

IntelLAS™ Mobile LiDAR System

- 300,000 Points Per Second
- ± 3 cm Accuracy
- 100 m Range
- Integrated GNSS, IMU, FOG
- Requires No Calibration
- Works at Highway Speeds
- Real Time Geospatial Data
- Optional Data Acquisition Software



The IntelLAS™ (Integrated Laser Acquisition System) mobile mapping system represents the very latest in dynamic geospatial data collection technology. The system comes fully calibrated and ready to operate, complete with its own 3D data acquisition and visualisation software.

APPLICATIONS

Delivering up to 300,000 data points per second, the system can be used at near highway speeds and is ideally suited to any number of applications including; highway planning, bridge, height and width, asset management, railroad surveys, corridor mapping, power line surveys, pipeline surveys, volumes and much more.

BENEFITS

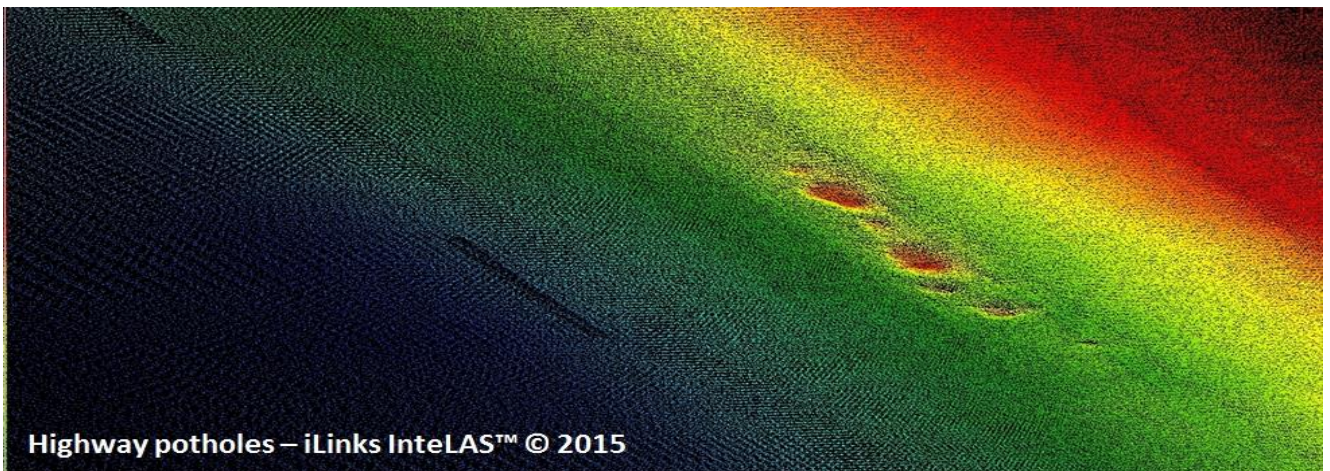
The compact form factor and light weight of the IntelLAS™ allows the system to be fitted to almost any type of vehicle, vessel or mobile platform in a matter of minutes.

The system has been designed to be simple to mobilise and easy to operate without the need for specialised training or qualifications. Being able to rapidly acquire accurate geospatial data in real time, without the need for post processing, not only offers a number of cost and efficiency benefits to existing operations, it also helps create new business and market opportunities.

FULLY CALIBRATED

The IntelLAS™ is delivered as a fully calibrated ready to go mobile mapping system, complete with PC and software. The system requires no user calibration or configuration and can be mounted on any type of mobile platform and be ready to acquire accurate 3D Geospatial data within minutes.

Onsite training is included with every system together with 12 months 24/7 telephone and remote internet support.



IntelLAS™ - Specifications

| LiDAR SENSOR | |
|--|--|
| Laser Class | 905 nm Class-1 Eye Safe |
| Laser / Detector pairs | 1 – 16 pairs (User selectable) |
| Horizontal Field of View (Degrees) | +15° to -15° (30°) |
| Vertical Field of View (Degrees) | 360° |
| Range (Meters) | 1m to 100m |
| Rotation Speed (Frame Rate) | 5-20Hz (300 RPM to 1200 RPM) user selectable |
| Accuracy | +/- 3 cm (one sigma at 25 m) |
| Output | Up to 300,000 points/second (user selectable) |
| GNSS RECEIVER | |
| Simultaneous Tracking Channels | 240 |
| GPS Signals / GLONASS Signals | L1, L2, L2C, L5 /L1,L2 |
| Single Point Accuracy (Meters) | 1.20m |
| SBAS Accuracy (Meters) | 0.60m |
| Satellite DGPS Accuracy (Meters) | 0.40m |
| VBS Accuracy (Meters) | 0.60m |
| XP / HP Accuracy (Meters) | 0.15m / 0.10 |
| RTK / VRS Accuracy (Meters) | 0.01m + 1ppm |
| COMBINED GNSS INS SYSTEM ACCURACY | |
| GYRO Type | Fiber Optic Gyro (FOG) |
| Accelerometers | MEMS |
| Pitch Accuracy (Degrees) | 0.015° |
| Roll Accuracy (Degrees) | 0.015° |
| Heading Accuracy (Degrees) – Stand Alone System | 0.050° |
| Heading Accuracy (Degrees) – External Antenna (1 m Baseline) | 0.030° |
| Heading Accuracy (Degrees) – External Antenna (2 m Baseline) | 0.020° |
| DATA OUTPUTS | |
| Communications Protocols | Ethernet TCP, Ethernet UDP, RS232, USB |
| Laser Data Output | Ethernet UDP – 700,000 Points Per Second |
| GNSS and IMU Data Output | Ethernet TCP – 100Hz |
| Timing Signals for Laser Data | GNSS 1 PPS and GPRMC (Programmable) |
| DATA INPUTS | |
| Command & Control | Ethernet (1 Gbyte) UDP, TCP |
| Programming | RS232, USB |
| RTK or VRS Correction Signals (RTCMv3 / CMR+) | RS232 |
| POWER | |
| Input Voltage | 9 – 32 Volts DC |
| Power Consumption | 30 Watts |
| PHYSICAL | |
| Dimensions (L x W x H) | 600 mm x 200 mm x 190mm |
| Weight | 12.0 kg (26.5 lbs.) |
| Environmental Protection | IP 65 |
| Shock | 500 m/sec ² amplitude, 11 msec duration |
| Vibration | 5 Hz to 2000 Hz, 3G RMS |
| Operating / Storage temperature | -10° to +60° C / - 40° to +105° C |

For more specific information on the IntelLAS™ or arrange a system demonstration, please call +1 281 665 3954 or e-mail us at info@ilinks.us



MADE IN AMERICA BY

