



# VisionLidar

Point clouds at your fingertips



## A COMPLETE POINT CLOUD SOFTWARE

Why VisionLidar?

Exclusive  
Capabilities

Fit any Industry

VisionLidar  
Suite

# WHY VISIONLIDAR?



## Save time

Classify your objects 3x faster, thanks to the object recognition tool. Focus on the most important aspects of your project in just a few steps. Process an unlimited amount of points, and use the registration tool to combine point clouds without any constraint.



## Save money

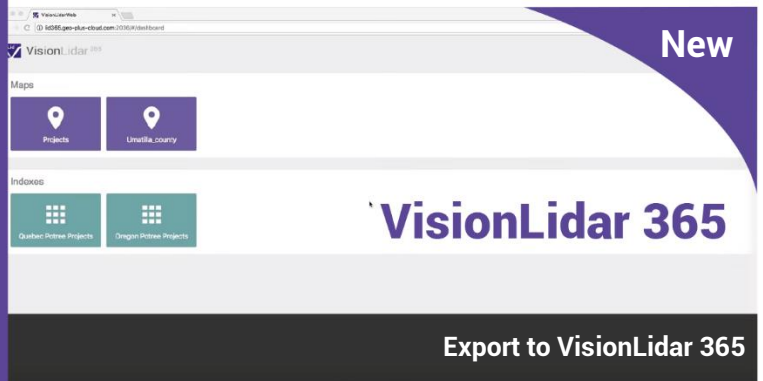
Maximize your budget with a complete software. VisionLidar can easily replace more than 4 traditional solutions. Simplify your point clouds processing, and eliminate unwanted points with this unique solution.



## Enhance your return on investment

Get the most out of your investment from the 3rd month of usage, thanks to the efficient workflow of VisionLidar. Create annotations and share your point cloud in a web format (Potree). Measure and calculate directly within any browser.

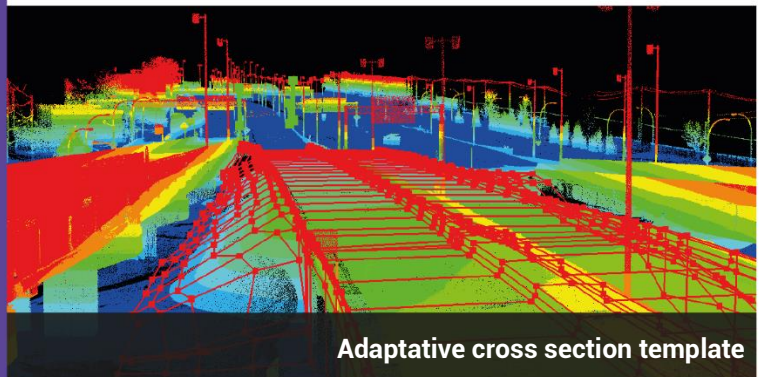
## EXCLUSIVE CAPABILITIES



Object recognition



Tree measurement



Adaptive cross section template



# FIT ANY INDUSTRY

CIVIL ENGINEERING

LAND SURVEYING

ARCHITECTURE

TRANSPORT

MINE & QUARRY

FORESTRY

## Earthwork and Complex Volumes

Generate and export contour lines to .DTM, and use 4 different methods to calculate volumes.

## Bare earth extraction

Extract bare earth surfaces from a point cloud, by automatically eliminating vegetation, buildings, cars, pedestrians, and other objects resulting from the mesh surface.

## Building models

Modelize a building in just a few steps. Create building footprints and a simplified roof symbology. Use the edge detector tool to extract edges.

## Cross section and profile

Set an alignment of points, and visualize the cross section in a separate window. tool to extract edges.

## Classification

Easily clean and classify your point cloud. Identify grounds, buildings, vegetation, and separate them into layers.

