

Sonardyne Launches ‘Syrinx’™ Doppler Velocity Log



Sonardyne International, UK, is introducing its first-ever Doppler Velocity Log, called Syrinx. Developed to meet the needs of surface and subsea vehicles that require high-integrity, high-performance navigation aiding over a wide range of water depths and seabed types, the new Syrinx DVL is making its worldwide debut at the Ocean Business exhibition in Southampton (14-16 April 2015).

The introduction of Syrinx is a natural extension of the company's existing 6G and SPRINT product lines and follows a major investment in research and engineering aimed at creating the industry's best performing 600kHz DVL.

The Syrinx DVL employs full linear signal processing to provide very low noise, high precision velocity measurements over a wide range of seabed bottom types and altitudes. During extensive testing, Syrinx has demonstrated its ability to achieve consistent and reliable 'bottom lock' at high altitudes comparable to a 300kHz DVL, with the high resolution performance of a 1200kHz DVL.

Syrinx can be used as a standalone DVL, as part of an integrated navigation system, or perform both functions at once due to concurrent Ethernet and serial output capability at ping rates of up to 10Hz. Its dual output capability also now means that only one DVL instrument is required on a vehicle as both pilots and survey teams can simultaneously share the output from Syrinx. This offers valuable savings, both in terms of cost and vehicle payload space.

Sonardyne worked closely with users during the development of Syrinx to address the performance and ownership limitations of existing DVLs. One innovation to come out of this process is individual, factory replaceable 'capsule' transducers. DVLs are typically installed on the underside of vehicle so their transducers are highly susceptible to becoming damaged during the course of normal operations. Repairing this damage usually involves replacing the entire transducer assembly which is an expensive option, especially if only one transducer is damaged. With Syrinx however, each transducer is individually replaceable making servicing and repair fast and cost effective.

The Syrinx DVL has also been designed to be easy to install, set up and use and can be fitted to existing instrument mounting brackets. This makes it straightforward for users to equip their vehicles with Syrinx without any modification. A 4,000 metre depth rated titanium version is available to meet the requirements of modern Work-Class ROVs, with 3,000 metre and 6,000 metre models also available.

Simon Partridge, engineering director at Sonardyne is confident that Syrinx will provide the best possible DVL solution available, even more so when tightly coupled with the SPRINT INS platform. Sonardyne is producing acoustic positioning, inertial navigation and DVL technology all under one roof. This has technical, commercial and support advantages for customers, he added.

Those attending the Ocean Business exhibition from 14–16 April 2015 at the National Oceanography Centre in Southampton, UK, will be able to see Syrinx on Sonardyne's Stand E1 and also on the company's new trials and research vessel, *Echo Explorer*, which will be hosting daily demonstrations.

Image: Sonardyne Syrinx is a new 600kHz DVL that delivers class-leading, high altitude navigation over a wide range of seabed types.