Pix4D**mapper**

The leading photogrammetry and drone mapping software

Desktop & cloud

Versatile

Flexible workflows

Capture your images with any camera or drone, process them locally or on the cloud, and selectively share any part of the project.

Powering multiple applications & industries

A broad variety of tools to power applications in multiple industries, from surveying & mapping, construction, agriculture, mining & aggregates, public safety, oil & gas, power & utilities, to education & research.

Multilingual

Use the software in your language. Pix4Dmapper is available on desktop in English, Japanese, German, Spanish, French, Chinese, Italian, Russian or Korean.

Support

Count on our personal technical support, expert user community, knowledge base and training programs to help you keep learning and overcome any issues.

Accurate

Survey-grade results

Sub-centimeter resolution from lightweight and compact cameras to large-frame metric cameras.

Precise measurements

Even for projects without geolocations by assigning linear scales.

Quality results

Get the results you require. Customize your projects by defining areas of interest, changing processing options or adding ground control points.

Automation

High-speed processing using GPUs and multi-thread CPUs. Let the software handle all the calibration, image processing, and object classification.

Inputs

RGB images
.jpg, .tif

Drone images
.jpg, .tif

Multispectral images
.jpg, .tif

Thermal images
.jpg, .tif

Fisheye images
.jpg, .tif

Camera rig images
.jpg, .tif

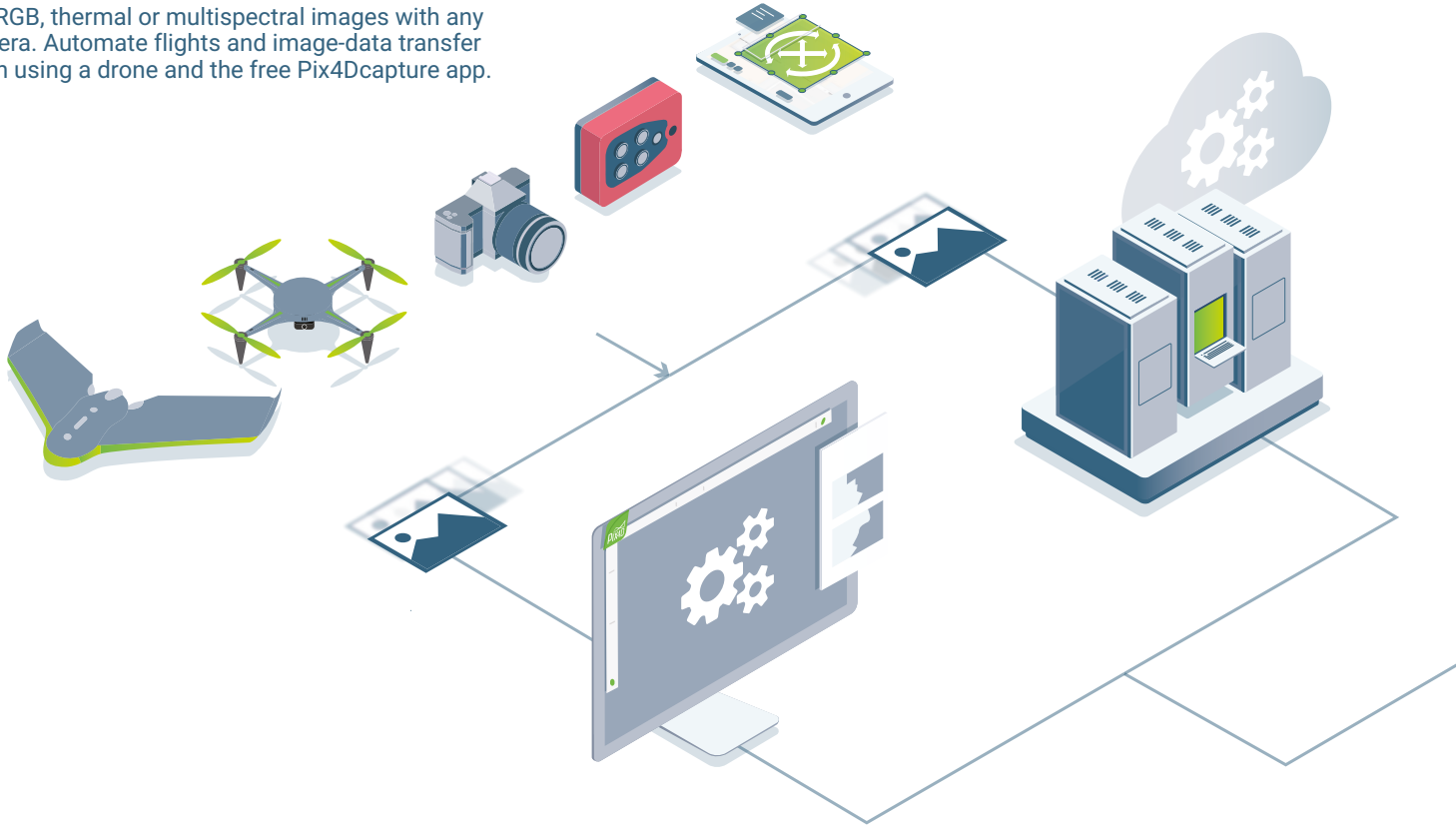
360° camera images
.jpg, .tif

Videos
.mp4,.mov, .wmv, .avi

Workflow

Capture

Get RGB, thermal or multispectral images with any camera. Automate flights and image-data transfer when using a drone and the free Pix4Dcapture app.



Digitize

Pix4Dmapper transforms your images into digital models and maps. Seamlessly process your projects using our cloud or your local computer.

Check

Assess and improve the quality of your project thanks to the detailed quality report and the rayCloud™ environment.

