

Is This New Indoor Mobile Mapping System Setting a New Standard?



NavVis, a Germany-based specialist in mobile indoor mapping, visualisation and navigation, has launched the M6, a next-generation indoor mobile mapping system that aims to overcome the scalability and data-quality constraints of today's reality capture technology. Surveyors and AEC professionals can now use reality capture technology for demanding applications, such as large-scale indoor mapping projects, factory planning, creating and updating as-built BIM models and construction monitoring.

The [NavVis M6](#) is an all-in-one system that captures 360 degree immersive imagery, photorealistic point clouds, Bluetooth beacons, WiFi signals and magnetic field data. The NavVis M6 features a mobile Lidar system that, according to the company, lets it scan up to 30 times faster than stationary devices, letting users capture up to 30,000 square

metres in a day. Worth some special attention is the 6D simultaneous localization and mapping (SLAM) technology, which significantly improves the quality of data captured. Thanks to 6D SLAM, M6 continuously scans even the most complex indoor environments, including uneven surfaces or changing elevations, such as ramps, open spaces or long corridors without compromising the quality of the data.

Four laser scanners and six cameras

M6's innovative software is complemented by hardware features designed to improve the quality of data and ease of capture: four laser scanners with a range of up to 100 metres are arranged to maximize scan coverage, while six cameras automatically take high-resolution images during mappings. The innovative design of the M6 includes camera placement that keeps the operator in a blind spot.

The solution particularly is a suitable device for surveyors and AEC professionals who need to be able to capture large properties to update or create floorplans or as-built BIM models. At the same time, [NavVis IndoorViewer](#) software provides added value by giving every stakeholder access to the scanned environment through an interactive virtual building in their browser.

As said by Felix Reinshagen, CEO of NavVis, the NavVis M6 marks a quantum leap in indoor mobile mapping. Anyone who needs to scan large properties, run repeated scans or would like to move into the field of reality capture will profit from the ground-breaking data quality, he points out. With M6, users can now quickly capture large, complex indoor environments for typical tasks such as updating floorplans, documenting construction progress or creating as-built BIM models. At the same time, M6 captures the data needed to provide customers with additional deliverables such as browser-based immersive walkthroughs and indoor navigation, Reinshagen concluded.

