

Atlans Series

Inertial Navigation Systems for georeferencing applications

Atlans Series is a complete range of North seeking and North keeping Inertial Navigation Systems (INS). Cost-effective, they provide Fiber-Optic Gyroscope (FOG) performance to the full spectrum of land & air mapping applications and offer highly accurate positioning in all conditions, including within GNSS-denied environments.



Atlans A3

COMPACT AND
LIGHTWEIGHT INS



Atlans A5

BEST-IN-CLASS
EXPORT-FREE INS



Atlans A7

HIGH-GRADE
STANDARD INS



Atlans A9

ULTIMATE INS FOR
NICHE APPLICATIONS

A SCALABLE SOLUTION

- Covering the full range of Land & Air applications
- OEM versions available to meet specific requirements
- Export-free versions available: Atlans A3 – Atlans A5

APPLICATIONS

LAND

- Asset inventory
- Pavement condition survey
- Vehicule automation
- HD mapping
- Automotive testing
- Ground-truth

AIR

- Small area survey (UAS)
- Wide area survey (plane, helicopter)
- Precision pointing

UNRIVALED PRICE-PERFORMANCE RATIO

- Highly accurate positioning (up to 0.01m)
- Accurate heading for long-distance straight lines and GNSS-denied environments
- Cost-effective
- Quick and simple installation

TECHNICAL SPECIFICATIONS

LAND APPLICATIONS

	Atlans A3			Atlans A5			Atlans A7			Atlans A9		
CHARACTERISTICS												
North seeking							●			●		
Temperature	From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C		
Temperature variation	1°C/min (internal)			1°C/min (internal)			1°C/min (internal)			1°C/min (internal)		
Weight	OEM: 450 g			2.6 kg			2.6 kg			4.5 kg		
Dimensions (mm)	OEM: 70.5 x 70.5 x 47.3			160 x 160 x 113			160 x 160 x 113			180 x 180 x 160		
PERFORMANCE WITH GNSS (in RMS)												
Correction type	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
Horizontal Position (X,Y) (m)	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
Vertical Position (Z) (m)	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
Roll & Pitch (deg)	0.015	0.03	0.05	0.008	0.01	0.01	0.005	0.008	0.008	0.0020	0.0020	0.0025
Heading (single antenna, deg)	0.035	0.05	0.1	0.025	0.04	0.05	0.012	0.015	0.02	0.005	0.008	0.01
Heading (dual antenna, deg)	0.035	0.05	0.1	0.025	0.04	0.05	Available on request			Available on request		
Heading drift 10 min straight line	0.08	0.08	0.08	0.05	0.05	0.05	0.008	0.008	0.008	0.002	0.002	0.002
PERFORMANCE DURING GNSS OUTAGE 1 min (in RMS)												
Correction type	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
Horizontal Position (X,Y) (m)	0.40	1.50	1.50	0.15	0.60	0.90	0.08	0.40	0.70	0.04	0.20	0.40
Vertical Position (Z) (m)	0.20	0.50	1.0	0.15	0.60	0.70	0.06	0.40	0.50	0.04	0.20	0.40
Roll & Pitch (deg)	0.03	0.06	0.06	0.008	0.012	0.012	0.005	0.008	0.008	0.0020	0.0020	0.0025
Heading (single antenna, deg)	0.035	0.05	0.1	0.025	0.04	0.05	0.012	0.015	0.02	0.005	0.008	0.01

AIR APPLICATIONS

	Atlans A3			Atlans A5			Atlans A7			Atlans A9		
CHARACTERISTICS												
North seeking							●			●		
Temperature	From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C		
Temperature variation	1°C/min (internal)			1°C/min (internal)			1°C/min (internal)			1°C/min (internal)		
Weight (kg)	OEM: 450 g			2,6 kg			2,6 kg			4,5 kg		
Dimensions (mm)	OEM: 70,5 x 70,5 x 47,3			160 x 160 x 113			160 x 160 x 113			180 x 180 x 160		
PERFORMANCE WITH GNSS (in RMS)												
Correction type	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
Horizontal Position (X,Y) (m)	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
Vertical Position (Z) (m)	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
Roll & Pitch (deg)	0.015	0.03	0.05	0.008	0.01	0.01	0.005	0.008	0.01	0.0020	0.0020	0.0025
Heading (single antenna, deg)	0.035	0.1	0.15	0.025	0.04	0.05	0.015	0.02	0.03	0.005	0.008	0.01
Heading (dual antenna, deg)	0.035	0.1	0.15	0.025	0.04	0.05	Available on request			Available on request		
Heading drift 10 min straight line	0.08	0.08	0.08	0.03	0.03	0.03	0.008	0.008	0.008	0.002	0.002	0.002
PERFORMANCE DURING GNSS OUTAGE 1 min (in RMS)												
Correction type	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
Horizontal Position (X,Y) (m)	0.60	10	15	0.20	1.60	2.70	0.15	1.10	1.80	0.05	0.30	0.60
Vertical Position (Z) (m)	0.10	1	1.50	0.20	1.00	1.50	0.10	0.60	1.00	0.05	0.30	0.60
Roll & Pitch (deg)	0.03	0.15	0.15	0.008	0.012	0.012	0.005	0.009	0.01	0.0020	0.0020	0.0025
Heading (single antenna, deg)	0.035	0.1	0.15	0.025	0.04	0.05	0.015	0.02	0.03	0.005	0.008	0.01