

| X-PAD Office Fusion                                                      | PRO        | X-TOPO        | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|--------------------------------------------------------------------------|------------|---------------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| <b>General</b>                                                           | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Jobs management                                                          | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| System settings (units, precision, parameters, etc.)                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Data management (drawings, surveys, surfaces, point clouds, raster maps) | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Filters panel to manage entities visibility                              | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| 2D/3D advanced viewer                                                    | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Info commands (id, distance, area, angle)                                | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
|                                                                          |            |               |                |                   |                   |                          |                                    |                                      |
| <b>Import &amp; Data transfer</b>                                        | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| TPS/Digital level direct transfer (download)                             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| TPS/GPS/Digital Level data format                                        | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| X-PAD Survey and X-PAD Build                                             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Customizable ASCII import (points, measurements, codes)                  | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Autodesk DXF/DWG                                                         | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Adobe PDF vector format                                                  | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| LandXML (points, drawing, surfaces)                                      | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Google Earth KML/KMZ                                                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Esri Shape (points, drawing)                                             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| OBJ file (3D models)                                                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| GRD and ASC format (surfaces or DEM)                                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Raster map (PNG, JPG, BMP, TIFF, PDF) with World file for positioning    | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| BLK360 G1, BLK2GO scans direct transfer (download)                       | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Standard Points cloud data format (E57, LAS, PTS, PTX, ASCII)            | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Leica scanner Points cloud data format (LGS, BLK2GO, RTC360)             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |

| X-PAD Office Fusion                                                                   | PRO        | X-TOPO        | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|---------------------------------------------------------------------------------------|------------|---------------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| FARO colorized scans                                                                  | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| IFC models                                                                            |            |               |                |                   |                   |                          |                                    | ●                                    |
|                                                                                       |            |               |                |                   |                   |                          |                                    |                                      |
| <b>Export</b>                                                                         | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| TPS direct transfer (upload)                                                          | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| TPS/GPS data format                                                                   | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| X-PAD Survey and X-PAD Build                                                          | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Customizable ASCII export (points, measurements, codes)                               | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Autodesk DXF/DWG                                                                      | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Standard Points cloud data format (E57, LAS, PTS, ASCII)                              |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| OBJ (surfaces)                                                                        |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| WEBGL (surfaces)                                                                      |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| LandXML (points, surfaces)                                                            |            | ●             |                |                   |                   |                          |                                    |                                      |
| Google Earth KML                                                                      |            | ●             |                |                   |                   |                          |                                    |                                      |
| PDF3D                                                                                 |            | ●             |                |                   |                   |                          |                                    |                                      |
|                                                                                       |            |               |                |                   |                   |                          |                                    |                                      |
| <b>CAD</b>                                                                            | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Layers management                                                                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Snap to object                                                                        | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Drawing aids (ortho, grid, snap, automatic list)                                      | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Properties panel of selected objects                                                  | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Selection tools                                                                       |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Drawing commands (line, polyline, polygon, arc, circle, text, block)                  |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Annotation commands (linear, aligned, angular, radius, diameter, coordinates, object) |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |

| X-PAD Office Fusion                                                                                                    | PRO        | X-TOPO        | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|------------------------------------------------------------------------------------------------------------------------|------------|---------------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| Table of data fully customizable or dynamic                                                                            |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Editing commands (delete, move, copy, rotate, scale, align, trim, extend, offset, explode, linearize, chamfer, fillet) |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Editing polyline commands (open, close, insert, delete, join, invert, remove loops, reduce, grid of vertices)          |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Map view (OpenStreet Map, Bing Map, WMS, ...) and extraction of raster map                                             |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Second viewport                                                                                                        | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Fly mode and Panorama mode                                                                                             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Clip planes and Clipboxes                                                                                              |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Projection planes                                                                                                      |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Clean drawing commands (purge, keep only visible or only selected)                                                     |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Quick sections of 3D models                                                                                            |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Edges extraction from 3D models                                                                                        |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Creation of final drawings on paper size                                                                               |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Designer for plot box customization                                                                                    |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Object's report                                                                                                        |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Orthophoto generation                                                                                                  |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
|                                                                                                                        |            |               |                |                   |                   |                          |                                    |                                      |
| <b>Topography</b>                                                                                                      | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Management of topographic points (Simple)                                                                              | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Management of topographic points (Advanced)                                                                            |            | ●             |                |                   |                   |                          |                                    |                                      |
| Management of TPS & GNSS measurements (Simple)                                                                         | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Management of TPS & GNSS measurements (Advanced)                                                                       |            | ●             |                |                   |                   |                          |                                    |                                      |
| Management of Survey codes                                                                                             | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Cartographic coordinate systems                                                                                        |            | ●             |                | ●                 |                   | ●                        |                                    |                                      |
| GNSS localization systems                                                                                              |            | ●             |                | ●                 |                   | ●                        |                                    |                                      |

