

Gexcel Presents Wearable Mobile Surveying System



Gexcel, an Italian provider of Lidar and imagery analysis software solutions, has entered the 3D mobile mapping market with its HERON system. HERON is Gexcel's innovative professional indoor and outdoor real-time 3D surveying system, developed under an EC-JRC licence.

Developed for challenging mapping and surveying tasks, such as deep dark underground mines or tunnels or in a complex industrial area, HERON is suited both for surveying, localisation and model-comparison tasks.

Surveying

For challenging surveying jobs the system works as follows. The surveyor wears the HERON backpack laser scanner and walks along the site without using GPS/GNSS, targets and trolleys. The following step is that the 3D survey will be visualised in real time on the HERON touch-screen control unit. The whole surveying process is accelerated and more convenient. An area of around 50,000m² can be surveyed on foot in 90 minutes.

Localisation and model comparison

When it comes to localisation it is possible to upload a 3D model of the site and activate the HERON localisation process. The wearable mobile surveying system automatically recognises the surveyor's position and compares the actual 3D real-time survey with the uploaded 3D model.

Regarding model comparison the surveyor can upload a previous 3D model of the site and start a new HERON survey in tracking mode to observe in real time the differences between the actual survey and the uploaded model. When a millimetre-resolution point cloud is needed to produce a high-definition model, static scans can be automatically mapped onto the system's medium-resolution scans without using targets and spheres.

For more information watch the video below.

<https://www.gim-international.com/content/news/gexcel-presents-wearable-mobile-surveying-system>
