     | ◆      | ◆ <sup>2</sup> | ◆ <sup>2</sup> /0 |
| Limit Box for efficient viewing and interaction of selected regions                   | ◆              |              | ◆              | ◆     | ◆      |                | ◆ <sup>4</sup> /0 |
| Limit Box Manager to organise multiple limit boxes                                    | ◆              |              | ◆              | ◆     | ◆      |                | ◆ <sup>2</sup> /0 |
| QuickSlice  |                |              | ◆              | ◆     | ◆      |                |                   |
| TruSlicer   |                | ◆            |                |       |        |                |                   |
| Slice along X,Y and Z axis  |                | ◆            |                |       |        |                |                   |
| Color clouds by setup   |                | ◆            |                |       |        |                |                   |
| Set Limit Box by fence  | ◆              |              | ◆              | ◆     | ◆      |                | 0                 |
| Auto Bundle (grouping) of scans   |                | ◆            |                |       |        |                |                   |
| Visualise bundle's Link network   |                | ◆            |                |       |        |                |                   |
| View multiple setups and bundles in same view   |                | ◆            |                |       |        |                |                   |
| Global registration of multiple scans   |                | ◆            | ◆              |       |        |                |                   |
| Geo-referencing   |                | ◆            | ◆              |       |        |                |                   |
| Cloud-to-Cloud registration   |                | ◆            | ◆              |       |        |                |                   |
| Auto Align Scans  |                | ◆            | ◆              |       |        |                |                   |
| Smart Align for Auto Align  |                | ◆            | ◆              |       |        |                |                   |
| Visual Alignment  |                | ◆            | ◆              |       |        |                |                   |
| Automatic orientation for Visual Alignment  |                |              | ◆              |       |        |                |                   |
| Automated registration using HDS targets  |                |              | ◆              |       |        |                |                   |
| Optional prioritization of target-based registration over Cloud-to-Cloud registration |                | ◆            |                |       |        |                |                   |
| Automated registration across sitemaps  |                | ◆            |                |       |        |                |                   |
| Automatic registration from RTC360 VIS data   | ◆              | ◆            |                |       |        |                |                   |
| Editing Target labels/names   | ◆              | ◆            | ◆              |       |        |                |                   |
| View scanner locations  | ◆              | ◆            | ◆              | ◆     | ◆      | ◆              | ◆ <sup>2</sup> /0 |
| Unify point clouds  | ◆              |              | ◆              | ◆     | ◆      | ◆              |                   |
| Basic conceptual design & 2D drawing tools  |                |              |                | ◆     | ◆      |                |                   |
| Insertion of modelled objects/geometry  |                |              |                | ◆     |        |                |                   |
| Replication and editing of modelled objects   |                |              |                | ◆     | ◆      |                |                   |
| Planar patch editing  |                |              |                |       |        |                |                   |
| Make Square or Rectangular  |                |              |                | ◆     | ◆      |                |                   |
| Create/Fill Hole  |                |              |                | ◆     |        |                |                   |
| User-defined quality-of-fit checks  |                |              | ◆              | ◆     | ◆      |                |                   |
| Region growing  |                |              |                |       |        |                |                   |
| Plane   |                |              | ◆              | ◆     | ◆      |                |                   |
| Cylinder  |                |              | ◆              | ◆     |        |                |                   |
| Sphere  |                |              | ◆              | ◆     |        |                |                   |

