why Vision Lidar?

Vision Lidar is a complete and comprehensive desktop point Cloud processing software that gives you the ability to manage and produce high-quality deliverables for your customers.

Regardless of the project size, data collection system or mission type (airborne scanning, land scanning, mobile scanning), with VisionLidar you will maximize your return on investment and get a better overview of your data.

Geo-Plus

LAND SURVEYING

CIVIL ENGINEERING

MANUFACTURING

A PERFECT FIT
FOR ANY INDUSTRY!

ARCHITECTURE

MINING & QUERY

FORESTRY

TRANSPORT

Geo-Plus

IT'S ALL ABOUT *better investment returns!*

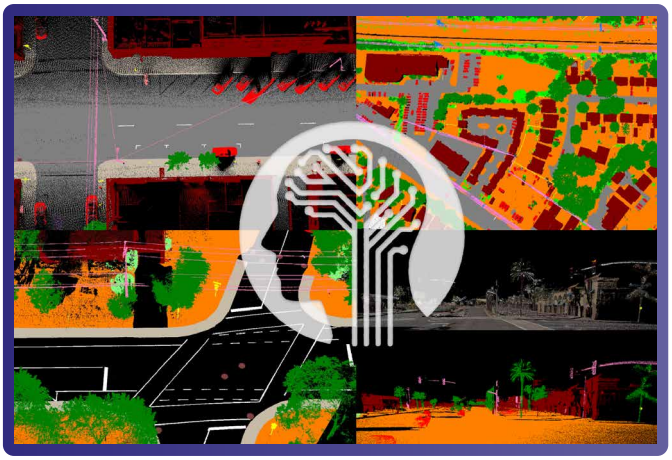
VisionLidar, always at the cutting edge of technology, uses a fast visualization engine for point cloud and spherical images, numerous automatization tools, a unique and powerful AI (Artificial Intelligence) classification tool, and much more!

With its simple workflow and various processing and analysis capabilities, VisionLidar is the most cost-effective point cloud software that will satisfy all your needs.

AWESOME capabilities guaranteed!!

AI CLASSIFICATION PROCESS

Powerful Deep Learning classification process which uses the latest AI technology to segment your point cloud over our 250 classes. Use our predefined models to classify your terrestrial or airborne data. Create multiple iterations to refine your segmentation and get the maximum control of your 3D data.



AI ANNOTATION & TRAINING

Create your own AI Classification model according to your scanner signature (RGB, Intensity, points cloud geometry). Use our powerful selection tools to annotate elements you want to classify and get a new model compiled according to your project specifications. Get the full control of your projects with VisionLidar.

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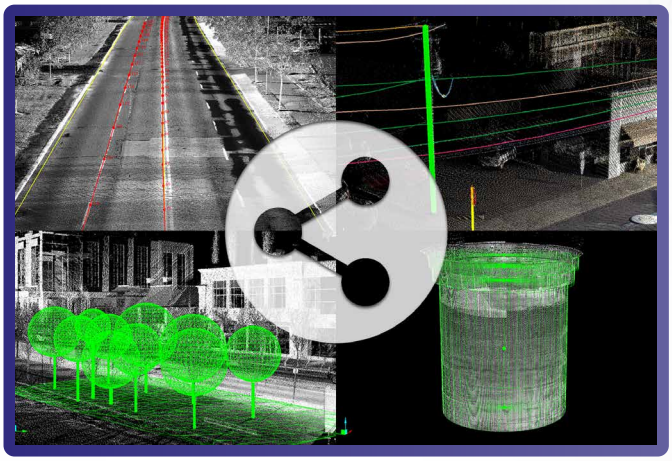
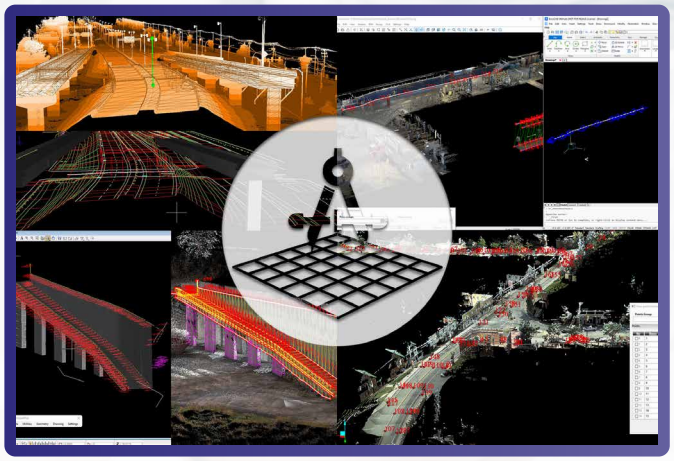
ASSETS EXTRACTIONS

