Agisoft Metashape is a cutting-edge software solution, with its engine core driving photogrammetry to its ultimate limits, while the whole system is designed to deliver industry specific results relying on machine learning techniques for post-processing and analysis tasks.

The software allows to process images from RGB or multispectral cameras, including multi-camera systems, into the high-value spatial information in the form of dense point clouds, textured polygonal models, georeferenced true orthomosaics and DSMs/DTMs. Further post-processing enables to eliminate shadows and texture artifacts from the models, calculate vegetation indices and extract information for farming equipment action maps, automatically classify dense point clouds, etc.
Very fast
& highly accurate

Based on the state-of-the-art technology developed by Agisoft, Metashape allows for very fast processing, providing at the same time consistent and highly accurate results both for aerial and close-range photography (up to 3cm for aerial, and up to 1mm for close-range photography).

Local or cloud processing

Agisoft Metashape is capable of processing of 50 000+ photos across a local cluster, thanks to distributed processing functionality. Alternatively, the project can be easily sent to the cloud to minimize hardware investment, with all the processing options being still available.

Intuitive UI
& stereo mode

The software package has a linear project-based workflow that is intuitive and can be easily mastered even by a non-specialist, while professional photogrammetrists can benefit from advanced features like stereo mode and have complete control over the results accuracy, with detailed report being generated at the end of processing.
Terrestrial laser scanners support Metashape 1.7 in addition to photogrammetric processing workflow of color and multispectral images presents functionality to join terrestrial laser scanner and camera data in one project.
Simultaneous adjustment of both laser scanner and camera positions allows to combine LiDAR and photogrammetric depth maps, which enables to benefit from LiDAR technology for interiors and photogrammetry for exteriors and photorealistic textures. Seamless integration makes it possible to apply full range of photogrammetric software tools to LiDAR data: markers support and automatic targets detection for manual alignment of scanner data, masking instruments to ignore unwanted objects, etc.
Improved depth maps

Metashape 1.7 includes new depth maps generation algorithm allowing to preserve thin structures in reconstructed models while efficiently filtering out noise on the final surface.
The algorithm, as most of the workflow steps, supports GPU-accelerated processing and distributed operation over network.
Automatic powerlines detection

Metashape 1.7 features functionality to automatically detect powerlines on the images and thus allows to perform large-scale powerlines inspection projects without need to invest in LiDAR equipment. The results in a form of a 3D polyline model for every wire can be exported for documentation and analysis in industry-specific tools or used for obstacle avoidance by mission planning algorithm within Metashape. Robustness of the results is ensured with catenary curve fitting algorithm.
Agisoft Cloud official release

We are proud to finally announce commercial release of Agisoft Cloud platform with flexible subscriptions including limited free plan for non-commercial use and scalable pay-as-you-go plan for your professional projects.
In line with Metashape 1.7 release Agisoft Cloud functionality is extended with sharing processing results option and embedding code generation tool to integrate your models in any website.
Seamless orthomosaic for Surveying & Mapping

Metashape is a perfect tool for aerial imagery processing. The functionality of the program is being constantly developed according to the tasks set by rapidly emerging UAS industry.

Metashape has proved to be a professional level post-processing tool capable of dense point clouds generation and classification for further exceptionally detailed DSMs/DTMs calculations and high-resolution seamless ortho-mosaics export, not to mention reconstruction of precise polygonal models of large scale objects. It is an indispensable part of GIS workflow starting with a UAV system.
Highly accurate measurements for Mining & Quarrying

Highly accurate DEMs produced by Metashape lay the grounds for precise area and volume measurements, both for excavations and piles. Once multiple flights performed at different time moments, Metashape allows for volume change tracking, soil erosion and glacier studies.

Automatic non-coded targets detection capability saves up on manual work in inspection projects done on a regular basis.
Customized vegetation index calculation for Precision Agriculture & Environmental Management

With support for panchromatic, multispectral and thermal imagery, Metashape seamlessly integrates into workflows involving processing of data from diverse sources, like vegetation and soil analysis, fires and night studies, etc.

Vegetation indices calculation according to a user-defined formula allows to analyze crop problems and generate prescriptions for variable rate farming equipment.
Consumer camera support for Archaeology & Documentation

Archaeology more and more often relies on photogrammetric approaches today, be it a need to model an artifact or a demand for an excavation mapping.

Thanks to the capability to process imagery from any digital camera, Metashape is widely used in various archaeological projects both up in the mountains and deep under the water, including special researches like greenery pattern studies to find ancient ruins under the ground or rock art documentation and analysis projects.
Oblique imagery support for Architecture & Cultural Heritage Preservation

Numerous projects prove that Metashape is a quality tool to solve the tasks of facade and building modeling.

With support for oblique imagery processing, Metashape allows to reconstruct the whole building, which can be employed for virtual tours creation, with reconstruction results being exhibited as illustrative models of large-scale cultural heritage objects. 3D models of partially ruined monuments and artifacts generated with Metashape present reliable basis for restoration works thanks to exceptional accuracy of reconstruction results.
Photorealistic textures for Visual Effects & Game Design

Thanks to being highly detailed and photorealistic, Metashape models meet the strict requirements of professional animation studios, which successfully employ the software for movie and game production.

Face and body capture results, being among the most demanded ones, prove that Metashape potential goes beyond one’s imagination.

Human scan by Infinite Realities
www.ir-ltd.net
**Advantages**

1. Highly accurate and detailed results
2. Fully automated and intuitive workflow
3. GPU acceleration for faster processing
4. Network processing for large projects
5. Agisoft Cloud for processing, visualization & sharing of the results
6. Reasonably powerful Standard edition for art projects
7. Easy sharing with PDF or fly through video export and direct upload to online resources
8. Stereoscopic measurements for precise feature extraction

**Compatibility**

1. Processes images from digital/ film/video cameras and multi-camera systems
2. Supports frame/fisheye/ spherical/cylindrical/RPC camera models
3. Works well with most UAVs (copters, fixed-wings, VTOLs)
4. Integrates with aerial LIDAR workflows with point cloud import
5. Exports results in widely supported formats
6. Supports most EPSG coordinate systems and configurable vertical datums
7. Runs on Windows, Mac OS X and Linux
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>02. Incremental image alignment</td>
<td>10. Elevation contour lines generation</td>
<td>17. 4D reconstruction for dynamic scenes</td>
</tr>
<tr>
<td>03. Mission planning</td>
<td>11. Georeferencing using flight log and/or GCPs</td>
<td>18. Hierarchical tiled model generation and visualization</td>
</tr>
<tr>
<td>07. True orthomosaic generation in user defined projections</td>
<td>15. Texture generation with delighting and deghosting filters</td>
<td>22. Headless operation support</td>
</tr>
<tr>
<td>08. Automatic seamline refinement for traditional DTM-based Orthomosaics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>