| X-PAD Office Fusion                                                                                         | PRO | X-TOPO | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|-------------------------------------------------------------------------------------------------------------|-----|--------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| Geoid corrections                                                                                           |     | ●      |                | ●                 |                   | ●                        |                                    |                                      |
| Calculation of coordinates from measurements (Simple)                                                       | ●   | ●      | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Calculation of coordinates from measurements (Advanced)                                                     |     | ●      |                |                   |                   |                          |                                    |                                      |
| Traverse adjustment                                                                                         |     | ●      |                |                   |                   |                          |                                    |                                      |
| Topographic utilities                                                                                       |     | ●      |                |                   |                   |                          |                                    |                                      |
| Calculation reports                                                                                         |     | ●      |                |                   |                   |                          |                                    |                                      |
| Georeferencing of raster maps                                                                               |     | ●      |                |                   |                   |                          |                                    |                                      |
| Automatic vectorization of monochromatic raster maps                                                        |     | ●      |                |                   |                   |                          |                                    |                                      |
| Raster editing: Transparent, Invert, Brightness/Contrast/Intensity, Crop                                    |     | ●      |                |                   |                   |                          |                                    |                                      |
| Photos manager                                                                                              |     | ●      |                |                   |                   |                          |                                    |                                      |
| Reference points manager                                                                                    |     | ●      |                |                   |                   |                          |                                    |                                      |
| Digital level data management and calculation                                                               |     | ●      |                |                   |                   |                          |                                    |                                      |
| Transformation commands (scaled, rigid, Helmert 3D)                                                         |     | ●      |                |                   |                   |                          |                                    |                                      |
| Coordinate transformation (map ⇔ map, map ⇔ geographic, geographic ⇔ geographic)                            |     | ●      |                |                   |                   |                          |                                    |                                      |
| Compare surveys coordinates and report                                                                      |     | ●      |                |                   |                   |                          |                                    |                                      |
|                                                                                                             |     |        |                |                   |                   |                          |                                    |                                      |
| SURFACES                                                                                                    | PRO | X-TOPO | X-SCAN         | AERIAL            | GROUND            | GNSS PP                  | NET ADJ                            | BIM                                  |
| Breaklines and boundary lines                                                                               |     | ●      |                |                   |                   |                          |                                    |                                      |
| Terrain 3D surfaces from points and points cloud                                                            |     | ●      |                |                   |                   |                          |                                    |                                      |
| Slopes symbols                                                                                              |     | ●      |                |                   |                   |                          |                                    |                                      |
| Contour lines                                                                                               |     | ●      |                |                   |                   |                          |                                    |                                      |
| Volume calculation from 3D surfaces (to elevation, to reference plane, between two surfaces, stockpile/pit) |     | ●      |                |                   |                   |                          |                                    |                                      |
| Automatic adjustment of reference plane to balance cut and fill volume                                      |     | ●      |                |                   |                   |                          |                                    |                                      |
| Calculation zones for volumes                                                                               |     | ●      |                |                   |                   |                          |                                    |                                      |

