

Routescene Presents New 3D Mobile Mapping Solution



Routescene launched a new turnkey 3D mobile mapping solution, the Routescene LidarPod, at Intergeo. With the solution surveyors can save time, achieve more detailed and faster results and address many of the challenges currently facing the surveying industry. The Routescene LidarPod has been developed specifically for use on unmanned aerial vehicles (UAVs) but can also be fitted onto any mobile platform as required, such as cars and boats.

The company is seeing an increasing demand for 3D data, which is taking over from traditional 2D maps and this trend will accelerate in the next few years. Routescene also notices an increased need to update mapping information more frequently, with customers displaying an ever increasing sophistication using a variety of applications which need 3D

data, such as Building Information Management systems (BIM).

3D data collection

The Routescene LidarPod is a robustly engineered, high-specification and high-accuracy, lightweight, self-contained system which uses Velodyne Lidar technology to provide rapid 3D data collection and automated processing. It is simple to operate and enables rapid deployment in the field. According to the company it is an ideal tool for meeting the new demands being seen across the industry. It will transform surveying and how surveying is applied across many sectors.

This flexibility, particularly its use on UAVs, is attractive for many sectors and situations where accurate mapping is essential but difficult to achieve. It will enable surveys to take place in areas which previously would not have been considered.

The advanced technology has many wide-ranging applications. The Routescene UAV LidarPod can be used in situations where physical access to land is limited, risky or otherwise too costly including mining, forestry, utilities & energy as well as academic research and traditional surveying and mapping. It is the only safe way to survey dangerous and hostile environments. It will be invaluable in awkward or rough terrain where access is difficult such as landslips or disaster zones, offering the only viable solution for remote locations or locations with little infrastructure where airborne (fixed wing) Lidar is prohibitively expensive.

The fast data collection and analysis is perfect in situations where speed is of the essence and the outcomes are needed immediately, for instance, in opencast mine planning, reconnaissance or emergency response. The technology also provides a safer way to survey. Improvements in safety will be seen, as surveys are undertaken from a safe distance or from a vehicle, and in addition it reduces the time on site.

Mapping

Routescene's new technology offers a non-intrusive method to obtain detailed and precise geo-referenced 3D datasets. It can be used for 3D mapping; large scale topographic surveys; city planning and management; powerline inspection; scoping, planning and management of mines plus forestry design, management and operation.

To increase its' appeal further, the Routescene LidarPod costs significantly less than a vehicle based mobile mapping system. The rate of return is much higher with a payback period calculated at around 100 days and there are certainly more benefits and advantages compared to traditional survey methods.

The turnkey solution includes LidarViewer, specially developed software to turn the raw data into valuable business information. It will enable users to convert, analyse and filter huge volumes of point cloud data to improve productivity and workflow. Powerful filters enable users to extract relevant data for use in third party software, such as GIS and CAD packages, which are unable to cope with such large data volumes.