# Leica Cyclone Technical Specifications

| REGISTRATION, VISUALISATION, MODELLING & QUERY TOOLS                               | BASIC | REGISTER 360 | REGISTER | MODEL | SURVEY | IMPORTER | Free VIEWER       |
|--|-------|--------------|----------|-------|--------|----------|-------------------|
| Smooth surface to segment extraneous data  |       |              | ◆        | ◆     | ◆      |          |                   |
| Automated Pipe Run with elbows   |       |              |          | ◆     |        |          |                   |
| Virtual Surveyor™ to assign survey feature codes to points                         |       |              |          | ◆     | ◆      |          |                   |
| Mesh   |       |              |          |       |        |          |                   |
| Creation (basic, complex, TIN)   |       |              |          | ◆     | ◆      |          |                   |
| Intelligent decimation   |       |              |          | ◆     | ◆      |          |                   |
| Decimation based on user-specified grid spacing                                    |       |              |          | ◆     | ◆      |          |                   |
| Polyline and breakline support   |       |              |          | ◆     | ◆      |          |                   |
| Delete and add faces   |       |              |          | ◆     | ◆      |          |                   |
| Fill in holes  |       |              |          | ◆     | ◆      |          |                   |
| Generate contours from meshes  |       |              |          | ◆     | ◆      |          |                   |
| Scan Cleaning  |       |              |          |       |        |          |                   |
| Single scan cleaning   |       | ◆            | ◆        |       |        |          |                   |
| Bundle cleaning  |       | ◆            |          |       |        |          |                   |
| Cross-SiteMap cleaning   |       | ◆            |          |       |        |          |                   |
| Support for double scan cleaning   | ◆     | ◆            | ◆        | ◆     | ◆      |          |                   |
| Surface Deviation  |       |              |          |       |        |          |                   |
| Cut/fill contours  |       |              |          | ◆     | ◆      |          |                   |
| Table output on user-specified grid  |       |              |          | ◆     | ◆      |          |                   |
| Points on user-specified grid  |       |              |          | ◆     | ◆      |          |                   |
| Generate cross-sections through point clouds along an alignment                    |       |              |          |       |        |          |                   |
| Alignment/Station Manager  |       |              |          | ◆     | ◆      |          |                   |
| Create Lines at Station  |       |              |          | ◆     | ◆      |          |                   |
| Create COGO Points, Breaklines & Cross Section Lines                               |       |              |          | ◆     | ◆      |          |                   |
| Create profiles, plans and sections  |       |              |          | ◆     | ◆      |          |                   |
| Import LandXML Alignment   |       |              |          | ◆     | ◆      |          |                   |
| Create, Save, @ Load Station Templates   |       |              |          | ◆     | ◆      |          |                   |
| Secondary Plan View Window   |       |              |          | ◆     | ◆      |          |                   |
| Ortho Image Extraction   |       |              |          | ◆     | ◆      |          |                   |
| User-defined QA parameters mapped to link and bundle errors                        |       |              |          |       |        |          |                   |
| Color-coded  |       | ◆            |          |       |        |          |                   |
| Optimized with graphics for color-blind users                                      |       | ◆            |          |       |        |          |                   |
| Station Notation display relative to an alignment                                  | ◆     |              | ◆        | ◆     | ◆      |          | ◆ <sup>2</sup> /0 |
| Fit edge template for curve extraction (e.g. curbs, flowlines)                     |       |              |          | ◆     | ◆      |          |                   |
| Measure & dimension point clouds and models  |       |              |          |       |        |          |                   |
| Slope distance   | ◆     | ◆            | ◆        | ◆     | ◆      |          |                   |
| ΔX, ΔY, ΔZ distances   | ◆     | ◆            | ◆        | ◆     | ◆      |          |                   |
| Geometric Object Volume  | ◆     |              |          | ◆     | ◆      |          |                   |
| Surface area   | ◆     |              |          | ◆     | ◆      |          |                   |
| Horizontal and Vertical Clearances   |       |              |          | ◆     | ◆      |          |                   |
| Angel to Horizontal  | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Angel to Vertical  | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Back angle   | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Cut/fill volume  | ◆     |              |          | ◆     | ◆      |          |                   |
| Piping takeoff query   |       |              |          | ◆     |        |          |                   |
| Automated visual interference checking   |       |              |          | ◆     |        |          |                   |
| Fit cylinders, structural steel from catalogues                                    |       |              |          | ◆     |        |          |                   |
| Insert piping components from catalogues (reducer, elbow, branch, flange, valve)   |       |              |          | ◆     |        |          |                   |
| Piping Mode to add insulation thickness, Line ID, specification, Symbol Key (SKEY) |       |              |          | ◆     |        |          |                   |
| Set object creation parameters   | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Create and manage object annotation  | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Output feature codes and annotated vertices, spheres, to ASCII                     | ◆     |              |          | ◆     | ◆      |          |                   |
| Generate 2D drawings from 3D models  |       |              |          | ◆     | ◆      |          |                   |
| 3D redlining   | ◆     |              |          | ◆     | ◆      |          |                   |
| Scanner simulation   | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Multiple coordinate system support   | ◆     |              | ◆        | ◆     | ◆      |          |                   |
| Assign colours & materials to objects  | ◆     |              | ◆        | ◆     | ◆      |          | ◆                 |
| Create and manage layers   | ◆     |              | ◆        | ◆     | ◆      |          | ◆                 |