| X-PAD Office Fusion                                                           | PRO        | X-TOPO        | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|-------------------------------------------------------------------------------|------------|---------------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| Fill Analysis with graph and reports                                          |            | ●             |                |                   |                   |                          |                                    |                                      |
| Cross-sections from points, lines, surfaces and point clouds                  |            | ●             |                |                   |                   |                          |                                    |                                      |
| Customizable annotations and layout for cross-sections                        |            | ●             |                |                   |                   |                          |                                    |                                      |
| Apply raster map on surface as texture                                        |            | ●             |                |                   |                   |                          |                                    |                                      |
|                                                                               |            |               |                |                   |                   |                          |                                    |                                      |
| <b>3D Design</b>                                                              | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Lay polyline to surface, to a plane or to a fixed elevation                   |            | ●             |                |                   |                   |                          |                                    |                                      |
| Extract perimeter polyline of a 3D surface                                    |            | ●             |                |                   |                   |                          |                                    |                                      |
| Sideslopes creation: to another surface, to an elevation, to another polyline |            | ●             |                |                   |                   |                          |                                    |                                      |
| Sideslopes creation by width and height or slope                              |            | ●             |                |                   |                   |                          |                                    |                                      |
| Rapid design excavation command from building layout                          |            | ●             |                |                   |                   |                          |                                    |                                      |
| Ramp creation from top to bottom of excavation                                |            | ●             |                |                   |                   |                          |                                    |                                      |
| Close polyline triangulation                                                  |            | ●             |                |                   |                   |                          |                                    |                                      |
| Merge terrain model with design model                                         |            | ●             |                |                   |                   |                          |                                    |                                      |
| Remove part of the surface, Divide and cut surface                            |            | ●             |                |                   |                   |                          |                                    |                                      |
|                                                                               |            |               |                |                   |                   |                          |                                    |                                      |
| <b>Points Cloud</b>                                                           | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Render mode (Colour, Intensity, True colours, Distance, Elevation)            | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Point size                                                                    | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Point selection tools (Nearest, Lowest, Highest, Average)                     | ●          | ●             | ●              | ●                 | ●                 | ●                        |                                    |                                      |
| Point selection with Smart Magnifier                                          |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Manual clean of points cloud                                                  |            | ●             | ●              | ●                 | ●                 |                          |                                    |                                      |
| Editing tools (cut, copy)                                                     |            |               | ●              | ●                 | ●                 |                          |                                    |                                      |
| Merge of multiple scans in one single Points cloud                            |            |               | ●              | ●                 | ●                 |                          |                                    |                                      |
| Level points cloud to horizontal                                              |            |               | ●              |                   |                   |                          |                                    |                                      |

| X-PAD Office Fusion                                                                               | PRO | X-TOPO | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|---------------------------------------------------------------------------------------------------|-----|--------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| Automatic plane detection and projection on plane intersection                                    |     |        | ●              |                   |                   |                          |                                    |                                      |
| Point cloud registration (full auto, cloud to cloud, visual alignment, by targets)                |     |        | ●              |                   |                   |                          |                                    |                                      |
| Support of panoramic images                                                                       |     |        | ●              |                   |                   |                          |                                    |                                      |
| Terrain surfaces from Points cloud                                                                |     |        | ●              |                   |                   |                          |                                    |                                      |
| Mesh 3D from Points cloud (maximum 100000 points)                                                 |     |        | ●              |                   |                   |                          |                                    |                                      |
|                                                                                                   |     |        |                |                   |                   |                          |                                    |                                      |
| Image processing                                                                                  | PRO | X-TOPO | X-SCAN         | AERIAL            | GROUND            | GNSS PP                  | NET ADJ                            | BIM                                  |
| Import of photos                                                                                  |     |        |                | ●                 | ●<br>(max 75)     |                          |                                    |                                      |
| Import of navigation data (Exif, standard formats and custom ASCII)                               |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Import of Ground Control Points from custom ASCII files or from Fusion topographic points         |     |        |                | ●                 |                   |                          |                                    |                                      |
| Definition of cartographic or local coordinate system                                             |     |        |                | ●                 |                   |                          |                                    |                                      |
| Graphical selection of the cameras to use                                                         |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Fast workflow to define position of Ground Control Points                                         |     |        |                | ●                 |                   |                          |                                    |                                      |
| Automatic detection of Ground Control Points markers and auto centering                           |     |        |                | ●                 |                   |                          |                                    |                                      |
| Support of RTK GNSS missions and data processing without Control Points                           |     |        |                | ●                 |                   |                          |                                    |                                      |
| Calculation of dense points cloud with different level of details                                 |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Editing of the dense points cloud to clean and reduce calculation area                            |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Move, Rotate and Scale tools to resize and georeferenced the points cloud (terrestrial photos)    |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Digital Surface Model                                                                             |     |        |                | ●                 |                   |                          |                                    |                                      |
| Digital orthophoto (from DSM or from Mesh3D) with automatic split in parts if the size is too big |     |        |                | ●                 |                   |                          |                                    |                                      |
| Optimization of specific area of the orthophoto by using specific images                          |     |        |                | ●                 |                   |                          |                                    |                                      |
| 3D mesh with texture                                                                              |     |        |                | ●                 | ●                 |                          |                                    |                                      |
| Report with different level of details                                                            |     |        |                | ●                 |                   |                          |                                    |                                      |

