



Size  
50m tall



Scan time  
10 minutes



Location  
Paris,  
France



Industry  
Conservation



Scanned  
Arc de  
Triomphe

## Words by Samuel Duhaussay, Geotopo

“Alongside our work in land management, engineering and rail sectors, our teams dedicate time for architecture and heritage projects, working to preserve just some of the 40,000 listed historic monuments in France alone. As a geospatial technology specialist, we are aware of the great significance many of our historical monuments hold.

One of the most famous, located at the tip of the Champs-Élysées in central Paris, is the Arc de Triomphe. In order to demonstrate to the Parisian crowds the precision and speed of scanning technology, we enlisted the help of GeoSLAM’s ZEB HORIZON.

Recognised as the centre of Paris for its position on the iconic roundabout, and measuring 50m tall, 45m wide and 22m deep, access to the Arc is limited. Yet with the ZEB HORIZON and its ability to capture distant elements at a range of 100 metres, the handheld scanner proved to be an effective companion for the project.

With approximately 600,000 visitors per year, accessing the site with a static scanner would be difficult. In order to carry out the survey, the operator walked around the Arc, returning to complete a figure of eight shape, all in one fluid motion and after ten minutes data capture was complete.

Achieving the same results with a static scanner would have taken considerably longer due to the numerous set-ups and the time it takes to complete each scan. The ZEB HORIZON was not only fast, but discreet and easy to operate in such a busy environment.

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GeoSLAM technology was at the top of our list to scan the Arc, primarily due to its accuracy, 'on-the-go' method of data collection and fast application. In just 10 minutes of data capture, we obtained 10 million cloud points with 2cm accuracy - together depicting the engravings of war victories as designed by architect, Guillaume Abel Blouet in 1833.

Its ability to capture 300,000 points per second made the ZEB HORIZON our technology of choice. Understanding the project's restrictions due to location and popularity, we're delighted with the outcome, which demonstrates the importance of mobile mapping devices to historical buildings such as this."