# Leica Cyclone Technical Specifications

| REGISTRATION, VISUALISATION, MODELLING & QUERY TOOLS   | BASIC | REGISTER 360 | REGISTER | MODEL | SURVEY | IMPORTER | Free VIEWER |
|--|-------|--------------|----------|-------|--------|----------|-------------|
| Save/restore viewpoints  | ◆     |              | ◆        | ◆     | ◆      |          | ◇           |
| Save screen image as image file  | ◆     | ◆            | ◆        | ◆     | ◆      |          | ◇           |
| Object Grouping  |       |              |          | ◆     | ◆      |          |             |
| Geometry types that can be created:  |       |              |          |       |        |          |             |
| HDS flat targets   | ◆     |              | ◆        |       |        |          |             |
| HDS spherical targets <sup>1</sup>   | ◆     | ◆            | ◆        |       |        |          |             |
| Black/White targets  | ◆     | ◆            | ◆        |       |        |          |             |
| Patch (plane) <sup>1</sup>   |       |              | ◆        | ◆     |        |          |             |
| Extruded patch   |       |              |          | ◆     |        |          |             |
| Box <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Corner <sup>†</sup>  |       |              | ◆        | ◆     | ◆      |          |             |
| Steel shape <sup>†</sup> (e.g. I-beam)   |       |              | ◆        | ◆     |        |          |             |
| Cylinder <sup>†</sup>  |       |              | ◆        | ◆     | ◆      |          |             |
| Sphere <sup>†</sup>  |       |              | ◆        | ◆     |        |          |             |
| Vertex   |       |              | ◆        | ◆     | ◆      |          |             |
| Line   |       |              | ◆        | ◆     | ◆      |          |             |
| Elbow <sup>†</sup> , Reducing Elbow <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Cone <sup>†</sup>  |       |              |          | ◆     |        |          |             |
| Torus <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Reducer (Eccentric, Concentric) <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Flange (Blind, Weld-Neck) <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Pipe Tee <sup>†</sup>  |       |              |          | ◆     |        |          |             |
| Valve <sup>†</sup>   |       |              |          | ◆     |        |          |             |
| Polyline, Polygon  |       |              |          | ◆     | ◆      |          |             |
| Rectangle, Square  |       |              |          | ◆     | ◆      |          |             |
| Arc, Circle  |       |              |          | ◆     | ◆      |          |             |
| Ellipse  |       |              |          | ◆     | ◆      |          |             |
| Cubic spline   |       |              |          | ◆     | ◆      |          |             |
| Point-of-view camera   | ◆     |              |          | ◆     | ◆      |          | ◇           |
| Point-of-view camera (Height)  | ◆     |              |          | ◆     | ◆      |          | ◇           |
| Pointed (Ballistic) cone   |       |              |          | ◆     | ◆      |          |             |
| Environmental lighting   | ◆     |              |          | ◆     | ◆      |          | ◇           |
| Create fly-throughs and output sequence of image files or .AVI (Audio Video Interleave) file |       |              |          | ◆     | ◆      |          |             |
| Elevation check  | ◆     |              | ◆        | ◆     | ◆      |          |             |
| Pipe Modelling user interface  |       |              |          | ◆     |        |          |             |
| Auto Black & White Target Extraction   |       | ◆            | ◆        |       |        |          |             |
| Ortho Image output   | ◆     |              | ◆        | ◆     | ◆      |          | ◇           |
| Estimate normals   |       | ◆            | ◆        | ◆     | ◆      | ◆        |             |
| Scripting  |       |              |          | ◆     |        |          |             |
| Model Library  |       |              |          | ◆     |        |          |             |
| Automatic Pipe Finder  |       |              |          | ◆     |        |          |             |
| Create GeoTags   |       | ◆            |          | ◆     | ◆      |          | ◇           |
| Floor Flatness/Floor Levelness   |       |              |          | ◆     | ◆      |          |             |
| Customisable Registration Report   |       | ◆            |          |       |        |          |             |

| TruSpace\Keyplan\Sitemap\Map   | BASIC | REGISTER 360 | REGISTER | MODEL | SURVEY | IMPORTER | Free VIEWER |
|--|-------|--------------|----------|-------|--------|----------|-------------|
| Open\View KeyPlan  | ◆     |              | ◆        | ◆     | ◆      |          | ◇           |
| Create SiteMap   |       | ◆            |          |       |        |          |             |
| Create Map from OpenStreetMap's Slippy map (satellite or streetmap view) |       | ◆            |          |       |        |          |             |
| GPS locate Setups on satellite map                                       |       | ◆            |          |       |        |          |             |
| Create Hyper links in SiteMaps   |       | ◆            |          |       |        |          |             |
| Edit Hyperlinks in SiteMaps  |       | ◆            |          |       |        |          |             |
| Create KeyPlan   |       |              | ◆        | ◆     | ◆      |          | ◇           |
| Edit KeyPlan   |       |              | ◆        | ◆     | ◆      |          | ◇           |
| Open TruSpace  | ◆     |              | ◆        | ◆     | ◆      |          |             |
| Extract targets in TruSpace  |       |              | ◆        | ◆     | ◆      |          |             |
| Measurements in TruSpace   | ◆     |              | ◆        | ◆     | ◆      |          |             |
| View Multi-Image in TruSpace   | ◆     |              | ◆        | ◆     | ◆      |          |             |

