Kongsberg Unveils New-generation Multibeam Echosounder

Kongsberg Maritime has released the EM 304, the third generation of its de facto industry-standard 30kHz multibeam echosounder system, which is used for high-resolution seabed mapping from depths of 10 metres to beyond the continental rises, deeper than 8,000 metres. Developed as a low-noise echosounder with state-of-the-art electronics, the EM 304 delivers high-quality data that requires minimal post-processing.

In addition to offering increased range and resolution performance, the EM 304 introduces a broad range of functionality and new features that serve as a significant upgrade to the current generation EM 302 system.

**EM 302 Replacement**

As part of a new EM technology platform designed for future challenges, the EM 304 is compatible with a new Kongsberg developed datagram format, which supports several new features, such as extended backscatter calibration, with more features already in development. The new format is supported by Kognifai, Kongsberg’s open digital ecosystem which brings opportunities to transform survey operations through digitalisation.

The EM 304 provides survey vessel operators with the highest performance, most accurate mapping capability. The system replaces the EM 302 which has been the de facto industry standard since it was launched in 2006, said Uhlen, director Sales Subsea. The performance of the EM 302 has resulted in a record number of medium-to-deep water systems being delivered for operations around the world.

**Transducers**

Considering the extensive EM 302 global user-base, Kongsberg has developed the EM 304 to utilise the same transducers as its current generation system. This simplifies upgrading from the EM 302 to the new EM 304 platform. Installation is optimised thanks to a highly, modular and flexible system with compact electronics. The EM 304 also accommodates easier installation through the use of a sub-bottom profiler. The Kongsberg SBP 300 can be fully integrated, by sharing the same receiver transducer as the EM 304.

The EM 304 is a highly scalable mapping system that takes advantage of features and benefits achieved in the development of the EM 2040 family and the EM 712. It joins Kongsberg Maritime’s range of leading Multibeam Echo Sounder Systems, from very shallow water to full ocean depth.

**Arctic waters**

For operations in artic waters, the system can be delivered with ice windows for protection of the transducers, enabling light ice-class vessels to heavy ice breakers operating in the toughest ice conditions to enjoy the benefits of Kongsberg’s new solution. And like all Kongsberg EM multibeam echo sounders, the EM 304 ensures an advanced operating environment to safeguard marine life inhabiting the survey area, through decreased emitted sound levels.

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