

## Pix4Dmapper 4.2 / **FEATURE LIST**

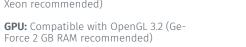
Aerial (nadir & oblique) & terrestrial imagery  Video (mph or avi format)  Automatically extracts still frames from videos to create a project  Any Camera (compact, SLR, themal, and the state project)  Any Camera (compact, SLR, themal, and subject price price)  Any Camera (compact, SLR, themal, and subject price)  Any Camera (compact, SLR, themal, and subject price)  Any Camera (rig support in support in the same project)  Camera rig support of an import  Known or customs reference coordinate system support in imperial or metric units  Camera exterior orientation support  External point cloud import  Processing templates  Automatic point dould with any camera, from small to large frames, from consumer-grade to his specialized cameras  Processing a susport in importation or project  External point cloud import  Processing templates  Automate processing and generation of outputs by using standard or customized templates  Rapid Check with quality Report  Rapid processing template for a quick dataset-check while still on site  Optimize internal camera parameters, such as IcDAR, to generate DSMs & orthomosaics  Processing template for a quick dataset-check while still on site  Optimize internal camera parameters, such as focal length, principal point of autocollimation distortions  Rolling shutter effect correction  Automatic point cloud densification  Automatic point cloud densification  Automatic point cloud densification  Produce a dense and detailed 3D point cloud, which can be used as a basis for DSM and 3D Automatic point cloud densification  Process automatically with or without known camera exterior orientations: (x, y, z, w, f, k)  Automatic point cloud densification  Process automatically with or without known camera exterior orientations: (x, y, z, w, f, k)  Automatic point cloud densification  Process automatically with or without known camera exterior orientations: (x, y, z, w, f, k)  Automatic point cloud ditering a  Automatic point cloud densification  Project merging and splitting  Quality Report  Pr	
Any camera (compact, \$1.8, thermal, multispectral, 60Pro, 360°, tetracam, 128° frame, 6.1 mages in 1,90° or Attinuation 1,90° or Attinu	latform
Multi-camera support in the same project  Camera rig support  Room or custom reference coordinate system support in imperial or metric units  Camera exterior orientation support  External point cloud import  Process images using known rig relatives from multiple synchronized cameras  Camera exterior orientation support  External point cloud import  Processing templates  Automatic print quality Report  Rolling shutter effect correction  Rolling shutter effect correction  Rolling shutter effect correction  Automatic point cloud densification  Automatic point cloud densification  Automatic point cloud densification  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic origithess and color correction  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic ingithess and color correction  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning point cloud  Automatic point cloud filtering & smoothing  Machine-learning poi	
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Ground control point (GCP ) / Manual tie point (MTP) editing  Annotate and edit 2D and 3D GCPs, check points, and MTPs with the highest accuracy, using both or images and 3D information at the same time	original
Ellipsoid error visualization  Visually assess the size of the error of the computed position of a GCP or MTP  District of the error of the computed position of a GCP or MTP  District of the error of the computed position of a GCP or MTP	
Project reoptimization Reoptimize camera positions and/or rematch images based on GCPs & MTPs to improve recon	nstruction
Carve: Remove points from 3D point cloud and create filters based on image content.	
Image masking  Mask: Clear the unwanted background in orthoplane results.  Global Mask: Disregard objects that appear in all images, such as a drone leg or a tripod	
Point cloud editing  Select, classify or delete points from the point cloud using various selection tools	
Orthoplane creation  Define a plane to generate a DSM and orthomosaic from building facades, bridge piles, etc	
Annotate and measure polylines and surfaces in the point cloud.	
Polyline and surface object creation  Accurately refine vertexes in multiple original images.	
3D mesh and DSM editing  Annotate & create surfaces in the point cloud to flatten an area or fill up holes in the mesh	sh and DSA
Fly-through animation  Create a virtual camera trajectory, play the animation in real-time and export it	
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Volume object creation  Volume object management	Ģ	Annotate and measure volumes based on the DSM
Volume object management		
