

# 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		
<b>CHARACTERISTICS</b>												
<b>North seeking</b>							●			●		
<b>Temperature</b>	From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C		
<b>Temperature variation</b>	Insensitive to any operational temperature change						Insensitive to any operational temperature change					
<b>Weight</b>	OEM: 450 g			2.9 kg			2.9 kg			4.5 kg		
<b>Dimensions (mm)</b>	OEM: 70.5 x 70.5 x 47.3			160 x 160 x 113			160 x 160 x 113			180 x 180 x 160		
<b>PERFORMANCE WITH GNSS (in RMS)</b>												
<b>Correction type</b>	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
<b>Horizontal Position (X,Y) (m)</b>	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
<b>Vertical Position (Z) (m)</b>	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
<b>Roll &amp; Pitch (deg)</b>	0.015	0.03	0.05	0.008	0.01	0.01	0.005	0.008	0.008	0.0020	0.0020	0.0025
<b>Heading (single antenna, deg)</b>	0.035	0.05	0.1	0.025	0.04	0.05	0.012	0.015	0.02	0.005	0.008	0.01
<b>Heading (dual antenna, deg)</b>	0.035	0.05	0.1	0.025	0.04	0.05	Available on request			Available on request		
<b>PERFORMANCE DURING GNSS OUTAGE 1 min (in RMS)</b>												
<b>Correction type</b>	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
<b>Horizontal Position (X,Y) (m)</b>	0.40	1.50	1.50	0.15	0.60	0.90	0.08	0.40	0.70	0.04	0.20	0.40
<b>Vertical Position (Z) (m)</b>	0.20	0.50	1.0	0.15	0.60	0.70	0.06	0.40	0.50	0.04	0.20	0.40
<b>Roll &amp; Pitch (deg)</b>	0.03	0.06	0.06	0.008	0.012	0.012	0.005	0.008	0.008	0.0020	0.0020	0.0025
<b>Heading (single antenna, deg)</b>	0.035	0.05	0.1	0.025	0.04	0.05	0.012	0.015	0.02	0.005	0.008	0.01

After dynamic alignment is completed.  
Actual performance obtained under operational condition of use.

## AIR APPLICATIONS

	Atlans A3			Atlans A5			Atlans A7			Atlans A9		
<b>CHARACTERISTICS</b>												
<b>North seeking</b>							●			●		
<b>Temperature</b>	From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C			From -20°C to +55°C		
<b>Temperature variation</b>	Insensitive to any operational temperature change						Insensitive to any operational temperature change					
<b>Weight (kg)</b>	OEM: 450 g			2.9 kg			2.9 kg			4.5 kg		
<b>Dimensions (mm)</b>	OEM: 70.5 x 70.5 x 47.3			160 x 160 x 113			160 x 160 x 113			180 x 180 x 160		
<b>PERFORMANCE WITH GNSS (in RMS)</b>												
<b>Correction type</b>	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
<b>Horizontal Position (X,Y) (m)</b>	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
<b>Vertical Position (Z) (m)</b>	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30	0.01	0.02	0.30
<b>Roll &amp; Pitch (deg)</b>	0.015	0.03	0.05	0.008	0.01	0.01	0.005	0.008	0.01	0.0020	0.0020	0.0025
<b>Heading (single antenna, deg)</b>	0.035	0.1	0.15	0.025	0.04	0.05	0.015	0.02	0.03	0.005	0.008	0.01
<b>Heading (dual antenna, deg)</b>	0.035	0.1	0.15	0.025	0.04	0.05	Available on request			Available on request		
<b>Heading drift 10 min straight line (deg)</b>	0.08	0.08	0.08	0.03	0.03	0.03	0.008	0.008	0.008	0.002	0.002	0.002
<b>PERFORMANCE DURING GNSS OUTAGE 1 min (in RMS)</b>												
<b>Correction type</b>	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS	PPK	RTK	DGPS
<b>Horizontal Position (X,Y) (m)</b>	0.60	10	15	0.20	1.60	2.70	0.15	1.10	1.80	0.05	0.30	0.60
<b>Vertical Position (Z) (m)</b>	0.10	1	1.50	0.20	1.00	1.50	0.10	0.60	1.00	0.05	0.30	0.60
<b>Roll &amp; Pitch (deg)</b>	0.03	0.15	0.15	0.008	0.012	0.012	0.005	0.009	0.01	0.0020	0.0020	0.0025
<b>Heading (single antenna, deg)</b>	0.035	0.1	0.15	0.025	0.04	0.05	0.015	0.02	0.03	0.005	0.008	0.01

After dynamic alignment is completed.

Actual performance obtained under operational condition of use.