Make your virtual survey inhouse, extract points and chains with your own feature codes. Use our semi automatic tools to get pavement lines from intensity, vectorize edges, curbs, or crash barriers. Get poles and cables extracted directly from their own class. Export your results to CADs and GIS.



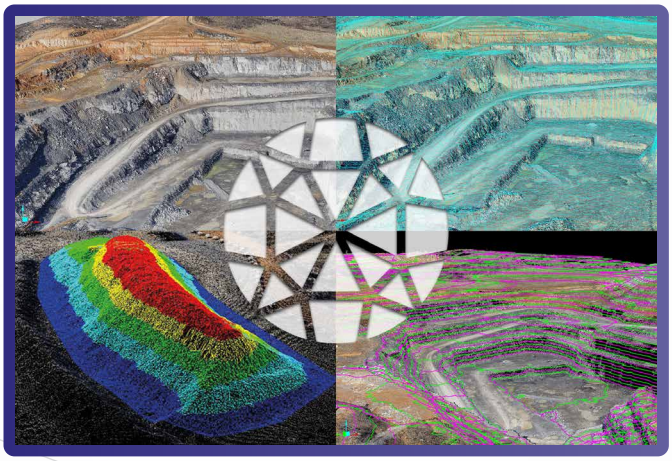
INTEROPERABILITY WITH CAD

Synchronize your CAD with your point cloud data and vectorize directly in your own controlled environment. Follow the market standards to create your deliverables by using your Customer Feature codes. Store your points and chains in a database connected to your CAD by using our VisionCivil module.



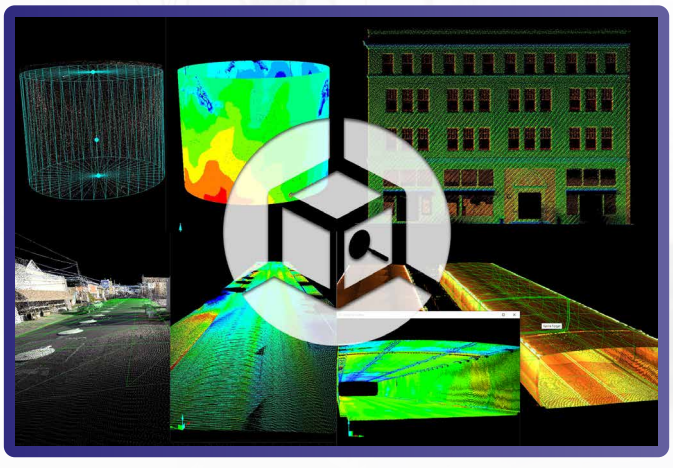
BARE EARTH & SURFACE ANALYSIS

Extract bare earth surfaces (DEM, DTM) from your point cloud data by using Artificial Intelligence to eliminate vegetation, buildings, cars, pedestrians, and other objects. Create contour lines from the surface, add brake lines, different algorithms to calculate volume with one scan or difference between 2 scans.



