

	Features	Advantages
INPUTS	3DR imagery support	Process images taken by original 3DR Mapping Platforms
	Ground Control Point edit or import (.csv, .txt)	Import and edit Ground Control Points to improve the accuracy of your project
	Local, global and arbitrary coordinate reference system support in meter and feet	Choose from all known coordinate systems or your own local system
	Camera position and exterior orientation (omega, phi, kappa) support	Calculate optimized camera position and exterior orientation from a low grade GPS and without any IMU
PROCESSING	Rapid Check processing mode	Process initial project results in low-resolution in minutes only
	Rapid Check Quality report	Assess quality and completeness of acquired images while still on site
	Camera self-calibration	Optimize internal camera parameters, such as focal length, principal points and lens distortions, without the need of a camera calibration report
	Automatic Aerial Triangulation (AAT) and Bundle Block Adjustment (BBA)	Process automatically with or without known camera position and exterior orientation
	Quality report	Assess quality of projects
	Project merging	Process parts of projects individually and merge them into one project
	Project area definition	Import (.shp) or draw specific orthomosaic and point cloud densification/filtering areas to generate results inside specific boundaries
RAYCLOUD EDITOR	Project viewing	Assess flight plan, camera positions, inspect automatic keypoint matching and add uncalibrated cameras
	Manual tie point editing	Annotate and edit GCPs (2D & 3D), Check Points and Manual Tie Points with the highest accuracy, using both original images and 3D information at the same time
	Project reoptimization	Reoptimize camera positions and rematch images based on GCPs and manual tie points to improve reconstruction of difficult areas
	Fly-through animation	Create a virtual camera trajectory in the 3D point cloud, play the animation in real-time, export the animation as a video (in mp4 and avi format) and the flightpath waypoints in CSV format
OUTPUT RESULTS	2D output results	<ul style="list-style-type: none"> • Geo-referenced orthomosaics in GeoTIFF output format • Google tiles export in KML and HTML output format • Mapbox tiles in MB format
	Fly-through animations and flightpaths	Point cloud Fly-through animation in MP4 and AVI format

Hardware specifications:
 Minimum requirements: Windows 64bit / Vista, 7, 8, Server / 2-Core CPU / 4GB RAM
 Recommended: 6-Core CPU i7 or Xeon / 32GB RAM (or more depending on dataset size)