

Advans Series

Inertial Navigation Systems for Land Defense Applications

Based on Fiber-Optic Gyroscope (FOG) technology, the Advans Inertial Navigation Systems (INS) are designed to provide highly accurate positioning and pointing to the full range of land applications from tactical navigation to high-grade artillery systems. Accurate in GNSS-denied environments, easy to integrate and operate, non-ITAR and maintenance free, the Advans Inertial Navigation Systems have been selected by many integrators and land forces worldwide.



Advans Ursa

COST-EFFECTIVE INS FOR
ALL TACTICAL VEHICLES



Advans Lyra

MID-GRADE INS FOR
NAVIGATION AND POINTING



Advans Vega

HIGH-GRADE INS FOR
LONG RANGE APPLICATIONS

SCALABLE SOLUTION

- Wide range of performance
- Covers the full spectrum of land applications
- Same functions and algorithms
- Same protocols and cabling

FOG TECHNOLOGY

- Full performance in GNSS denied conditions
- No drift in heading over the long run
- Very high reliability
- No periodic maintenance

EASY INTEGRATION

- Optimized SWaP
- No velocity sensor needed
- Automatic calibration
- WEB interface for settings

TECHNICAL SPECIFICATIONS



	Ursa U5	Lyra L7	Vega V5
Horizontal position (without GNSS) ⁽¹⁾	0.4% DT	0.2% DT	0.1% DT
Heading ⁽²⁾	4 mils	1 mil	0.5 mil
Roll and pitch ⁽²⁾	1 mil	0.5 mil	0.2 mil
Volume (mm)	166 x 160 x 136	275x136x150	180x180x162
Weight (kg)	3.8	4.5	5
Consumption	< 12 W	< 18 W	< 18 W
Minimal Static Alignment	< 2 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 > 100,000hrs - No moving parts - No periodic maintenance		
Shocks	40 g/10 ms without shock absorbers - Lyra & Vega are howitzer qualified		
Qualification	MID-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