

# Advans Series

## Inertial Navigation Units for Land Defense Applications

Based on Fiber-Optic Gyroscope (FOG) technology, the Advans inertial navigation units (INUs) are designed to provide highly accurate positioning and pointing. North-seeking even in GNSS-denied environments, the series covers the needs of the full range of land applications from tactical navigation to high-grade artillery systems.

Very compact and adaptable to any communication protocol, they are developed from the same architecture, making them easy to integrate and operate.

ITAR-free, the Advans inertial navigation units have been selected by many integrators and armies worldwide.



### Advans Ursa

COST-EFFECTIVE INU FOR  
ALL TACTICAL VEHICLES



### Advans Lyra

MID-GRADE INU FOR  
NAVIGATION AND POINTING



### Advans Vega

HIGH-GRADE INU FOR  
LONG RANGE APPLICATIONS

## SCALABLE SOLUTION

- Wide range of performance
- Covers the full spectrum of applications from tactical navigation to high-grade artillery systems
- Identical integration architecture for each product (identical web interface, communication protocols, algorithm, functions and connectors).

## BENEFITING FROM THE FOG TECHNOLOGY

- Fast and accurate alignment
- High bias stability over the long run
- Very high reliability
- Adapted to harsh environments
- Low cost of ownership
- No periodic maintenance

## TECHNICAL SPECIFICATIONS



**Ursa U5**



**Ursa U7**



**Lyra L5**



**Lyra L7**



**Vega**

	<b>Ursa U5</b>	<b>Ursa U7</b>	<b>Lyra L5</b>	<b>Lyra L7</b>	<b>Vega</b>
Horizontal position (without GNSS) <sup>1</sup>	0.7% DT	0.5% DT	0.4% DT	0.2% DT	0.1% DT
Heading <sup>2</sup>	6 mils	4 mils	2 mils	1 mil	0.5 mil
Roll and pitch <sup>2</sup>	2 mils	2 mils	0.5 mil	0.5 mil	0.2 mil
Volume (mm)	166x160x136	166x160x136	275x136x150	275x136x150	180x180x162
Weight (kg)	4	4	4.5	4.5	5
Consumption	<12 W	<12 W	<18 W	<18 W	<18 W
Initial alignment	4 minutes				
Fast alignment (stored values)	30 seconds				
Optional GNSS	Advans GNSS or any GNSS providing NMEA 0183 messages				
Optional odometer	Advans VMS or any odometer through CAN bus or pulses				
Communication input/output	RS-232 / RS-422 / CAN / Ethernet - Web based interface for configuration				
Reliability	MTBF > 80,000hrs - No moving parts - No periodic maintenance				
Shocks	40g/10ms without shock absorbers - Lyra & Vega are howitzer qualified				
Qualification	MIL-STD-810G / MIL-STD-461F / MIL-STD-1275E / IP67 / CE / ROHS				
Operating temperature	-32°C to +71°C				
Export control	French export legislation applies - No ITAR/EAR restricted components				

1: In percentage of distance traveled. Expressed in CEP50

2: After dynamic alignment is completed. Expressed in RMS