GeoSLAM Hub

The complete end-to-end software solution for your geospatial data
GeoSLAM Hub

GeoSLAM Hub & Draw is a comprehensive software suite that transforms 3D point cloud data into actionable information and valuable deliverables.

A part of GeoSLAM’s complete mobile mapping solution, GeoSLAM Hub & Draw bring together industry-leading SLAM with powerful post processing functionality to deliver complete end to end solutions.
Why GeoSLAM Hub?

- SLAM processing to generate accurate 3D point clouds from mobile data
- Automatic registration of multiple scans and geo-referencing of datasets to control
- Import, view and interrogate data captured from all GeoSLAM mobile mapping devices
- Quick & easy workflows with ‘drag and drop’ functionality - produces deliverables in minutes
- Provides survey-grade data accuracy, without the surveyor

SLAM

Globally recognised as the most robust SLAM engine in the world, GeoSLAM Hub enables automatic drag and drop processing of data captured from all GeoSLAM mobile mapping solutions.

Furthermore, GeoSLAM Hub offers unique user definable advanced SLAM processing parameters enabling accurate results to be achieved even in the most challenging of environments.
Features of GeoSLAM Hub

**Automatic Registration**
A range of tools are provided for simple registration of point cloud data including alignment of multiple scans and geo-referencing using spherical targets.
GeoSLAM Hub automatically synchronises contextual visual imagery with 3D point cloud data (requires ZEB-CAM).

**Advanced Processing**
Data collected in challenging or restricted environments can be reprocessed using a suite of advanced processing parameters.
With a simple ‘slider’ functionality, users can reduce scan drift (in open environments), remove outlying data points, prioritise planar surfaces (in noisy environments) and much more.

**View & Annotate**
Synchronised point cloud data and imagery data can be easily viewed and examined in both 2D and 3D.
Co-ordinates, dimensions and areas can be quickly extracted and important elements highlighted using ‘Notes’ feature.

**Export**
Customisable export options facilitate smooth interoperability with downstream processing software and workflows.
Data can be smoothed, decimated and exported in most industry standard formats including LAS and E57.
Data can also be saved with colour RGB, shade values and normals.
Why GeoSLAM Draw?

- Create 2D plans, sections & elevations from 3D point cloud data in minutes
- Rapid 2D area measurement, and 3D volume calculations from 3D data
- Automatic vectorization of 2D lines allows for rapid floorplan and ceiling layouts
- Easily export data for use in third party CAD and GIS software packages
- Publish, share, and collaborate with multiple stakeholders
- End to end scan to plan workflow

2D Deliverables
A range of simple-to-use tools for quickly extracting layouts and sections from point cloud data.
Draw section & plan lines through 3D point cloud data to immediately produce 2D outputs.
Choose manual or automatic vectorization processes to rapidly generate floorplans, ceiling plans or basic building layouts in minutes.

Share Globally
Collaborate and share with your colleagues and customers using GeoSLAM Viewer in which people can view the synchronised imagery and 3D point cloud data captured.
Using GeoSLAM Draw Pro you can also publish web exports including 3D point clouds, 2D layouts, and video.

3D Deliverables
Advanced options are available for delivering 3D information - ideal for those working in the mining and engineering sectors.
Outputs include the creation of mesh DTMs, volumes, profiles, and surface change measurement.
### GeoSLAM Hub

#### Features Summary

Choose the right package for you

<table>
<thead>
<tr>
<th>Feature</th>
<th>Start</th>
<th>Plan</th>
<th>BIM</th>
<th>Mining</th>
<th>Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import non-proprietary</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>3D View</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Layout/Section</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>WebExport</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Registration</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Virtual Pano</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Sketch</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Merger</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Proprietary Formats</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Mesh</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Align/Transform</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Vectorizer</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Profiler</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>PhotoMatch</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>RCP Import &amp; Export</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Elliptical Section</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Polygonal Section</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Curved Section</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Cloudexport</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>4CAD</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>4Revit Plugin</td>
<td></td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
</tbody>
</table>

The Start package comes as standard with all GeoSLAM Solutions.
System Requirements

Minimum
• Windows 10
• i7 6th Generation
• AMD Ryzen 7 (1700X)
• Integrated Graphics
• 16GB RAM
• 30GB free space
• SSD

Minimum
• Windows 10
• i7, i9 8th generation or greater (higher clock speed)
• AMD Ryzen 7 (2700X)
• NVIDIA GTX 1060
• 32GB RAM
• 30GB free space
• SSD
Contact us

GeoSLAM Ltd.
Innovation House
Mere Way
Ruddington Fields Business Park
Nottingham
NG11 6JS

+44 (0) 1949 831 814
info@geoslam.com
@GeoSLAMLtd