	Ţ	Import and export selected volume bases in .shp files to enable easy monitoring of stockpiles on site.
Base adjustment	Ţ	Adjust the reference base to fit different terrain and obtain accurate measurement.
Region editing	Ţ	Create and edit regions on the orthomosaic, choose the best content from multiple underlying images and projection type to remove moving objects or artifacts
Local blending	Ţ	Edit only the desired portion of the orthomosaic, blend it in real-time and get the improved orthomosaic within minutes
Planar or ortho projection selection	Ţ	Select planar or ortho projection for each created region to remove artifacts
Radiometric adjustment interface	Ţ	Make the indices more reliable and accurate by correcting illumination effects using a radiometric target
Reflectance map	<u>_</u>	Generate an accurate Reflectance map at the preferred resolution as a basis of index maps
Multiple region management	<u>_</u>	Improve your analysis by managing and visualizing index values per region
Automatic NDVI map	<u>_</u>	Generate singleband and NDVI maps based on pre-defined formulas without user intervention
Index formula editing	Ţ	Create and save your own formulas choosing among each available input band and generate custom index maps
Class management	<u>_</u>	Create a basis of your annotated vector map by segmenting the data into classes using statistical algorithms (equal spacing, equal area, Jenks)
Prescription annotation	<u>_</u>	Match on-site scouts and observations by assigning annotations based on your decisions
Prescription map export	Ţ	Put your data into action and export the prescription map in .shp format
	<b>-</b> -	Nadir orthomosaics in GeoTIFF output format
2D output results:	Ţ	Orthomosaics from user-defined orthoplane in GeoTIFF output format
	<u>_</u>	Google tiles export in .kml and .html output formats
	<u>_</u>	Index maps (Thermal, DVI, NDVI, SAVI, etc.) in GeoTIFF and GeoJPG format
	<u>_</u>	Prescription maps in .shp format
2 FD contract records	<b>▲</b> 🖵	• Nadir DSMs and DTMs in GeoTIFF format
2.5D output results:	<u>_</u>	• DSMs from user-defined orthoplane in GeoTIFF output format
3D output results:		• 3D PDF for easy sharing of 3D mesh • Full 3D textured mesh in .obj, .ply, .dxf, and .fbx format • Tiled Level-of-detail (LoD) mesh in osgb and slpk (Esri) format • Point cloud in .las, .laz, .xyz and .ply output format • Contour lines in .shp, .dxf, .pdf format • User-defined vector objects in .dxf, .shp, .dgn and .kml format
	•	<ul> <li>Full 3D textured mesh in .obj and .fbx format</li> <li>Point cloud in .las output format</li> <li>Georeferenced annotations in .csv, GEOjson, and .shp format</li> </ul>
Fly-through animation and flighpaths		Export the animation in .mp4 and .avi formats and the fly-through waypoints and path in .csv format
Optimized camera position, external orientation and internal parameters, undistorted images	-	Export Aerial Triangulation results into traditional photogrammetry software solutions (e.g. INPHO, Leica LPS, DAT/EM Summit Evolution)
	•	Process on the cloud -using any web browser-
Web processing, visualization, inspection and collaboration	•	Visualize 2D maps and 3D models -mesh & point cloud visualization options-
	-	Instant measurement of distances and surfaces
	•	Inspect objects: visually connect a 3D point and the original images used to compute its location
	•	Share Projects with annotations via a simple link
	•	Embed project output in a webpage
	•	Real-time shading for digital surface model (DSM) visualization
Language Options  Cloud platform  Desktop platform	•	English, Spanish, Mandarin (zh-CH, zh-TW), Russian, German, French, Japanese, Italian and Korean English, Japanese
	Local blending Planar or ortho projection selection  Radiometric adjustment interface Reflectance map Multiple region management Automatic NDVI map Index formula editing Class management Prescription annotation Prescription map export  2D output results:  2.5D output results:  Fly-through animation and flighpaths Optimized camera position, external orientation and internal parameters, undistorted images  Web processing, visualization, inspection and collaboration  Language Options Cloud platform	Local blending  Planar or ortho projection selection  Radiometric adjustment interface  Reflectance map  Multiple region management  Automatic NDVI map  Index formula editing  Class management  Prescription annotation  Prescription map export   2D output results:  2.5D output results:  3D output results:  Fly-through animation and flighpaths  Optimized camera position, external orientation and internal parameters, undistorted images  Web processing, visualization, inspection and collaboration  Language Options  Cloud platform

## **HARDWARE SPECS**



CPU: (quad-core or hexa-core Intel i7/ Xeon recommended)





**HD:** (SSD recommended)



**OS:** Windows 7, 8, 10 64 bits Linux (Enterprise only)



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