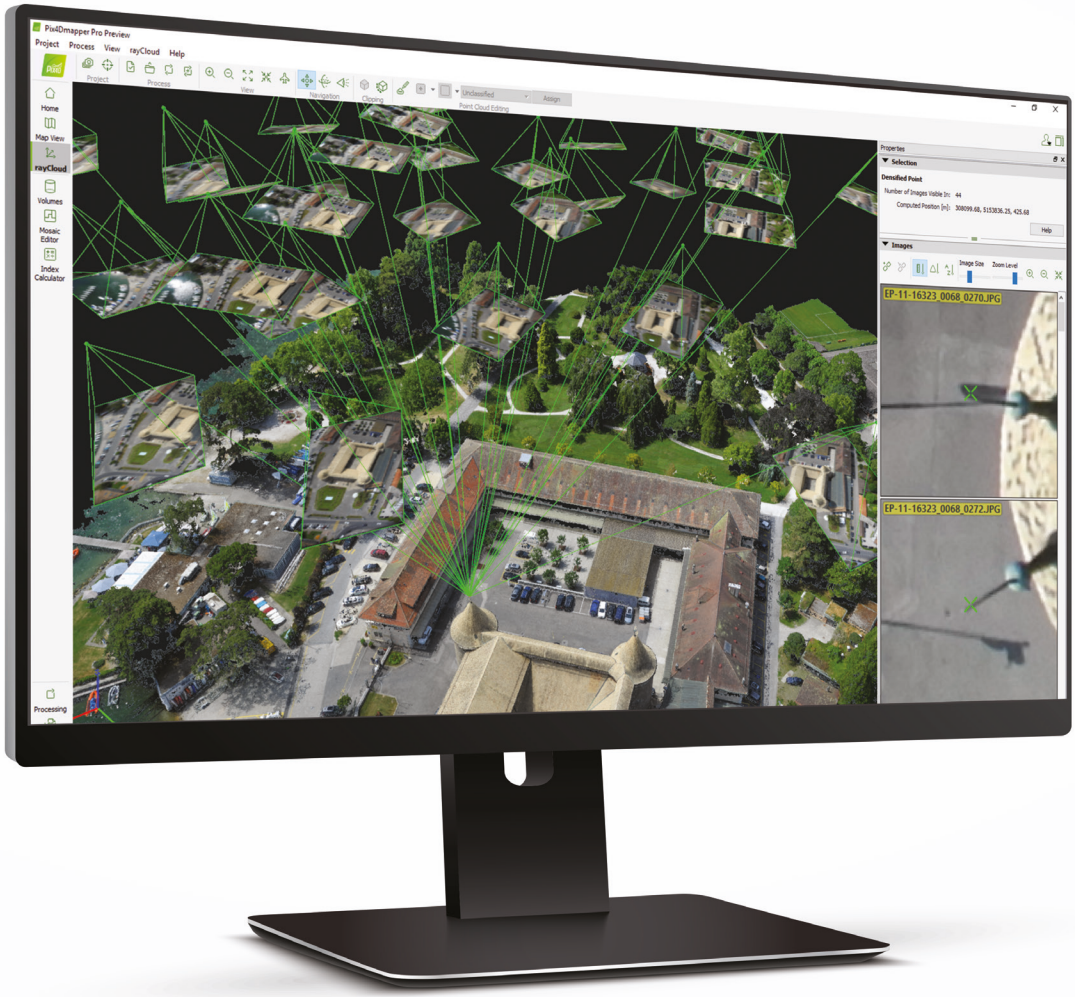
Measure & inspect

Measure distances, areas and volumes, extract elevation profile and perform virtual inspections.

Collaborate & share

Selectively and securely share project data and insights with your team, clients and suppliers.

