

Impact Subsea Launches ISM3D AHRS



Impact Subsea has announced the launch of a groundbreaking underwater Attitude & Heading Reference System - the ISM3D. It utilises high-grade MEMS-based accelerometers, angular rate gyroscopes and magnetometers that feed into a fusion engine driven by a dual-core micro-processor. The unit provides heading to $\pm 0.5^\circ$ of local magnetic north with pitch and roll to $\pm 0.05^\circ$ accuracy.

For optimal performance, a hard and soft iron calibration can be performed on the unit once installed on the ROV, AUV or other underwater platform. This ensures that a consistently accurate heading is provided at all times.

In areas where a large amount of steel or other magnetic disturber is present, the unit can be switched to operate using the angular rate gyroscopes and accelerometers, without input from the magnetometer. The low drift rate of the advanced MEMS based gyroscopes enables navigation to be conducted in areas where previously only a fibre or ring laser diode based heading sensor would suffice.

The ISM3D is being provided in a titanium housing, depth rated to 6,000 metres and with a length of 65mm.

<https://www.hydro-international.com/content/news/impact-subsea-launch-the-ism3d-ahrs>
