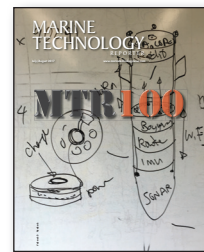


MTR 100

*Marine Technology Reporter's 12th Annual Report on
100 innovative companies in the Subsea Sector*

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Global Ocean Design LLC is pioneering a new class of commercial undersea vehicle: the benthic lander, along with the component technologies and surface support systems that make these craft more cost-effective, user-friendly and reliable. Global Ocean Design was formed in 2011 in the quest to reach the Mariana Trench as a subcontractor to James Cameron's DEEPSEA CHALLENGE Expedition. The company brought a legacy of techniques and experience from a globe-spanning 40-year career at the Scripps Institution of Oceanography/UCSD by its founder, Kevin Hardy. The small company was successful in the great endeavor. Still, the larger dream was to make access to the sea more affordable and simpler for researchers from all universities, agencies and NGOs. In 2011, Hardy proposed a plan to the International SeaKeepers Society (ISKS) to provide their vessels as "ships-of-opportunity" to global marine scientists who could use them to further their research using the tools of their discipline. The ISKS Discovery Yacht program was the result. Its products find use in diverse installed customer bases, enhance other manufacturers' products, and provide standard free-vehicle solutions for a growing global community with its Nanolander fleet.

The Nanolander is a self-contained untethered, autonomous unmanned vehicle using 10-in., 13-in. or 17-in. buoyancy spheres for long duration benthic and mid-water operation using third party sensors. Nanolanders may be deployed without use of

winch, crane or A-frame. Depth ratings of different models range from 1km-12km. Anchors are sourced in the port of operation, saving money on shipping. Its Beacon Board is new idea in surface location devices for sphere housings. Using a pair of GPS receivers linked by a VHF radio, the system provides the ship with an unambiguous, direct range-and-bearing to a surface target, up to 8 nautical miles of the ship, rain or fog. The Deck Purge Box (DPB) dynamically removes damaging moisture vapor from undersea housings of every kind prior to deployment. When the purge cycle is done, the user is ready to deploy. Its 10-in. OD polystyrene spheres have an O-ring seal and four connector ports. They work to 1,000m, making it a low-cost pressure-proof housing with 11-lbs of buoyancy (empty). The plastic spheres will not corrode in seawater, are electrically inert, and invisible to WiFi and other RF. The LiPo Battery Pod provides 16vdc fully charged, 32Ah capacity, with a net buoyancy +4-lbs. It's a car battery that floats.



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