Pix4Dmapper on desktop

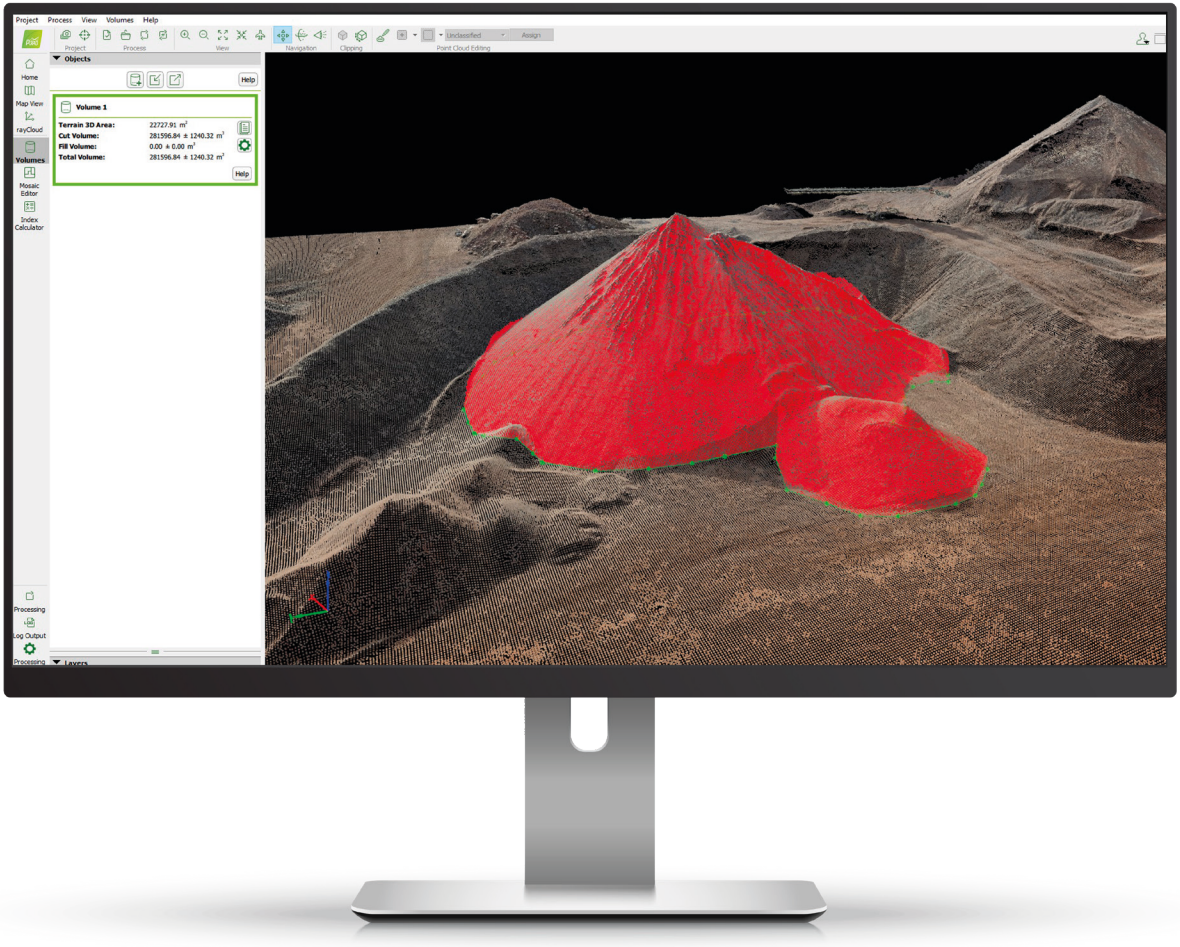


rayCloud ™

The power of understanding photogrammetry

A unique environment connecting your original images to each point of the 3D reconstruction to visually verify and improve the accuracy of your project.

