

New Wearable System Paves Way for Mobile Mapping for Mainstream Use in Surveying



NavVis, a pioneer of indoor spatial intelligence technology and enterprise solutions, has announced the launch of NavVis VLX, a wearable mapping system that captures high-quality data in even the most complex built environments such as construction sites, stairwells and small technical rooms. The all-in-one reality-capture capabilities of NavVis VLX include both survey-grade point clouds and high-

resolution panoramas. The combination of high-quality data capture and a compact, economical design will transform the way AEC projects are captured with fast, efficient scanning for BIM and CAD applications, while also extending the scope of projects to new deliverables such as web-based digital twins.

NavVis VLX is equipped with two Lidar sensors and is able to quickly and efficiently capture survey-grade point clouds using the same ground-breaking SLAM technology that NavVis has developed for its industry-leading indoor mobile mapping system, NavVis M6. Along with point clouds, NavVis VLX captures high-resolution panorama images in a complete 360° field of view, which is a result of four strategically positioned cameras.

Hands-free scanning in complex environments

The innovative design for a wearable device positions the hardware on the front and top of the operator. This provides several advantages over backpack models. Wearing the device on the front enables the operator to have more control over where the sensors are scanning, which improves data quality. The operator is also able to view and interact with the built-in screen that provides live feedback of what has been scanned and the quality of the data being captured. The combination of greater control over the device and hands-free scanning is particularly well-suited to complex environments such as construction sites and manufacturing facilities with obstacles and stairwells.

“We designed [NavVis VLX](#) to provide the AEC industry with a compact, versatile device that efficiently captures buildings and still delivers survey-grade point clouds,” said Georg Schroth, NavVis CTO.

“Our industry-leading indoor mobile mapping system, NavVis M6, has really taken off in the two years since launch because of its ability to quickly capture high-quality data in large commercial and industrial properties. Knowing that there is still an unmet need for high-quality mobile data capture in a wider range of building documentation applications, we set out to develop a more versatile device that can achieve what NavVis M6 does at a smaller scale and on a lower budget.”



NavVis VLX features a new design for wearable mobile mapping that enables fast, targeted scanning in the most complex environments.

Sceptics of mobile mapping

“We are very proud to announce today that this ambition has resulted in a wearable mapping system that is convenient and economical but delivers the data quality you would expect from a high-end device. In fact, we are so confident in the quality of the data that we believe even the biggest sceptics of mobile mapping will be convinced when they see the point cloud and panorama quality NavVis VLX can achieve.”

The data captured by NavVis VLX can be applied to a wide range of applications including conventional building documentation such as CAD drawings and BIM models, but also to innovative digital twin solutions, such as NavVis IndoorViewer. NavVis is launching partnerships with PointCab, ClearEdge3D and Hemminger for Bentley Microstation, in addition to the existing integration with Autodesk Revit, to ensure that NavVis VLX and NavVis M6 seamlessly fit into existing workflows of third-party solutions.



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