

INERTIAL NAVIGATION UNITS

INU based on FOG

(Fiber-optic gyroscopes)



Advans Ursa

HIGH-GRADE INU FOR
BLUE FORCE TRACKING

Based on the FOG technology, Advans Ursa is a robust and maintenance-free system that provides highly-accurate continuous positioning, heading and attitude information for tactical navigation, blue force tracking, collaborative combat and light weapon systems, even in full GNSS denied environments.



Advans Lyra

HIGH-GRADE INU
FOR TACTICAL VEHICLES

Based on the FOG technology, Advans Lyra is a middle grade INU offering a very good cost-performance ratio for weapon systems such as rocket launchers, light howitzers, mortars, radars and observation systems.



Advans Vega

HIGH-GRADE INU FOR
ARTILLERY AND RADARS

Based on the FOG technology, Advans Vega is an inertial navigation system designed for military applications requiring mobility and high-accuracy. It provides immediate and continuous navigation and pointing information for radars, topographic systems and artillery launchers, howitzers and multiple rocket launchers.

**Ursa U5****Ursa U7****Lyra L5****Lyra L7****Vega**

HORIZONTAL POSITION WITHOUT GNSS⁽¹⁾	1 % DT	0.7 % DT	0.5 % DT	0.3 % DT	0.1 % DT
REAL TIME HEADING ACCURACY⁽²⁾	6 mils	4 mils	2 mils	1 mil	0.5 mil
ROLL AND PITCH	3 mils	2 mils	0.5 mils	0.5 mils	0.2 mil
ALIGNMENT⁽³⁾	Initial set up <4mn - Fine Alignment 10mn typical				
FAST ALIGNMENT (STORED VALUES)	30s				
VOLUME (MM)	166x160x136	166x160x136	275x136x150	275x136x150	180x180x162
WEIGHT		4 kg		4.5 kg	5 kg
POWER CONSUMPTION		<12 W		<18 W	
OPTIONAL EXTERNAL GPS	Any GPS providing - Smart Mil Std C/A GNSS NMEA 0183				
VMS COMPATIBILITY	Bus Can or pulses				
COMMUNICATION INPUT/OUTPUT	RS 232 / 422 / Ethernet - Web based interface for configuration				
RELIABILITY	MTBF > 80,000hrs - No moving parts - No periodic maintenance				
SHOCKS⁽⁴⁾	40g / 10ms without shock absorbers - Lyra & Vega Howitzer qualified				
QUALIFICATION	MIL Std 810 G - 461 F - 1275 E - Waterproof IP67 - CE marking ROHS				
OPERATING TEMPERATURE⁽⁵⁾	-45 °C to +71 °C				
EXPORT CONTROL	French export legislation applies - No ITAR restricted components				

⁽¹⁾ Value in % x DT (Distance Traveled) CEP with VMS (Velocity Measurement System) and ZUPT (Zero Update)

⁽²⁾ Mils rms after dynamic alignment ⁽³⁾ Typical values - Depends on alignment scenarios - U3: alignment with GNSS ⁽⁴⁾ Depends on shock profile ⁽⁵⁾ -32°C cold start