

# Enhanced Seaglider



iRobot is introducing a newly configured Seaglider UUV which can be outfitted with a larger set of fairings that significantly increases the UUV's volume and mass payload capabilities. Payload mass is doubled over Seaglider's original design to four kilograms and payload volume has expanded by 650% to more than 21,000 cubic centimetres, resulting in the ability to integrate both larger sensors and a greater number of sensors with Seaglider.

Seaglider has five sensor payload ports that facilitate a range of capabilities. Recent development efforts have resulted in new sensor offerings for Seaglider, including a pumped sensor that measures conductivity, temperature and pressure with an optional pumped dissolved oxygen sensor. The integration of a radiation sensor, an echo sounder

and a current profiler with Seaglider are also in development.

A long-range, high endurance UUV, Seaglider operates at water depths between 20 metres (approximately 65 feet) and 1,000 metres (3,280 feet). Seaglider is the first UUV to complete a mission lasting longer than nine months without needing to replace its battery and the first to complete a mission of more than 3,800 kilometres (approximately 2,360 miles).

"Seaglider has proven to be an extremely valuable tool for government agencies and the oceanographic community," said David Heinz, vice president of Maritime Systems at iRobot. "Researchers have expressed a need for more sensing capabilities on Seaglider, so that it can be used in a wider range of missions. This new configuration has allowed new sensors to be integrated with Seaglider, opening the door to future development efforts and potential new markets."

Seaglider will be on display at the OCEANS '11 conference in Kona, HI, USA at Booth #60-61. Representatives from iRobot will also be presenting three research papers at the conference.