

FEATURE LIST

	Features		Advantages
INPUTS	Aerial images in .jpg .jpeg formats	-	Process images taken from aerial manned or unmanned platform, nadir or slightly oblique (required: 0° - 45°; recommended: 10° - 35°)
	Multi-camera support in the same project	-	Create a project using images from different cameras and process them together
	Ground Control Points (GCPs)	-	Import and mark ground control points to improve the absolute accuracy of the project
	GCPs marks	-	Import of GCP marks from Pix4Dmapper into Pix4Dmatic
	Known reference coordinate system support	-	Select EPSG code from known coordinate systems libraries
	Geoid support	-	Support of most commonly used geoid models
PROCESSING	Multiprocessor CPU + GPU support	-	Increase the processing speed by leveraging the power of CPU cores and threads, as well as GPUs
	Backup mechanism	-	An automatic backup mechanism ensures that you do not lose your work when something unexpected stops Pix4Dmatic
	Calibration	-	Define the Image Scale and Keypoints parameters for the optimization of internal camera parameters (e.g. focal length, principal point of autocollimation and lens distortions) and external camera parameters (position, orientation) during calibration.
	Reoptimize	-	Reoptimize internal and external camera parameters based on GCPs to improve reconstruction.
	Point cloud densification	-	Define the point cloud Density and Number of Matches parameters to create a dense point cloud based on the sparse point cloud created during calibration
	Digital Surface Model	-	Define the Resolution cm/px, enable Surface smoothing with its Median filter radius (px) and enable Interpolation for the digital surface model creation.
	Orthomosaic	-	Create an orthomosaic based on the digital surface model and the images.
	Quality report	-	Assess the quality of the reconstruction between processing steps with the Quality Report.
RAYCLOUD	Project visualization	Ţ	Visualy assess the quality of optimized camera positions, automatic tie points, dense point cloud, digital surface model and orthomosaic
	GCPs	-	Annotate GCPs with the highest accuracy, using both original images and 3D information at the same time
	Checkpoints	-	Import and mark checkpoints to verify the absolute accuracy of the project
	Manual Tie Points (MTPs)	Ţ	Create and mark manual tie points to improve the calibration of your project
	Undo/Redo your changes	Ţ	Undo/Redo the actions and have no fear of losing a step
EXPORT	Dense point cloud (.las)	-	Export generated dense point clouds in .las file format.
	Digital Surface Model (.tiff)	-	Export generated digital surface model in a single .tiff or in tiles. LZW compression available
	Orthomosaic (.tiff)	-	Export generated orthomosaic in a single .tiff or in tiles. LZW compression available
	Quality report	-	Export the quality report to assess the accuracy and quality of projects
	Direct export to Pix4Dsurvey	-	Seamless export of processed Pix4Dmatic projects (.p4m) into Pix4Dsurvey. Together with Pix4D's proprietary .bpc file format, this leads to optimized loading and manipulation of large point clouds in Pix4Dsurvey.
LANGUAGE	Language option	-	English

HARDWARE SPECS



CPU: Quad-core or hexa-core Intel i5.



GPU: Any NVIDIA GPU that supports OpenGL 4.1 or higher.



Disk Space: 80 GB Free Space (2000-5000 images at 20MP). 160 GB Free Space (5000-10000 images at 20MP).



RAM: 32GB (2000-5000 images at 20MP). 64GB (5000-10000 images at 20MP).



OS: Windows 10, 64 bit or macOS Catalina.

