InteLAS™ HD - Mobile LiDAR System

- 700,000 Points Per Second
- ± 1 cm Accuracy
- 100 m Range
- Integrated GNSS, INS, FOG
- Requires No Calibration
- Works at Highway Speeds
- Real Time Geospatial Data
- Optional Data Acquisition Software

The InteLAS™ (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 700,000 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

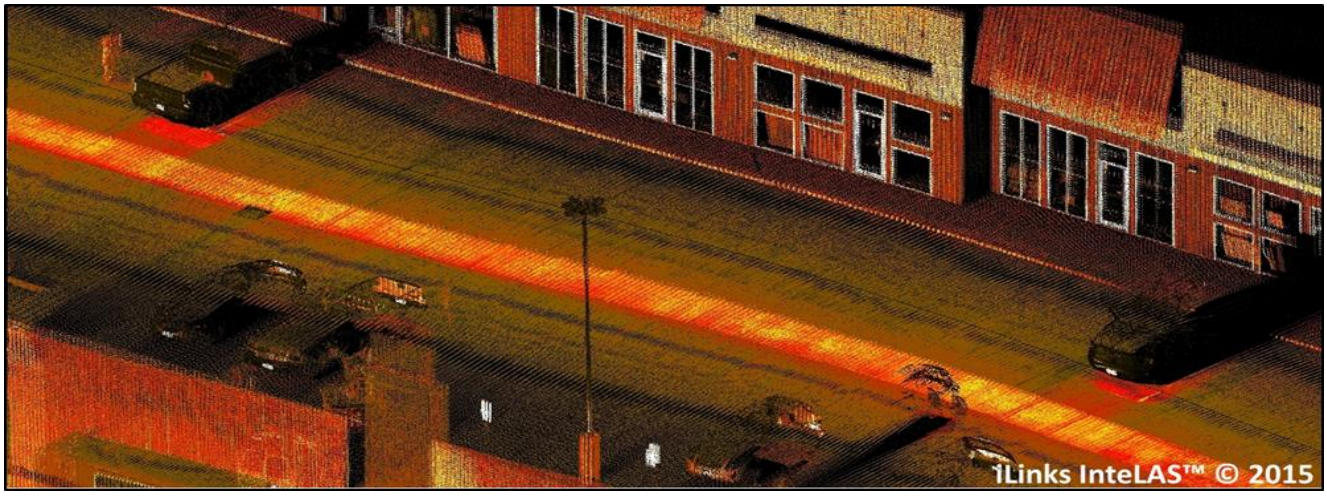
The compact form factor and light weight of the InteLAS™ allows the system to be fitted to almost any type of vehicle, vessel or mobile platform in a matter of minutes.

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 InteLAS™ 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.



InteLAS™ HD - Specifications

LiDAR SENSOR	
Laser Class	905 nm Class-1 Eye Safe
Laser / Detector pairs	1 – 32 pairs (User selectable)
Horizontal Field of View (Degrees)	+10.67° to -30.67° (41.34°)
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	<2 cm (one sigma at 25 m)
Output	Up to 700,000 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/sec² 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 or to arrange a system demonstration, please call **+1 281 665 3954** or e-mail us at **info@ilinks.us**

MADE IN AMERICA BY iLinks GEOSOLUTIONS