# Leica Cyclone Technical Specifications

|   |    |    |    |    |    |    |    |
|---|----|----|----|----|----|----|----|
| Change Colour Mapping (RGB, Intensity, Greyscale, Infrared) | ◆  | ◆  | ◆  | ◆  | ◆  | ◆  | ◇  |
| Temperature readout within infrared view                    | ◆  | ◆  | ◆  | ◆  | ◆  |    |    |
| Open ModelSpace view from TruSpace                          | ◆  |    | ◆  | ◆  | ◆  |    |    |
| Publish TruView from KeyPlan                                | ◆* | ◆* | ◆* | ◆* | ◆* | ◆* | ◆* |
| Sync view- TruSpace to ModelSpace                           | ◆  |    | ◆  | ◆  | ◆  |    |    |
| Quick Limit box from TruSpace to ModelSpace                 | ◆  |    | ◆  | ◆  | ◆  |    |    |
| Load Points within Fence                                    | ◆  |    | ◆  | ◆  | ◆  |    |    |

| DATA IMPORT   | BASIC          | REGISTER 360 | REGISTER | MODEL          | SURVEY         | IMPORT | Free VIEWER    |
|---|----------------|--------------|----------|----------------|----------------|--------|----------------|
| ASCII (XYZ, SVY, PTS, PTX, TXT, Customized format)  | ◆              | PTX only     | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| PTZ, PTG, PTB   | ◆              | PTG only     | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Cyclone Object Exchange (COE) format (from AutoCAD, MicroStation, via COE Data Transfer)                      | ◆              |              | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| SCAN, SC2   | ◆              |              |          |                |                | ◆      | ◆ <sup>3</sup> |
| ZFS, ZFC  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| BMP, TIFF, JPEG, PNG  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Batch Import and Auto-Align Images (supports iSTAR, Nodal Ninja, Spheron)                                     | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◇              |
| LandXML   | ◆              |              | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| SIMA  | ◆              |              | ◆        | ◆              | ◆              | ◆      |                |
| Optech: ixf   |                |              | ◆        |                |                | ◆      |                |
| FARO: fls, fws, frp   |                | ◆            | ◆        |                |                | ◆      |                |
| RIEGL: rsp, 3dd   |                |              | ◆        |                |                | ◆      |                |
| LAS   | ◆              |              | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Cyclone REGISTER 360 archive file (RAF)   |                | ◆            |          |                |                |        |                |
| Import Cyclone REGISTER 360 Project   | ◆ <sup>6</sup> |              | ◆        | ◆ <sup>6</sup> | ◆ <sup>6</sup> |        |                |
| Import project data collected on ScanStation C10  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Import project data collected on ScanStation P15/P16/P20/P30/P40/P50  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Import project data collected on Pegasus scanners   | ◆              |              | ◆        | ◆              | ◆              | ◆      |                |
| Direct WiFi import of project data collected on BLK360  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| Import project data collected on RTC360 imaging scanner including Cyclone FIELD 360 links, assets and GeoTags | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      |                |
| E57   | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| DotProduct: dp  | ◆              |              | ◆        | ◆              | ◆              | ◆      | ◆ <sup>3</sup> |
| HeXML   | ◆              |              | ◆        | ◆              | ◆              | ◆      |                |
| Import *.blk data from BLK360 Data Manager  | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      | ◆              |
| LGS (Leica Geosystems Universal project file)   | ◆              | ◆            | ◆        | ◆              | ◆              | ◆      |                |

