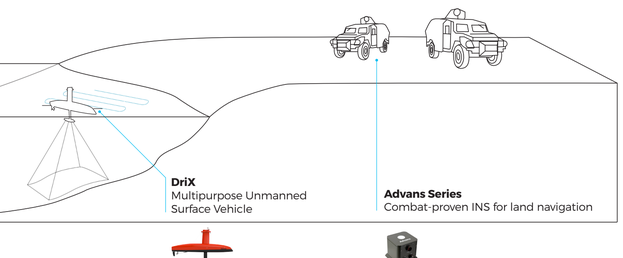

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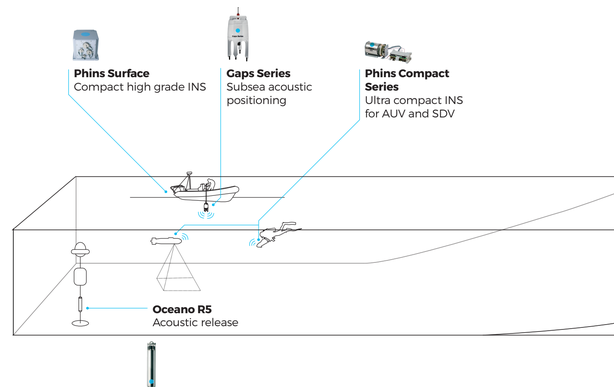


INERTIAL NAVIGATION SYSTEMS

iXblue's Inertial Navigation Systems (INS) are based on iXblue's Fiber-Optic Gyroscope (FOG) technology that offers unrivaled performance and ensures robustness and maintenance-free systems.

Phins Surface

SOLUTION FOR SURFACE NAVIGATION

Heading with GPS / USBL / LBL	0.01 deg secant lattitude RMS
Roll and pitch dynamic accuracy (no aiding)	0.01 deg RMS
Heave accuracy (Smart Heave)	2.5 cm or 2.5% RMS
Position accuracy	
With DVL	0.1% of travaled distance (CEP 50)
No aiding for 2 min / 5 min	3 m / 20 m (CEP 50)
Pure inertial mode	0.6 nm / hour (CEP 50)

SOLUTIONS FOR AUV NAVIGATION

Phins Compact C3

Phins Compact C5

Phins Compact C7

	Phins Compact C3	Phins Compact C5	Phins Compact C7
Heading	0.15 deg secant latitude RMS	0.05 deg secant latitude RMS	0.01 deg secant latitude RMS
Roll pitch	0.05 deg	0.01 deg	0.01 deg
Position accuracy with DVL-aided performance (straight line from origin)	0.2 % TD (CEP 50)	0.1 % TD (CEP 50)	0.05 % TD (CEP 50)
Positionaccuracy with DVL-aided performance (area survey pattern)*	0.04 % TD (CEP 50)	0.02 % TD (CEP 50)	0.01 % TD (CEP 50)

SOLUTIONS FOR LAND DEFENSE NAVIGATION

Advans Ursa

Advans Lyra

Advans Vega

	Advans Ursa	Advans Lyra	Advans Vega
Horizontal position (without GNSS) [1]	0.4% DT (CEP50)	0.2% DT (CEP50)	0.1% DT (CEP50)
Heading [2]	4 mils RMS	1 mil RMS	0.5 mil RMS
Roll and pitch [2]	1 mils	0.5 mil	0.2 mil

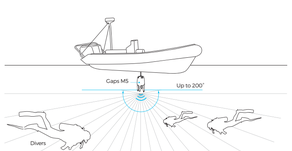
SUBSEA ACOUSTIC POSITIONING SYSTEMS

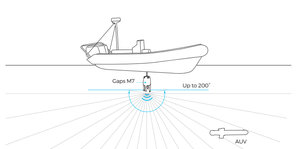
Gaps Series is an USBL positioning system that has been designed to provide accurate location, positioning and tracking of subsea assets and divers, from ultra-shallow to deep water depths. Gaps Series embeds a FOG-based motion sensor for vessel positioning redundancy and subsea telemetry. It is compatible and third-party equipment.

Gaps M5

Gaps M7

	Gaps M5	Gaps M7
Acoustic coverage	200 deg	200 deg
Operating range	995 m	4,000 m
Positioning accuracy	0.5 % slant range	0.1 % slant range
Range accuracy	20 mm	20 mm
Weight (air/water)	14 kg / -5 kg	16 kg / -7 kg





ACOUSTIC RELEASE

Oceano R5 is the latest version of iXblue's acoustic release. It is ideal for releasing up to 2,500kg payload in harsh environment down to 6,000m water depth. Fitted with a positive drive-off release mechanism, it is extremely reliable. The combination of an optimized design in a robust Super Duplex Stainless Steel (SDSS) housing offers outstanding corrosion resistance.

RELIABILITY

- Corrosion resistant SDSS housing
- Positive drive-off mechanism
- Back-up cell for release
- Compach design

PERFORMANCE

- Unrivaled battery life (60 months @ 0°C)
- Alkaline off-the-shelf batteries
- Capable of releasing up to 2,500 kg payload
- Operable down to 6,000 m water depth

Load characteristics	2 500 kg SWL / 2 500 kg RL / 5 000 kg TL
Overall dimensions (dia x L)	136 x 676 mm
Overall weight (air / water)	25 kg / 19 kg
Operating frequency	Low frequency (8.0 to 16.0 kHz)
Transducer beam pattern	Omnidirectional (horizontal plan) / Hemispherical (vertical plan)
Operating life	60 months @ 0°C (Alkaline)
Range	More than 10,000 m depending on ambient noise and acoustic propagation conditions

MULTIPURPOSE UNMANNED SURFACE VEHICLE

Able to conduct both remote-controlled and supervised autonomous operations, DriX offers unmatched seakeeping (up to sea state 5) and high-speed transit capabilities (up to 14 knots). Benefiting from 10 days of endurance at sea, it is a sea-proven and versatile unmanned platform able to host a wide range of payloads for multiple missions at sea.

Thanks to its open architecture, DriX can be tuned to fit the needs of any military integrator and can be used to conduct diverse military operations:

- Military bathymetry
- Rapid Environmental Assessment (REA)
- Anti-submarine warfare
- Emergency disaster relief
- Divers' tracking

Thanks to its certified Deployment System (DDS), DriX can be deployed from the coastline, from an amphibious ship dock or from a frigate davit. Requiring a reduced crew, the system ease of use and efficiency makes as routine and easy to use as a helicopter or a RHIB. Completing and enhancing existing assets, DriX brings provision of warning and an extra layer of defense whilst keeping humans in safer environments.