

iLinks IntelLAS™ MOBILE LiDAR SYSTEM



- Standalone mobile LiDAR
- Works at Highway Speeds
- Motion Reference Unit
- Fiber Optic Gyro Compass
- GNSS RTK Positioning
- Dual GNSS Heading
- 700,000 Points Per Second
- 100m Range Capability
- ± 1cm Accuracy at 100m
- 42° x 360° Field Of View
- Factory Calibrated
- Water & Dust Resistant
- Rugged Laptop PC
- HYPACK or QINSy
- Training & Support

iLinks IntelLAS™ MOBILE LiDAR SYSTEM (Long Range Version)



- Standalone mobile LiDAR
- Motion Reference Unit
- Fiber Optic Gyro Compass
- GNSS RTK Positioning
- Dual GNSS Heading
- 36,000 Points Per Second
- 250m Range Capability
- ± 3cm Accuracy at 100m
- 360° Field Of View
- Factory Calibrated
- Water & Dust Resistant
- Rugged Laptop PC
- HYPACK or QINSy
- Training & Support

Mapping urban utilities with mobile LiDAR

iLinks introduced the IntelLAS™ mobile LiDAR system in 2015, the first truly portable and rugged 'Engineering Grade' system capable of scanning roads and highways at normal traffic speeds. Since its introduction, the IntelLAS™ has been used on a number of urban development projects and has scanned literally hundreds of miles of highway, covering 40 to 50 miles per day.

Accurately georeferenced information is vital to the process of assessing existing utilities and infrastructures and facilitating effective planning for future demand.

Mobile LiDAR scanning delivers fast and accurate geospatial data for the GIS mapping of ground utilities, powerlines, vegetation and surrounding infrastructures.

When coupled with 360° georeferenced images, the



required features can be extracted from the LiDAR data to produce finished maps and engineering drawings. There are a number of commercially available 'Feature Extraction' software packages out there as well as numerous professional companies who will provide turnkey processing services.

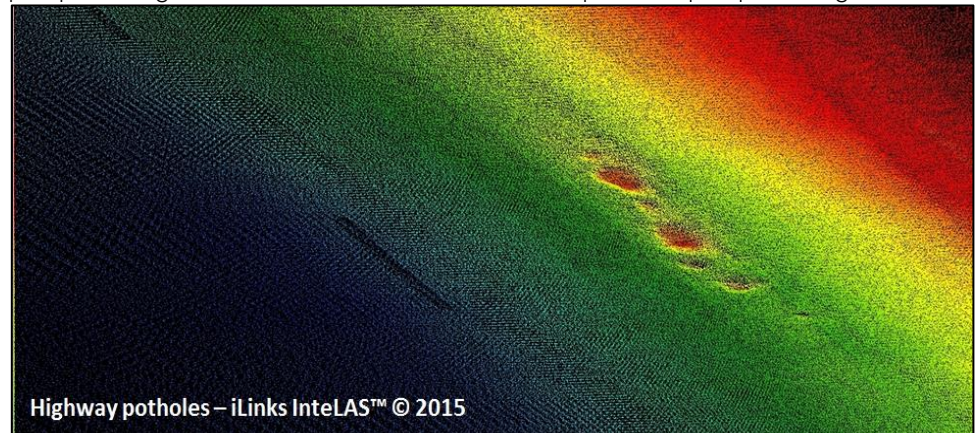
The benefits of using mobile LiDAR to map urban utilities and infrastructures speak for themselves, safety, speed

and efficiency, data quality and quantity are to name but a few. As an example; by simply driving through and urban development you will acquire accurate geospatial data for all of the ground assets, utilities, infrastructures and overhead power and communications lines.

Imagine the effort and the time required to gather that information by conventional survey means.

Urban mapping with the iLinks IntelLAS™

Since the introduction of the IntelLAS™ mobile LiDAR system in 2015, iLinks have successfully completed over 25 urban mapping and highway scanning projects with the IntelLAS™ system. In most cases, georeferenced 360° spherical digital images and LiDAR data has been acquired simultaneously, to aid the back office feature extraction process. In terms of data accuracy, the IntelLAS™ produces a real time point cloud on the vehicle which is accurate to within 3-5 cm due to dynamic positioning inaccuracies. This can be improved to 1-2 cm by post processing the GNSS and IMU data. iLinks can also provide a post processing services.



Highway potholes – iLinks IntelLAS™ © 2015