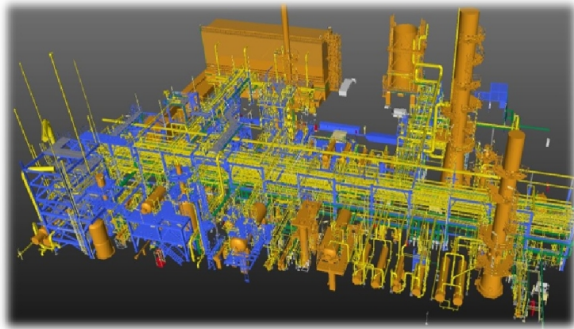


# Conventional LiDAR for Reality Capture

Applus+ Conventional LiDAR (Light Detection and Ranging) Capture technologies employ stationary systems to collect high-precision spatial data and deliver high-precision mapping and geospatial analysis with unparalleled accuracy for your most critical projects.



## THE Applus+ SOLUTION

While less flexible than mobile systems, it offers superior accuracy and is ideal for projects that require meticulous detail. These systems use laser pulses to measure distances, creating a dense point cloud that can be transformed into detailed 3D models or topographical maps.

They are applied in sectors such as construction and civil engineering, among others. The high level of detail captured makes it a valuable tool for professionals who require in-depth geospatial analysis.

Conventional LiDAR systems are typically stationary and used for capturing data in a fixed location. Mobile LiDAR systems, on the other hand, can be handheld or mounted on moving platforms and often use techniques like Simultaneous Localization and Mapping (SLAM) to infer their location as they move. Mobile LiDAR is usually faster in data collection but may offer slightly less precision compared to conventional systems.

## Target customers

Our Conventional LiDAR Capture services are designed for professionals in sectors that demand high-precision spatial data, such as civil engineering, construction, and major



industries, and are commonly used for dimensional control and capturing buildings, plants, and structures that require the highest level of detail and accuracy.

## Key customer benefits

- Conventional LIDAR systems achieve extended scanning distances, surpassing the capabilities of mobile LIDAR systems. They are especially well-suited for comprehensive mapping tasks, such as capturing entire landscapes or urban environments, all from a stationary position.
- It provides a higher degree of precision and control when it comes to scanning. Users can focus on specific areas or objects of interest, making them valuable for applications like archaeological site documentation or the inspection of building facades.
- These LIDAR systems offer the flexibility to be customized with varying laser wavelengths and scanner configurations. This adaptability is a significant advantage when it comes to tailoring the technology to specific project requirements, such as data collection in areas with dense vegetation or challenging environmental conditions.
- Traditional LIDAR systems can generate denser point clouds, resulting in more detailed 3D models. This feature is particularly advantageous when precision and intricate details are of utmost importance.