

OceanScan-MST Chooses iXblue's Inertial Navigation Systems to Equip LAUVs



iXblue's Phin's Compact Series has been selected by OceanScan-MST, the Portugal-based manufacturer of the lightweight, cost-effective AUVs (LAUV), to equip three new vehicles. To respond to the end-users' demand for a higher position accuracy with a small size factor and limited budget, OceanScan-MST opted for the Phins C3, which met all those requirements.

Built on iXblue's Fiber-optic Gyroscope (FOG) technology, the Phins Compact Series is a fully scalable system and has been designed to offer the AUV industry the ability to choose an inertial navigation system (INS) adapted to their vehicle, whatever their size, mission, and budget. Contrary to former technologies, the FOG technology is silent (no interference with sonars and other acoustic payloads) and has limited power consumption.

The Phins Compact Series provides position, true heading, attitude, speed, heave and depth for shallow and deepwater operations. Its performances are obtained thanks to its high-accuracy inertial measurement unit (IMU), which can be interfaced to third parties DVLs for optimum positioning of the subsea vehicle. Moreover, all Phins Compact INS' do not require any specific aiding sensor to complete their alignment (no magnetometer or dual antenna), thus easing the integration and ensuring that the best performances can be obtained in all sea conditions.

Small form factor vehicle

"Phins C3 has a compact footprint, perfect to integrate into small form factor vehicles such as the LAUV. The ratio between performance, power, size and cost makes the Phins C3 a perfect INS solution," comments Alexandre Sousa from OceanScan-MST. "This combined with well-written documentation and a very responsive iXblue support team makes OceanScan-MST work easier."

The Phins Compact Series benefits from an MTBF (Mean Time Between Failures) of over 100,000 hours, without any need for preventive maintenance. Therefore, it guarantees the highest level of reliability, robust autonomy and is now considered as the standard navigation solution on which AUVs can rely to be fully autonomous. It equips numerous AUVs around the world, for offshore subsea operations as well as for geoscience operations.