

Advans Vega SL

High-Grade Military INS for navigation in Amphibious assault operations

The Advans Vega Sea-Land provides GNSS-independent navigation for unmatched performance in amphibious assault and land combat operations under conditions of jamming and spoofing. Rugged, maintenance-free, and easy to integrate, the Advans Vega Sea-Land sets a new standard for resilient navigation performance in amphibious assault operations.



SEAMLESS SEA-LAND OPERATIONS

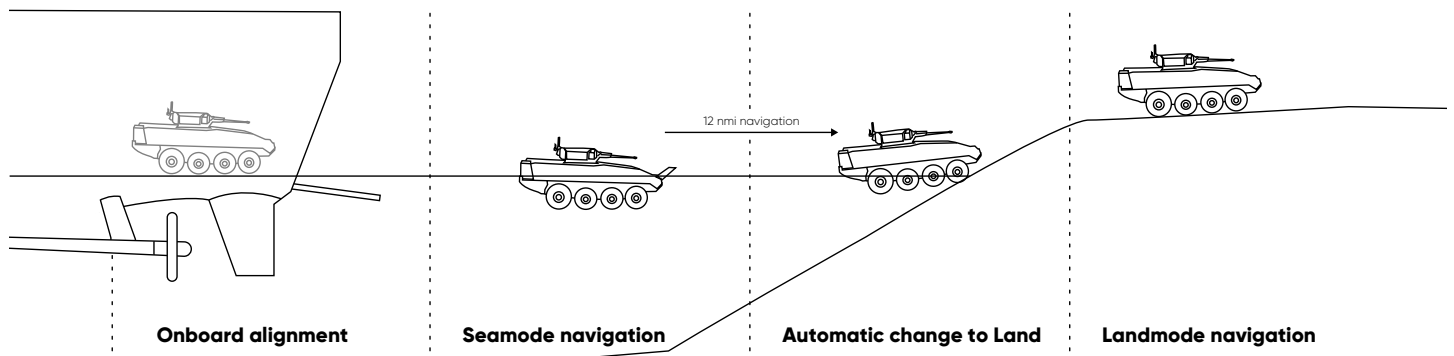
- High-grade navigation, heading and pointing on sea and land
- Decades of experience in combat navigation in both environments
- No operating constraints during amphibious assault phase
- Ease of use by crew

EASY INTEGRATION

- Optimized SWaP
- ETHERNET, RS-232/422, CAN, 1PPS
- Automatic calibration and Harmonization
- Web interface for settings
- No outside sensor required

FOG TECHNOLOGY

- Full performance in GNSS denied conditions
- No moving part/ gas cavity or vibration sensors
- Sensor MTBF 500 000 hours
- No periodic maintenance



Heading and Attitude | PERFORMANCE WITHOUT AIDING SENSORS

	Naval	Land
Heading ⁽¹⁾	0.05 °	0.5 mils
Roll ⁽²⁾	0.01 °	0.2 mils
Pitch ⁽²⁾	0.01 °	0.2 mils

(1) Expressed in mils sec (lat) RMS
(2) Expressed in mils RMS

Position

Operating mode		Naval	Land
INS / GNSS	Position ⁽¹⁾	5 m ⁽⁴⁾	5 m ⁽⁴⁾
	Altitude ⁽²⁾	5 m ⁽⁴⁾	5 m ⁽⁴⁾
INS ⁽⁵⁾	Position ⁽¹⁾	0.5 Nm / h ⁽¹⁾	0.1 % DT ⁽³⁾
	Altitude ⁽²⁾	0.5 Nm / h ⁽²⁾	0.1 % DT ⁽³⁾

⁽¹⁾ Expressed in CEP50
⁽²⁾ Expressed in EP50
⁽³⁾ Distance travelled since last position received (position fix or GNSS).
With a ZUPT every 10 km or 20 minutes. Applies to distance travelled > 5 km, otherwise 5 m.
⁽⁴⁾ Typical value. Depends on GNSS accuracy.
⁽⁵⁾ No external aiding sensor (either GNSS, either VMS), with a vehicle calibration carried out.

Mechanical

Dimensions (L x W x H)	178 mm x 178 mm x 162 mm
Connectors	MIL-DTL-38999 III (Black Zinc)

Hardware interfaces

Serial RS232 or RS422	3 x inputs and 3 x outputs + 1 x dedicated command / control port
Ethernet ⁽¹⁾	5 x (logical) inputs and 5 x (logical) outputs in UDP / TCP unicast / multicast in client or server mode + 1 dedicated (logical) port for command / control
GNSS	Compatible with any GNSS with NMEA sentences or specific binary sentences
Input / output formats	industry standards: NMEA 0183, ASCII, binary
Data output rate	0.1 Hz to 200 Hz

(1) (1)All inputs/ outputs are available on the Ethernet link. Outputs can be duplicated both on serial and Ethernet port.

Power Supply

Power supply	20 to 33 VDC (MIL-STD-1275E)
Power consumption	< 18 W

Environmental

Operating temperature	MIL-STD-810G, -46 °C / +71 °C ⁽¹⁾
Storage temperature	MIL-STD-810G, -46 °C / +80 °C
Operating vibrations	MIL-STD-810G
Operating shocks	MIL-STD-810G, 75 g
EMC	MIL-STD-461G, "Ground Army" levels
Power network	MIL-STD-1275E
Ingress protection	IP67

⁽¹⁾ Operation below -32°C requires a preheating phase
Subject to French export control authorization ITAR Free/EAR