Create objects and video animations, measure distances and surfaces.
Edit your point clouds, add ground control points and manual tie points, define processing areas and more.


Project
Process
View
Volumes
Help
Home
Map View
rayCloud
Volumes
Mosaic Editor
Index Calculator
Processing
Log Output
Objects
Help
Volume 1
Terrain 3D Area: 22727.91 m²
Cut Volume: 281596.84 ± 1240.32 m³
Fill Volume: 0.00 ± 0.00 m³
Total Volume: 281596.84 ± 1240.32 m³
Help
Layers

Measure

Polyline and surface

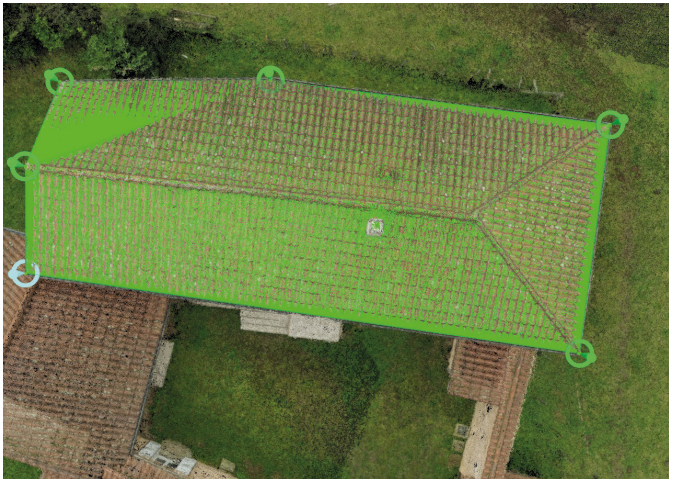
Measure distances and areas by setting vertices in the 3D model and in the original images.

Volume

Measure volumes in 3D with a fully-adjustable base height.

Scale

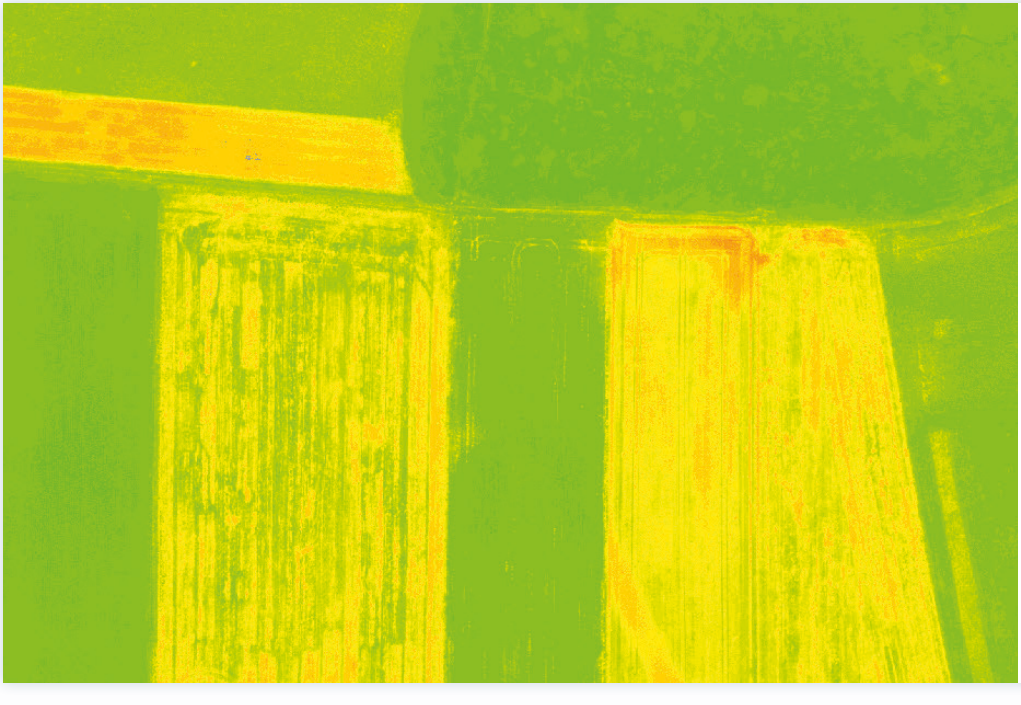
Assign a custom scale to non-georeferenced projects for accurate measurements.



