GEOMATE

Premium Surveying. Trusted Solutions

COPROCESS

ADVANCED LIDAR DATA POST-PROCESSING SOFTWARE

ADVANCED POINT CLOUD POST-PROCESSING SOFTWARE

CoProcess is an advanced post-processing software solution developed by GEOMATE, designed specifically for handling large-scale point cloud data. As an all-in-one platform, CoProcess efficiently transforms field-captured point cloud data into diverse deliverables across multiple formats.

Beyond its robust point cloud management, measurement tools, and visualization capabilities, CoProcess also includes a free configurable viewer. The software enables users to generate Digital Elevation Models (DEMs) and Digital Terrain Models (DTMs), perform semi-automatic feature extraction, automate data classification, design road layouts, and more — offering a comprehensive solution for streamlined data processing.

SPECIFICATIONS

System Recommendations

Operating system	Microsoft Windows 7, 8, 10, 11 (64-bit)
Install package size	Less than 500 MB
File system	NTFS

Hardware

Processor	Intel ® Core™ i7 (Minimum) Intel ® Core™ i9 (Recommended)
RAM	8 GB (Minimum) 32 GB or more 64 bit OS (Recommended)
Hard disk	500 GB SSD Drive (Minimum) 1 TB SSD Drive (Recommended)
Large project disk option	RAID 5, 6, or 10 w/ SATA or SAS drives
Graphics card	Nvidia GeForce 4 GB (Minimum) Nvidia GeForce 6 GB+ (Recommended)
Display	1024 × 768 (Minimum) 1920 × 1280 (Recommended)
Input	Keyboard, mouse with wheel

Software License

License type	Time limited SW registration code USB dongle driver
SW upgrade	Online version chech Manual install package

Supported Language

English

Russian

Chinese

CoProcess specifications

Foundation module	The software uses a custom format (*.codata) to quickly visualize massive point cloud data, and quickly build *.las, *.txt, *.csv, *.pts, *.xyz into *.codata through LOD technology; Covers conventional renderings such as height, intensity, RGB, classification, single, time, returns, return number, etc. It provides multi-hue rainbow, blend and mix rendering, and EDL effects improve rendering detail contrast; Realize the scene roaming of point clouds, vectors and images, perform viewpoint roaming according to the viewing angle position, and perform trajectory roaming by setting the browsing path; Provides single point, multi-point, distance, area, density and angle measurement. In addition to basic measurement, the software also provides elevation inspection, density quality inspection and profile analysis functions;
Foundation module	Provides rectangle and polygon selection of point cloud, and the functions of inner clipping, outer clipping, clearing and saving of updated point cloud
Terrains module	In adition to Standard CoProcess module; Automatic processing to output DEM results that meet the accuracy requirements; Quickly and accurately extract ground points under complex terrains; Variety of editing methods such as elevation leveling, elevation smoothing, elevation deletion, patching invalid values, elevation patching, removing spikes, and adaptive smoothing to quickly edit DEM results; Generate contour data in dxf format based on point cloud data; Generate the elevation points in DAT format according to the square grid or diamond grid; Realize TIN browsing and point cloud and TIN synchronous editing
Roads module	One-click to generate cross section and vertical section; Efficient editing of cross section and vertical section; Design routine automatically according to coordinates of stakes; circular curve; transition curve , etc. Add stakes in the view or according to user-defined mileage;
Volume module	Volume calculation by grid method, the result can be output in dxf format; Analyze volume difference between two phases ,and output the report. Automatic generation of bench crest and bench toe; TIN editing functions (smoothing, filtering, simplifying, cavity filling); Calculate the volume of user-defined region, and output the report;
Extraction module	Automatic and manual extraction of road features Overlay display of panoramic images and point cloud data Automatic generation of road surface model based on extracted vector and point cloud data Extraction of 10 km of road elements per person per day
Bulding Extracitions	Support for semi-automatic and tracked extraction of planar features Support for semi-automatic extraction of façade windows and parking elements
Stockpile Module	One-click clearing of non-stockpile point clouds Automatically identify the range of the stockpile Calculation of single-phase stockpile volume and two-phase filling and excavation volume

*Specifications are subject to change without notice.

GEOMATE

Premium Surveying. Trusted Solutions

SG MADE IN SINGAPORE

Geomate Positioning Pte. Ltd.

38 BEACH ROAD #29-11
SOUTH BEACH TOWER SINGAPORE 189767
+65 8919 0418
sales@geomate.sg
www.geomate.sg