| DATA EXPORT/PUBLISH   | BASIC          | REGISTER 360   | REGISTER       | MODEL          | SURVEY         | IMPORTER       | Free VIEWER    |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| AutoCAD DXF R12   | ◆              |                | ◆              | ◆              | ◆              |                |                |
| Cyclone Object Exchange (COE) format (to AutoCAD, MicroStation via COE Data Transfer) | ◆              |                | ◆              | ◆              | ◆              |                |                |
| ASCII (XYZ, SVY, PTS, PTX, TXT, Customized format)                                    | ◆              | PTX/PTS        | ◆              | ◆              | ◆              |                |                |
| PTX as separate Setups  |                | ◆              |                |                |                |                |                |
| Binary Point Cloud (PTZ, PTB)   | ◆              |                | ◆              |                |                |                |                |
| PTG   | ◆              | ◆              | ◆              |                |                |                |                |
| BMP, TIFF, JPEG, PNG  | ◆              |                | ◆              | ◆              | ◆              |                | ◇              |
| Ortho Image, GeoTIFF, TWF (World File)  | ◆              |                | ◆              | ◆              | ◆              |                | ◇              |
| SDNF 3.0 (Intergraph Steel Detailing Neutral File)                                    |                |                |                | ◆              |                |                |                |
| PCF (Alias Piping Component File)   |                |                |                | ◆              |                |                |                |
| Leica System 1200   | ◆              |                |                | ◆              | ◆              |                |                |
| LandXML   | ◆              |                |                | ◆              | ◆              |                |                |
| Cyclone II TOPO CWF & PCI   | ◆              |                | ◆              | ◆              | ◆              |                | ◆              |
| CloudWorx-VR ALP <sup>3</sup>   | ◆              |                | ◆              | ◆              | ◆              |                |                |
| E57 unified   | ◆              | ◆              | ◆              | ◆              | ◆              |                |                |
| E57 separate Setups   | ◆              | ◆              | ◆              | ◆              | ◆              | ◆              | ◆              |
| Cyclone REGISTER 360 archive file (RAF)   |                | ◆              |                |                |                |                |                |
| LGS (Leica Geosystems Universal project file)   | ◆ <sup>+</sup> |
| TruView Local dataset   | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             |
| TVG   | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             | ◆*             |

# Leica Cyclone Technical Specifications

|                                 |    |    |    |    |    |    |    |
|---------------------------------|----|----|----|----|----|----|----|
| JSV                             | ◆X |
| CVR                             |    |    |    | ◆# |    |    |    |
| Publish to TruView Cloud        | ◆* | ◆* | ◆* | ◆* | ◆* | ◆* | ◆* |
| Publish to JetStream Enterprise | ◆X |

| OTHER GENERAL CYCLONE FEATURES   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Metric or imperial units of measure  |  |  |  |  |  |  |  |
| Decimal Degrees or Degrees, Minutes, Seconds angular units of measure <sup>8</sup> |  |  |  |  |  |  |  |
| Bearing unit of measure for Azimuth of Resection <sup>8</sup>                      |  |  |  |  |  |  |  |
| Simultaneous view of video image and scanned data image <sup>8</sup>               |  |  |  |  |  |  |  |
| Customisable, exchangeable user interface: hotkeys, toolbars <sup>8</sup>          |  |  |  |  |  |  |  |
| 64-bit large number support  |  |  |  |  |  |  |  |
| 64-bit graphics support  |  |  |  |  |  |  |  |
| Continuous auto-save   |  |  |  |  |  |  |  |
| Undo/Redo <sup>8</sup>   |  |  |  |  |  |  |  |
| Client/server object database foundation <sup>8</sup>                              |  |  |  |  |  |  |  |
| Multi-threading to take advantage of multiple processors                           |  |  |  |  |  |  |  |
| Hierarchical project layout  |  |  |  |  |  |  |  |
| Flexible license support   |  |  |  |  |  |  |  |
| Terminal Services support <sup>8</sup>   |  |  |  |  |  |  |  |
| Multi-user profile configuration management <sup>8</sup>                           |  |  |  |  |  |  |  |
| Incremental, intelligent loading of 3D models <sup>8</sup>                         |  |  |  |  |  |  |  |
| Parametric objects <sup>8</sup>  |  |  |  |  |  |  |  |
| Online help  |  |  |  |  |  |  |  |
| Adjust Capture Settings of BLK360  |  |  |  |  |  |  |  |
| Scan Density (High, Medium, Low)   |  |  |  |  |  |  |  |
| Image Quality (HDR or LDR)   |  |  |  |  |  |  |  |
| Image Exposure (EV-5 to +5)  |  |  |  |  |  |  |  |
| Set capture button delay (up to 60 seconds) <sup>8</sup>                           |  |  |  |  |  |  |  |
| Delete scans from BLK360   |  |  |  |  |  |  |  |
| Check Battery level of BLK360  |  |  |  |  |  |  |  |
| Check internal storage availability of BLK360                                      |  |  |  |  |  |  |  |
| Check Serial Number of BLK360  |  |  |  |  |  |  |  |
| Check Firmware Version of BLK360   |  |  |  |  |  |  |  |
| Set time on BLK360 internal clock  |  |  |  |  |  |  |  |



### **Leica Geosystems – when it has to be right**

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