

Software Cube-3d

Photogrammetry &
3D data software



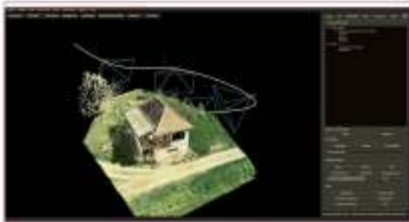


Cube-3d is a complete software for 3D data management, built by two modules for photogrammetry and for scanner data. The former processes images (or videos) to generate accurate digital maps and 3D models with extreme precision; the latter provides tools to align point clouds. It is compatible with cube-a surveys and with any third-party 3D model.

It is possible to draw on point clouds or meshes and merge data imported from traditional survey tools, all in a single software. The data can be then processed and enhanced thanks to the various CAD tools. Among the many features available, most appreciated are the automatic classification, orthophoto, cross-sections and profile lines, volume calculation, and more.

Licenses configuration is very flexible, from perpetual to temporary subscription, it adapts to the needs of many professionals.

Photogrammetry Module



3D POINT & DIGITAL SURFACE GENERATOR

The program can process, in a single project, images captured by any handy camera, UAV drone, or multiple-camera and create extremely accurate and detailed high-definition 3D models.

It can generate a fully geo-referenced, spatially orientated, and complete overview of your site configuration.

NEVER-FAILING ORIENTATION



Cube-3d automatically detects both GCPs and detail points, allowing the operator to check the position of the detected targets, in the first step of the orientation.

With Stonex targets, the time needed will be even shorter, centering is immediate. Alternatively, coded targets are also supported for fully automatic orientation. Even working with RTK drones, it will be easy to achieve centimeter accuracy without GCP.



Scanner Module

Import clouds from Lidar, Laser Scanners, and without limitation from any tool capable of generating them. Full support for Stonex Scanners and a wide range of import formats.

Register point clouds in cube-3d and take advantage of all the excellent tools it provides.



Main Functionalities

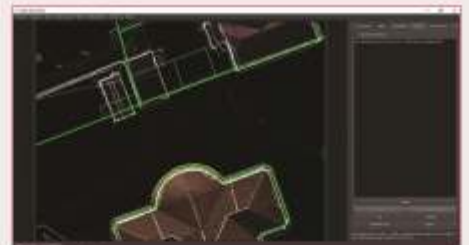
CLASSIFICATION

Benefits from an industry-leading classification engine with best-in-class point cloud customization tools that give users fast, easy-to-use, and simple data classification.

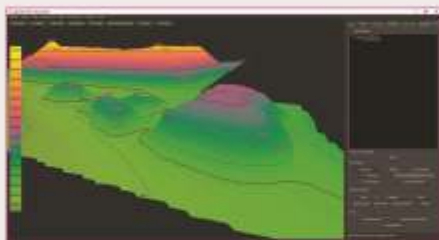
ORTHOPHOTO AND X-RAY

It allows to calculate high-resolution, traditional and true, digital orthophotos with cm-grade precision in perfect geo-referenced details.

The X-ray feature helps to see through the rooftops, so drawing building walls and similar features on a survey map will be much easier. From 2D X-ray views, generate layouts customising their dimension and position.



ORTHOPHOTO

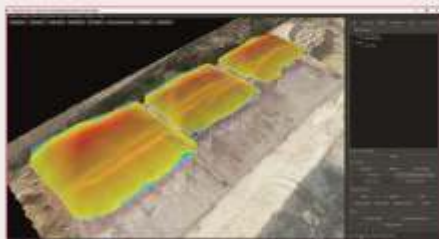


CONTOUR LINES

CROSS SECTIONS, PROFILES AND CONTOUR LINES

From point cloud data, it will draw a definition line and calculate single vertical cross-sections or multiple transverse profiles with user-defined intervals.

Or it can instantly create topographic maps, and freely explore terrain elevation data in 2D or 3D, thanks to the automated contour lines calculation.



VOLUME CALCULATION

VOLUMES

Calculate volumes, comparing different models for cut&fill. Dedicated tools to move points, increase/decrease heights, flatten, etc... permit the prediction of future surfaces/results of the area.

CAD ENGINE

Integrated CAD functions give you the power to work on your project with a complete layer system, snapping tools, drawing options and measurements.

No need of any further third-party CAD software.



CAD

Cube-3d FEATURES

MODULES

Feature	PHOTO	SCANNER	PRO
3D model from image/video	✓		✓
GCP orientation	✓	✓	✓
Classification	✓	✓	✓
Manual registration		✓	✓
Mesh calculation	✓	✓	✓
Orthophoto	✓		✓
2Dviews generation		✓	✓
CAD	✓	✓	✓
Volume	✓	✓	✓
Cross section & profile	✓	✓	✓
Contour line	✓	✓	✓
Video recorder	✓	✓	✓

SYSTEM REQUIREMENTS

	Minimum	Medium	High
Operating system	Windows 7, 8, 10; 64bit	Windows 10; 64 bit	Windows 10; 64 bit
Processor	Intel i5 or Ryzen 5	Intel i7 or Ryzen 7	Intel i9 or Ryzen 9
RAM	16 GB	16 - 64 GB	64 - 128 GB
Graphics	nVidia GTX 1050 or better	nVidia RTX 3060 or better	2x nVidia RTX 3060
Storage	SSD 128 GB + HDD 500 GB	SSD 256 GB + HDD 1 TB	SSD 512 GB (M.2) + HDD 1 TB

ACCESSORY

TARGETS

If you are involved in terrestrial photogrammetry, use Stonex targets to maximise the speed of your work with cube-3d.

On the front, the black circle ensures immediate detection; on the rear, you have coded targets for fully automatic orientation, up to 40 metres AGL .



Illustrations, descriptions and technical specifications are not binding and may change



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