| X-PAD Office Fusion                                                                                          | PRO        | X-TOPO        | X-SCAN<br>Next | X-PHOTO<br>AERIAL | X-PHOTO<br>GROUND | GNSS<br>POST-<br>PROCESS | GNSS<br>PPAdv<br>( NET<br>ADJUST.) | BIM<br>CONNECT<br>(opt) <sup>1</sup> |
|--------------------------------------------------------------------------------------------------------------|------------|---------------|----------------|-------------------|-------------------|--------------------------|------------------------------------|--------------------------------------|
| Generation of Solid orthophoto that allows to create 3D drawings working on the 2D orthophoto                |            |               |                | ●                 |                   |                          |                                    |                                      |
| 3D drawing by defining coordinates in 2 or more images                                                       |            |               |                | ●                 |                   |                          |                                    |                                      |
| Calculations with support of multi processors CPU and GPU                                                    |            |               |                | ●                 | ●                 |                          |                                    |                                      |
|                                                                                                              |            |               |                |                   |                   |                          |                                    |                                      |
| <b>GNSS Post Processing</b>                                                                                  | <b>PRO</b> | <b>X-TOPO</b> | <b>X-SCAN</b>  | <b>AERIAL</b>     | <b>GROUND</b>     | <b>GNSS PP</b>           | <b>NET ADJ</b>                     | <b>BIM</b>                           |
| Import of GNSS raw data from GeoMax receivers                                                                |            |               |                |                   |                   | ●                        |                                    |                                      |
| Import of RINEX raw data                                                                                     |            |               |                |                   |                   | ●                        |                                    |                                      |
| Editing of observations and intervals                                                                        |            |               |                |                   |                   | ●                        |                                    |                                      |
| Visualization of data and results on time diagram and on a map viewer                                        |            |               |                |                   |                   | ●                        |                                    |                                      |
| GNSS baseline processing                                                                                     |            |               |                |                   |                   | ●                        |                                    |                                      |
| Calculation by using precise ephemeris                                                                       |            |               |                |                   |                   | ●                        |                                    |                                      |
| Direct download of raw data from reference stations of several providers (SMARTnet, SOPAC, RGP, UNAVCO, NGS) |            |               |                |                   |                   | ●                        |                                    |                                      |
| Antenna manager                                                                                              |            |               |                |                   |                   | ●                        |                                    |                                      |
| GNSS baseline network adjustment                                                                             |            |               |                |                   |                   |                          | ●                                  |                                      |
| Customizable report                                                                                          |            |               |                |                   |                   | ●                        |                                    |                                      |
| Export observations in RINEX format                                                                          |            |               |                |                   |                   | ●                        |                                    |                                      |

<sup>1</sup> BIM CONNECT module requires X-TOPO main module