



LANDINS

GEOREFERENCING & ORIENTATION
FOR ROAD SURVEY AND MOBILE MAPPING



...FOR REAL-TIME APPLICATIONS OR OFFLINE USE

Courtesy of ABA Surveying Ltd

DELPHINS POST-PROCESSING SOFTWARE

A powerful tool for improved accuracy and increased reliability.



DELPHINS utilizes forward, backward and smoothing techniques for optimal trajectory computation. It allows seamless integration with sensor data collected in the field. It reduces the amount of offline work and boosts productivity.

APPLICATIONS:

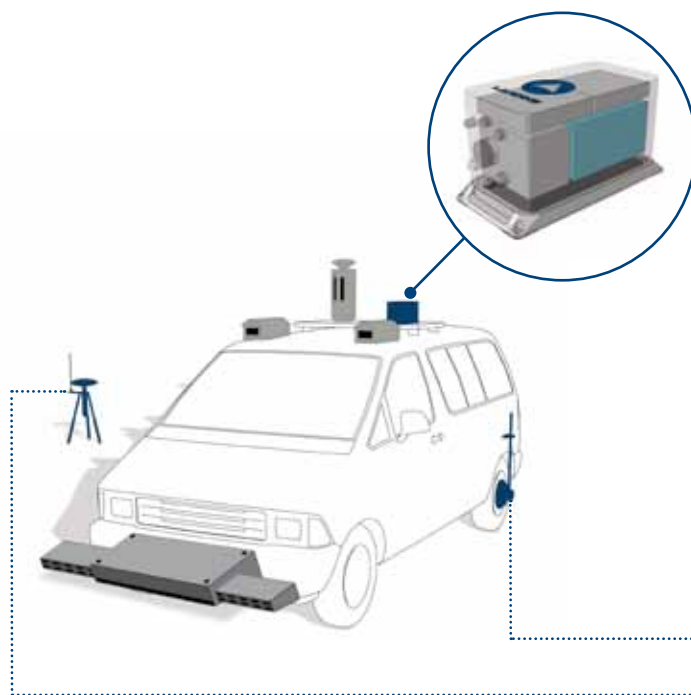
Asset management • Vehicle dynamics research • GIS data collection • Tunnel mapping • Vehicle control • Mobile Mapping Systems • Image capture • Underground survey • Pavement management • Autonomous vehicles • LIDAR mapping • Railway & Road survey

LANDINS

GEOREFERENCING AND ORIENTATION SYSTEM

ROAD SURVEY AND MOBILE MAPPING

LANDINS is a simple, turnkey position and orientation system for land-based mobile applications. It offers dependable position information in urban environments where GNSS is limited, even in real-time, thanks to its high-grade inertial heart designed by iXSea. LANDINS combines highly accurate position, precise timing and a very fast output rate to meet the requirements of the most demanding road survey and mapping applications.



iXSea FOG IMU:

- High grade FOG and acceleration sensors
- No heading drift even when GNSS is down
- 1 single GNSS antenna only

Embedded data processing unit:

- Uses IMU, GNSS and DMI for data fusion
- 200 Hz real-time data
- 1,000 Hz event markers
- Precise time-tagging
- Self-calibration when vehicle stops (ZUPTs)
- Fast in-motion initialization

Embedded GNSS*:

- GPS L1/L2, Glonass, Omnistar, RTK

Data logger:

- IMU data for post-processing
- GNSS raw data
- Real-time INS output

DMI*: Distance Measurement Instrument

GNSS: Reference station*

* Optional



LANDINS

SPECIFICATIONS

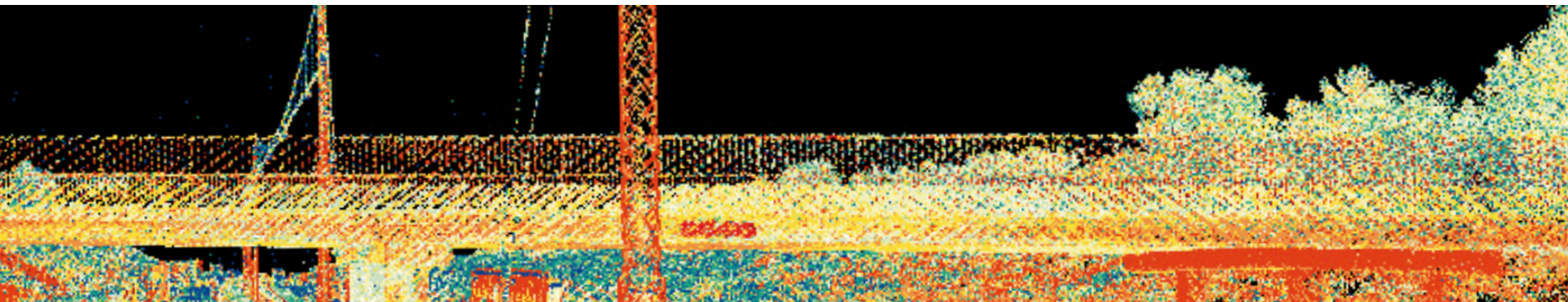
PERFORMANCE*

	DGPS	RTK	PPK
True heading (deg)	0.01	0.01	0.01
Roll/Pitch (deg)	0.005	0.005	0.005
Position X and Y (m)	0,3	0.035	0.02
Position Z (m)	0.5	0.05	0.05

PERFORMANCE* DURING GPS OUTAGES

Outage duration (sec)	15		60		120		300	
	RTK	PPK	RTK	PPK	RTK	PPK	RTK	PPK
True heading (deg)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Roll/Pitch (deg)	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Position X and Y (m)	0.07	0.05	0.20	0.10	0.30	0.25	0.70	0.60
Position Z (m)	0.05	0.05	0.10	0.07	0.25	0.20	0.50	0.40

* All figures are RMS
Specifications subject to change without notice



INS CHARACTERISTICS

Weight:	4.5 kg	Operating temperature:	-20°C to 55°C
Size:	275 mm x 136 mm x 175 mm	Storage temperature:	-40°C to 80°C
Embedded GNSS*:	L1/L2, Glonass, RTK, Omnistar	Logging capacity:	48 hrs (IMU, INS & GNSS data)
Power:	consumption: < 18W input range: 12 to 32V DC	MTBF:	40,000 hours

INS INTERFACES

3 event markers:	100 μ s time stamping accuracy, up to 1,000Hz
Output refreshing rate:	up to 200 Hz
Latency:	< 3 ms
Time tagging:	PPS signal
Ethernet 100 Mbits:	-configuration, monitoring, ftp/http access -5 logical ports
2 serial inputs:	RS232/422
2 serial outputs:	RS232/422
Pulses:	3 in/2 out
USB host:	for real-time logging or data transfer
DMI interface:	embedded



* Optional

EMEA

Phone: +33 1 30 08 98 88

www.ixsea.com

USA

Phone: +1 781 937 8800

ASIA-PACIFIC

Phone: +65 6747 4912

24/7
Worldwide
Support