3D STRUCTURE ANALYSIS

Monitor surfaces, buildings, and structures by Visualizing deviations and irregularities. Use planes to validate the verticality and the flatness of walls, ceilings, and floors. Compare two scans to monitor changes over the time. Share your observations by using reports



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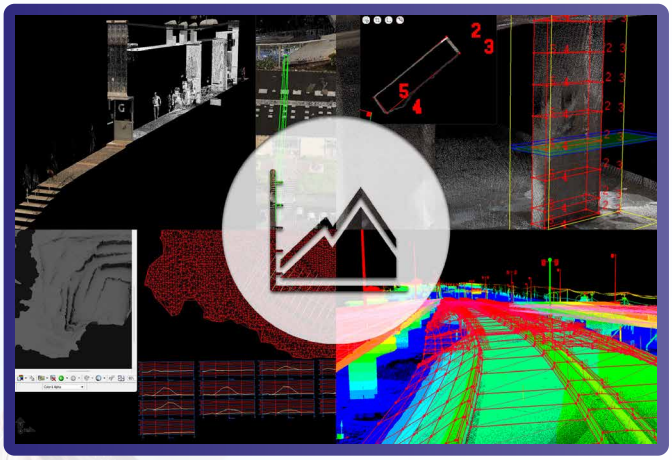
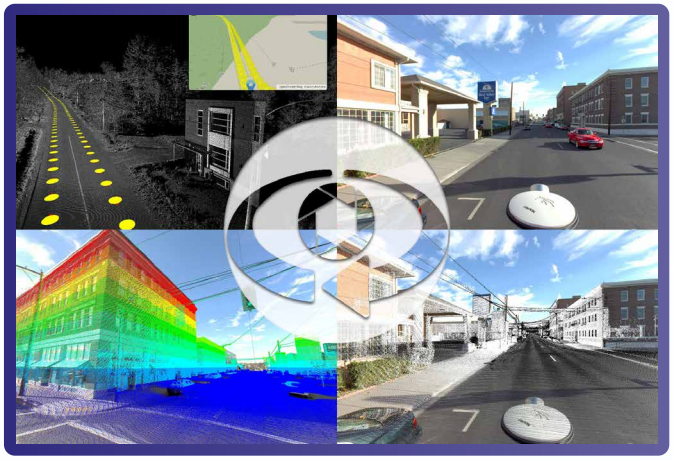
CROSS SECTION & PROFILE

Create point cloud cross section directly in VisionLidar and analyse or validate your data. Use our module VisionCivil to create alignments and extract Cross Sections or Profiles from your Surfaces and draw them directly on your own CAD system.



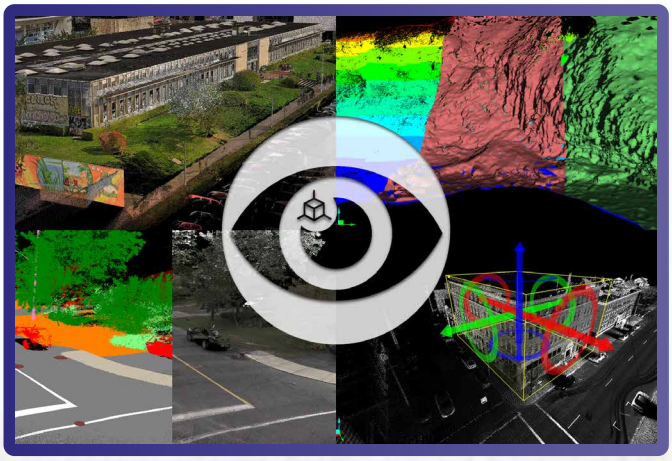
SPHERICAL IMAGE

A picture is worth a thousand words so imagine a Spherical image. Get in an immersive street view of your projects by mixing your point cloud data with an RGB image. VisionLidar also provides different algorithms to colorize your point cloud or create Spherical images from your point cloud.



VISUALISATION & CLIPPING TOOLS

Visualize your point cloud projects by Color, intensity, classes, elevation, distances or scans. Quick and easy control of your classes (renaming, color, templates number of points). Save and name your fences to organize your different views. Hide portion of your point cloud data in 3D by using clipping box. WYSIWYG export tool, what you see is what you export.



