

New Simrad split-beam scientific transducer for superior ecosystem monitoring

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Simrad, a leading developer of fishery and scientific transducer technology has introduced a next generation split-beam composite transducer designed primarily for deep-water research applications and ecosystem monitoring. The new 120 kHz Simrad ES120-7CD transducer can operate in water pressure down to 1500 meters, enabling scientists to collect improved data on fish species and smaller targets such as zooplankton.

The traditional use of the scientific echo sounder has been fish stock assessment typically based on hull mounted transducers onboard research vessels, but the ES120-7CD is suitable for installation on towed bodies, AUVs, buoys and landers, enabling scientists to look deeper than ever before.

"Since many of the species of interest are found in deeper water they are harder to detect using hull-mounted transducers, so the transducer must be lowered down to the targets to provide the ecosystem data that marine scientists require," says Frank Reier Knudsen, Fishery Biologist/Fishery Research, Simrad. "To address this, we have developed a new series of pressure resistive transducers that can operate down to 1500m on towed bodies or the sea floor."

Recently, it has been documented that by using many acoustic frequencies it is possible to discriminate between species, identify species and study species interactions. Particular attention has been directed towards smaller targets like zooplankton and multi-frequency acoustics has proven a valuable tool in zooplankton identification and fish-zooplankton discrimination. With the new ES120-7CD, the Simrad series of pressure resistant transducers is now suitable for even more scientific and fishery research applications.

"With growing environmental concern there is a need to monitor all ecosystem components including plankton and fish, from the surface down to deep waters. We hope that our new series of pressure resistant transducers, including our latest introduction, the ES120-7CD, will become valuable ecosystem monitoring tools. This new generation of transducers addresses new directives and regulations that aim to establish routines for effective and non-invasive monitoring of all ecosystem components," adds Frank.

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