

LiDAR Processing Unit for SLAM & Ego-Motion

Augmented LiDAR Box[®]

Track the position, direction, and velocity of your vehicle or robot equipped with LiDAR, in real time.



LiDAR-based Simultaneous Localization & Mapping

Gain instant awareness of your machine's movement solely through the use of 3D LiDAR data.



Precise control of your mobile robot in 6DoF



LiDAR-only relative position over long distances



Real-time super-resolution



GPS-denied Localization & Velocity



Off-road kinematics

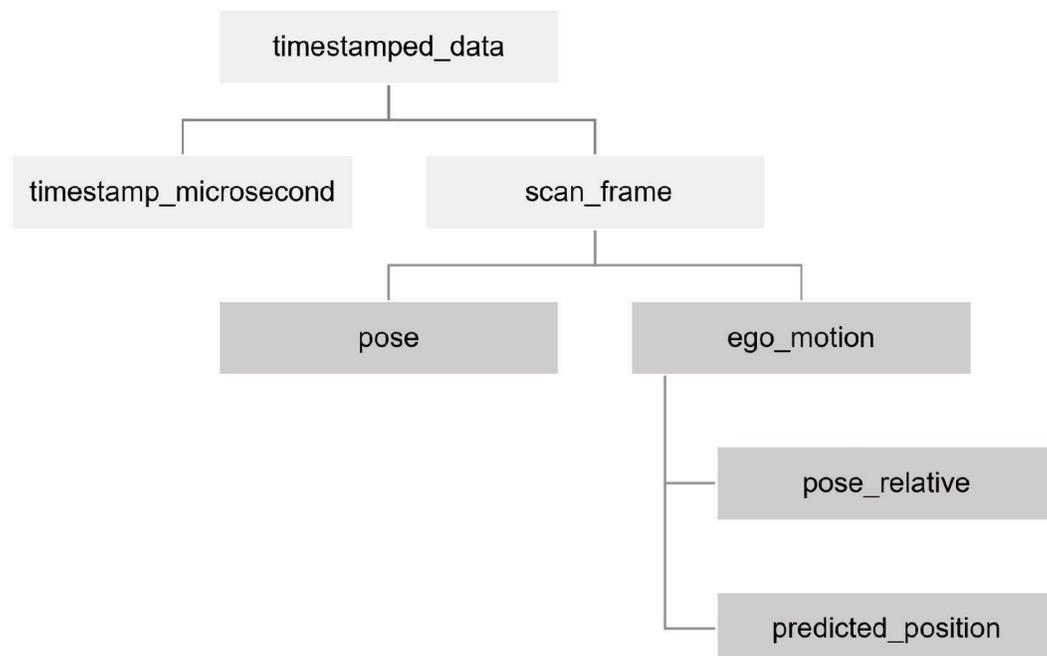


Full 3D Remote operation

Seamless integration

The real-time output is encoded in **OSEF** (*Open SErialization Format - TLV based*) and transmitted over TCP/IP.

Each timestamped frame contains the pose and ego-motion data and can retransmit the original point-cloud in the **Augmented Cloud** format.



You have three options to use ego-motion and produce super-resolution data:



Augmented Studio is an **embedded web interface** enabling you to get an immediate view of the output in real-time using a simple browser.

You can work both from a recorded file or live stream from your LiDAR and fine-tune the algorithms based on your context and objective.



You can also **use your preferred framework** such as ROS or RT Maps thanks to the provided drivers.

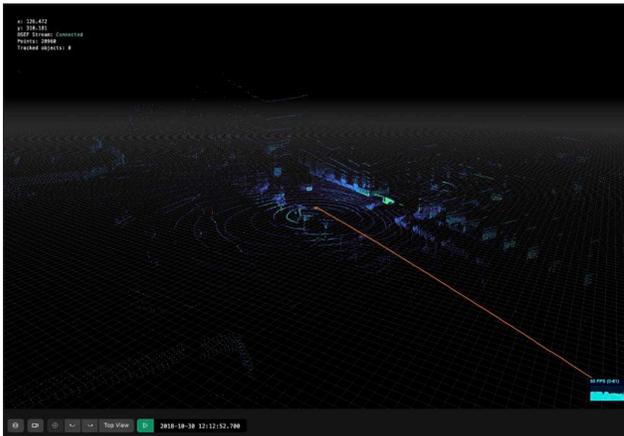
Please [visit our public repository](#) for the latest versions.



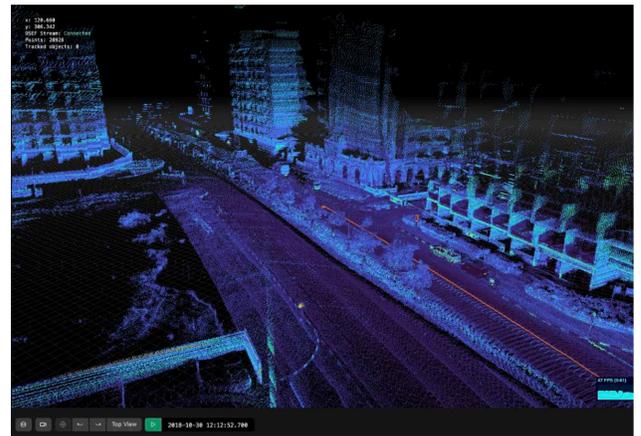
Our **RESTful http API** gives you full control of the software. Together with the provided C++ and Python [code samples](#), you can get a direct integration within your application software.

Real-time Super-resolution

The precise LiDAR pose information allows the display of each frame on a consistent live 3D map, providing a sharp high-definition perception:



LiDAR instant resolution



Real-time Super-resolution

Other Key Features

- ▶ IP65 and low power consumption.
- ▶ 24/7 all-lighting performance.
- ▶ Ideal for GPS-denied environment.
- ▶ Same output format regardless of Lidar model.

Recommended compatible LiDARs

Velodyne: VLP-16, VLP-32C

Ouster: OS0, OS1 and OS2 (32 and 64)

Hesai: Pandar XT-32

Product code

ALB-EGO-VD Compatible with Velodyne

ALB-EGO-OS Compatible with Ouster

ALB-EGO-HS Compatible with Hesai

ALB-EGO All compatible LiDARs

Visit alb.outsight.ai for further details, including demo videos and guides.