Improve visual integrity

Orthomosaic editor

Create and edit regions in the orthomosaic. Choose the best content from multiple underlying images to remove moving objects or artifacts.



Unlock the full potential of multispectral data

Index calculator

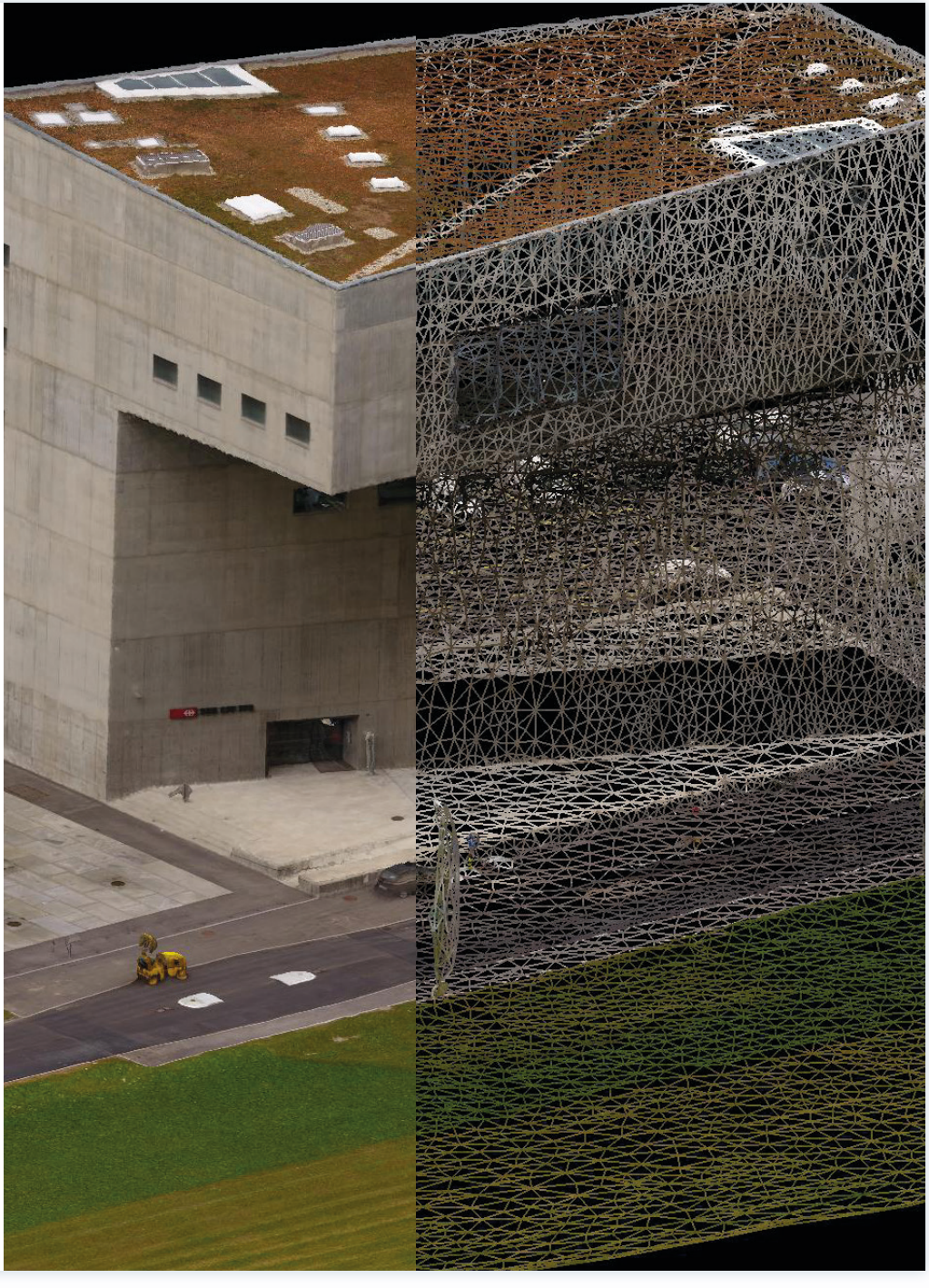
Create and customize index maps using multispectral imagery with radiometric accuracy.