## Scan to BIM, IFC, REVIT

New

New

## Clipping box

3D dynamic selection tool  
Move, rotate and resize a selected section  
Display only or hide a selected section

New

## 3D Structure analysis

Monitor surfaces, buildings, and structures. Visualize deviations and irregularities. Verify the verticality and the flatness of walls, ceilings, and floors. Automatic report creation

New

## Railway vectorization

Automated tools  
Adaptive template for vectorization  
Automatic catenary detection

New

## Integrating 360° images

Overlaying 360° images on point clouds  
Perform photogrammetry  
Create and share spherical images

New

## Manual and automatic registration

Stitch any type of scans together  
Create large and accurate datasets by picking control points

New

## Corridor manager

Road extraction  
Tin surfaces  
Classification

New

## Object detection and insertion

Accurate point picking  
Automatic classification  
Virtual land surveying

New

## Building footprint extraction

Vectorize large datasets  
Automatic detection  
Easy exportation to CAD



# VISIONLIDAR SUITE



## STANDARD

- \* Import LAS, LAZ, E57, PTS, CSV, X3A, FLS, LSPROJ
- \* Export to LAS, LAZ, E57, PTS, HTML
- \* Dynamic viewing: zoom, pan, rotation, lock axis
- \* Aerial, terrestrial and mobile scans can be combined in a project
- \* Classification and segmentation of point clouds
- \* Registration using least squares or using a list of points
- \* View by RGB, intensity, normals, class, scans
- \* View objects by wireframe or shading
- \* Create extractions of elements
- \* Grid simplification
- \* Intelligent 3D fence (inside or outside)
- \* Measurement tools (distance, angle, perimeter, area, elevation and path)
- \* Building facade analysis with PDF reporting
- \* Color shading of elevation with PDF reporting
- \* Automatic plane detection
- \* Surface creation (TIN) and bare earth extraction
- \* Dynamic 3D profile view
- \* Dynamic 3D cross-section view
- \* Automatic tree measurements (dendrometry)
- \* Web sharing (export to Potree)
- \* Magnifier and edge locator
- \* Fly-through with output to video in AVI format
- \* Image capturing in JPEG or PNG format
- \* Create polyline tool to create polylines freely or on a plane
- \* Export to planimetric orthophotos (GTIFF)
- \* Customizable keyboard shortcuts

## PREMIUM (+Standard)

- \* SQLite or Access (MDB) database connection
- \* Point management using PCode standards from DOT or other
- \* Point creation and selection
- \* Cylinder detection tool
- \* Chain and point connectivity management
- \* Alignment management with horizontal and vertical curves
- \* Edge detection (sidewalks, barriers, fence)
- \* Centerline detection and detection of road markings by intensity
- \* Road geometry extraction from intensity
- \* Catenary detection (power lines)
- \* Building footprint modelization and surface by section creation
- \* Surface management (surface modification, add holes, add breaklines, etc.)
- \* Adaptive 3D templates for modelization of roads and tunnels
- \* Export surfaces to DXF, SHP, MID, LandXML and VisionPlus database
- \* Export alignments to LandXML and VisionPlus database
- \* Export chains to DXF, SHP, MID and VisionPlus database
- \* Earthwork calculations (cut and fill)
- \* Surface and volume calculations
- \* Contour line creation
- \* Intelligent simplification of aerial data
- \* Rooftop detection for aerial data
- \* Classification management for aerial data
- \* Solid volumes for overhangs and vertical surfaces
- \* Meshing for solid features
- \* Export vector features to DXF, SHP, MID, GeoJSON, KML and LandXML
- \* Corridor management for efficient processing
- \* Annotations, measurements and spherical images exported to Potree
- \* Overlay of spherical images on the point cloud
- \* Colorize point clouds from spherical imagery
- \* Create spherical images from the point cloud
- \* Create survey points using photogrammetry
- \* Automatic detection of objects from groupings of points (clusters)
- \* Compare two scans with PDF reporting

## ULTIMATE (+Standard & Premium)

- \* Connectivity with AutoCAD, MicroStation, PowerDraft or BricsCAD
- \* Field data calculation from total station
- \* Field data calculation from GPS
- \* Least squares adjustment of field data
- \* Point group management
- \* Chain group management
- \* CAD standards management for points, lines and chains
- \* Management of notes and photos
- \* Management of parcels according to the topology
- \* Dynamic building siting
- \* Cogo functions
- \* Import points from ASCII files
- \* UTM, MTM, Lat/Long and other projection transformations
- \* Curve management tool
- \* Line intersection calculation tool
- \* Least squares adjustment for points, lines, polygons and curves
- \* Point and chain drawing management
- \* Preferences for displaying surfaces, profiles, and sections
- \* Alignments in 2D or 3D
- \* Combined scale factor for distances, surfaces and volumes
- \* Ground and grid distances
- \* Multi-user database usage
- \* Draw sectional and profile views directly in the CAD
- \* Import existing vector data into VisionLidar
- \* Advanced TIN editing capabilities

Find out more!

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