

New-generation Leica Mobile Mapping Solution

Leica Geosystems has introduced its next-generation vehicle-independent mobile mapping platform. By calibrating imagery and Lidar point cloud data, the Pegasus:Two delivers highly accurate geospatial data in a 360° spherical view while providing two methods for extracting data – either through Lidar or via photogrammetry.

With a sensor platform that uses six horizontal cameras, and an optional rear camera and a skyward view camera, a single high speed Lidar sensor, and an external output for an additional sensor, the Pegasus:Two enables numerous mobile mapping applications, from pavement analysis to geo-referencing railways systems, now possible within the same platform.

From hardware to post-processing, Pegasus:Two allows economic data collection by balancing the largest pixel to sensor ratio on the market (5.5 x 5.5 µm), delivering extremely high image resolution, in a 4MB camera and using a single low-noise, high-speed profiler. Users can download data via WiFi or wired Ethernet or by using the latest USB3 interface, by means of a multi-core, industrial PC with 1TB storage and a solid state drive, enabling longer missions. An optional rotation mount, designed specifically for the Leica ScanStation P20, also makes mounting the terrestrial scanner upside down or right side up while also enabling left or right rotation.

The latest software now offers semi-automatic object extraction features, which enable two-click GIS metadata extraction or calculation of distances on-the-fly directly into ArcGIS for Desktop software. Leica Geosystems also introduces an external timing output and trigger signal for use with a variety of additional sensors, from a thermal camera, to ground penetrating radar, sonar, or a pollution monitor. The External Trigger feature synchronises time stamping and coordinates user data with one simple click.

Urban canyons

Equipped with the Novatel's latest ProPak6 high precision receiver for the most demanding city or rugged environments, the Pegasus:Two offers users a global system. It tracks signals of all available constellations, GPS, Glonass, Galileo and BeiDou as well as L-band, SBAS, and QZSS band coverage to ensure the best signal even when moving through urban canyons. The system provides a low noise, 200hz Inertial Measurement Unit for tracking the vehicle path thereby ensuring data is positioned accurately.

Portable

The Leica Pegasus:Two mobile mapping system now comes with a new streamlined and compact look and continues to fit in two travel cases. A convenient handle surrounding the unit enables easy mounting on and off your vehicles. The Pegasus:Two is a vehicle-independent system with a rechargeable 11 hour battery, and can be used on any moving platform.

Along with the Pegasus:Two, the advanced prototype, Pegasus:T2, a trolley based mobile system weighing less than 20 kilograms will also be on display at the HxGN LIVE 2014 Conference in Las Vegas.

Availability

The Leica Geosystems Pegasus:Two is available as of today. Ordering information and details are available from all authorised Leica Geosystems representatives. As the Leica Pegasus:Two system replaces the Pegasus:One, customers who own Pegasus:One can benefit from a defined upgrade to the Pegasus:Two system. The latest software from the Pegasus:Two is also backwards compatible with Pegasus:One.

Further information on the Leica Pegasus:Two can be found [here](https://www.gim-international.com/content/news/new-generation-leica-mobile-mapping-solution).