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— DIFFERENT PACKAGES —
TO SUIT
ALL YOUR NEEDS!

premium

standard

Lid

ultimate

Geo-Plus

VisionLidar standard

Point cloud processing software

- Import LAS, LAZ, E57, PTS, CSV, X3A, FLS, LSPROJ, WRK, RCP, RETRACE, PLY
- Unique point cloud data format for Desktop and Web (VisionLidar 365) platform
- Image to Scan option (create point cloud projects from Images)
- Aerial, terrestrial and mobile scans can be combined on the same project
- View spherical images embedded with point clouds
- Colorize point clouds from spherical imagery
- Dynamic view: zoom, pan, rotation, lock axis
- View by RGB, intensity, class, scans
- Classification using returns for aerial data
- Basic classification option for ground, buildings and vegetation
- Advanced view by elevation with reporting options
- Advanced view by distance with reporting options
- Advanced point cloud selection tools allowing to distribute points over 256 classes
- Registration using least squares or using a list of points
- Surface creation (TIN) for bare earth extraction
- View surfaces by wireframe or shading
- Simple polyline vectorization tool with export option to DXF and GIS compatible file format
- Point Cloud Simplification by Grid
- Named fence (inside or outside) with selection option.
- Measurement tools (name, distance, angle, perimeter, area, elevation and path)
- Automatic plane detection
- Dynamic 3D profile view
- Dynamic 3D cross-section view
- Dynamic cursor with edge detection
- Fly-through with AVI rendering option
- Export to planimetric orthophotos (GTIFF)
- Customizable keyboard shortcuts
- Import 3D objects mesh files (Obj and Ply)
- Map location of your position when a projection is used
- Export to LAS, LAZ, E57, PTS, CSV, RCP, PLY and Potree 2.0

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VisionLidar premium

Point cloud processing software

ALL THE STANDARD FEATURES IN ADDITION TO THE BELOW

- SQLite or Access (MDB) database connection
- Point management using configurable Feature Code standards
- Virtual survey tool for chain and point connectivity (using Feature codes)
- Autodetection for cylinder shapes (ex. poles)
- Automatic tree detection and measurements (dendrometry)
- Alignment management with horizontal and vertical curves
- Edge detection using single or multiple clicks.
- Road marking detection using intensity (by two clicks or by trajectory)
- Catenary and pole detection (distribution power lines)
- Share click position through UDP port sending point's position to external software
- BIM module for quick building modeling with IFC export option (walls, aperture, doors, windows, sections)
- Surface management (surface edition, holes, break lines)
- Point Clouds to Surface Analysis with reporting options
- Point Clouds to Point Cloud Comparison with reporting options
- Adaptive 3D templates for road and tunnel modeling (road by sections)
- Export surfaces to DXF, KML, SHP, MID, OBJ, LandXML and VisionPlus database
- Export alignments to LandXML and VisionPlus database
- Export chains to DXF, GeoJSON, KML, SHP, MID, CSV and VisionPlus database
- Export vector features to DXF, SHP, MID, GeoJSON, KML and LandXML
- Volume calculations (cut and fill) including multidate comparison
- Contour line creation (topographic maps)
- Building footprints from classification (Class 6)
- Meshing for solid features
- Solid volumes for overhangs and vertical surfaces
- Corridor management for efficient processing
- Web diffusion: annotations, measurements and spherical images exported to VL365 or Potree v2.0
- Image colors to Class, selecting points from scans that correspond to a specific RGB on the image
- IFC to obj converter
- Vectorization by photogrammetry (Spherical images)
- Automatic detection of objects from groupings of points (clusters)

VisionLidar

Point cloud processing software

ultimate

ALL THE PREMIUM AND STANDARD FEATURES IN ADDITION TO THE BELOW

- Connectivity with AutoCAD, AutoCAD Map Civil 3D, MicroStation, Microstation Connect, PowerDraft or BricsCAD
- Simultaneous drawing between VisionLidar and CAD
- Advanced classification process using unique Deep Learning GPU technology:
  - *adapted to your scanner or class definition*
  - *Split large project into partition for better processing efficiency*
  - *Uses of Multi GPU (Nvidia) to boost speed processing*
  - *Process locally on your own computer*
- *Training classification module allowing to create your own model including RGB, Intensity, or Geometry only*
- *Crash barrier detection module*

Vision Civil for CAD (included with Ultimate)

- Compatible with AutoCad, AutoCad Map, Civil 3D, MicroStation, MicroStation Connect, PowerDraft, BricsCad
- Sharable Sqlite or Mdb database to store data and standards
- 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 on a CAD layout
- Import existing CAD vector data into VisionLidar
- Advanced TIN editing capabilities

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