Produce application maps by integrating the results, such as prescription maps, into all major farm management software.

Flatten & smooth surfaces

DSM and mesh editing

Create surfaces to improve planarity or fill holes in critical areas.



Automatically uncover insights

Automatic point cloud classification

Pix4Dmapper's machine-learning algorithms identify and label points, grouping them into classes to distinguish ground from roads, vegetation, buildings, and man-made objects.

Manual control

Point cloud editor

Manually remove noise or unwanted elements, crop a project to focus on an area of interest, or classify objects.

Additional features

- Project merging / splitting
- Detailed quality report
- Error ellipsoid displaying MTP/GCPs accuracy in 3D
- Rolling shutter correction
- Scale and orientation constraint
- Image masking for disregarding invalid pixels among all images
- Volume management for stockpile or earthwork inventory
- Object creation and digitization
- Tiled Level-of-Detail (LoD) mesh
- Import LIDAR point clouds for DSM generation
- Automatic DTM generation
- Orthoplane for creating orthomosaic of any plane/facade
- Radiometric adjustment to generate accurate index and thermal maps
- Custom indices for raster computation based on reflectance values
- Multi-core CPU processing
- GPU-accelerated processing
- Fly through video

Recommended Hardware Specs

CPU: quad-core or hexa-core Intel i9/Xeon

GPU: compatible with OpenGL 3.2 and 2 GB RAM

RAM: 16GB - 64GB

OS: Windows 8, 10 64 bits

Pix4Dmapper on cloud

Expand your processing capabilities with Pix4D Cloud

You can process more projects and faster taking full advantage of Pix4D Cloud processing resources. Continue using your local machine with no interruptions.

Highlight findings

Leverage the link between the 3D reconstruction and your original 2D images with the virtual inspector. Identify a point of interest in the 3D view and highlight critical elements in the original images, add descriptions or even attach external URLs.

Annotate & export

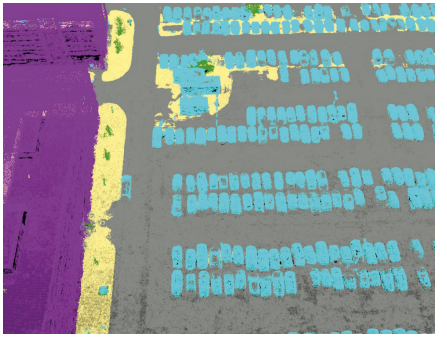
Pinpoint objects, measure distances, surfaces, volumes and elevation profiles. Export quantitative, geometrical and geolocation data at the click of a button.

Collaborate & share

Streamline and speed up project communication and teamwork.
Securely share project data and insights with your team, clients, and suppliers via a link.

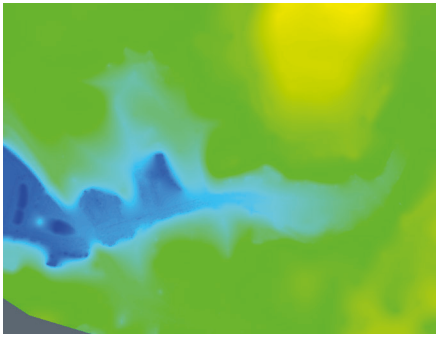
Outputs

Full-color point cloud
.las, .laz, .ply, .xyz

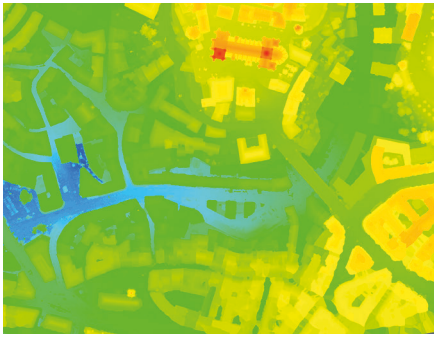


Classified point cloud
.las, .laz

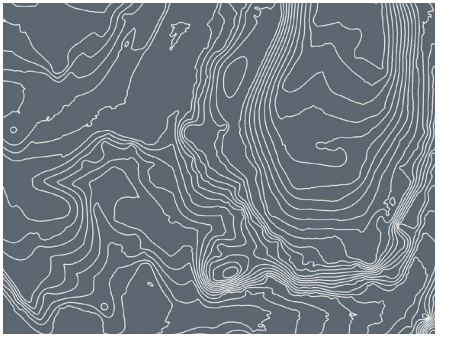
3D textured mesh
.ply, .fbx, .dxf, .obj, .pdf
Level-of-detail mesh in .osgb, .slpk



Digital Terrain Model (DTM)/
GeoTiff (.tif)

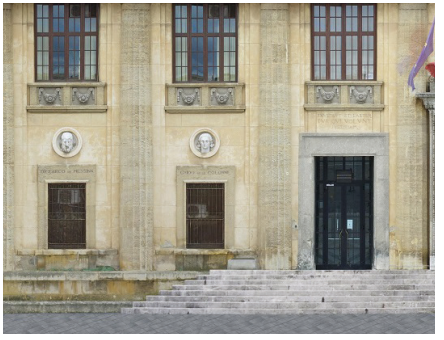


Digital Surface Model (DSM)
GeoTiff (.tif), .xyz, .las, .laz

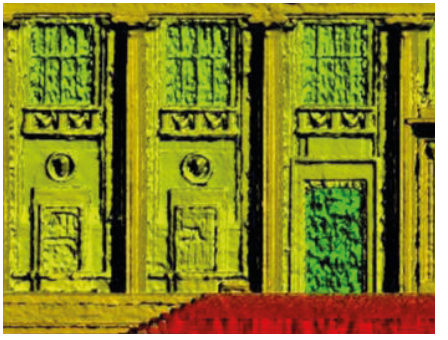


Contour lines
.shp, .dxf, .pdf

Orthomosaic
GeoTiff (.tif), .kml

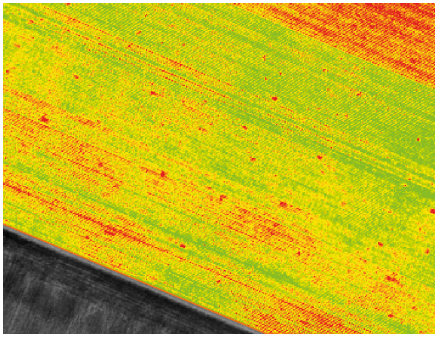


Facade orthomosaic
GeoTiff (.tif)

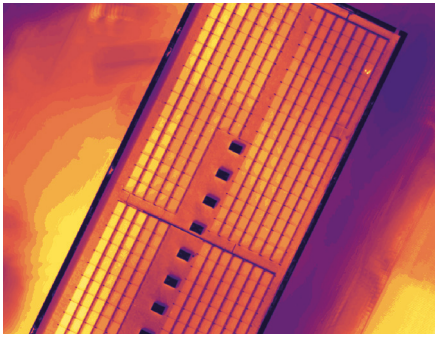


Facade digital surface model
GeoTiff (.tif)

Reflectance maps
GeoTiff (.tif)



Index maps
GeoTiff (.tif), .shp



Thermal maps
GeoTiff (.tif)

Teach and learn with Pix4Dmapper

Teach with Pix4Dmapper

Educational licenses

Teach, learn and research the future of photogrammetry and mapping with Pix4Dmapper educational licenses tailored to schools and universities.

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Continous learning for mapping professionals

Training & certification

Strengthen your professional knowledge and skills with practical training. Choose from self-paced, instructor-led or custom training. Training is available online, onsite, and in multiple languages.

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Pix4D Enterprise solutions

Multi-licenses

Empower your organization with multiple licenses of your preferred Pix4D solutions, with a smooth implementation and impactful enterprise-wide deployment.

Pix4Dengine

Your customized workflow. Your competitive advantage.

Leverage 3D mapping in your automatic workflow or customized platform with Pix4Dengine: a set of APIs running on your infrastructure or in the cloud.

Enterprise services

Bring your ideas to life through our consulting and integration services, enterprise training and enterprise support.

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