New Electric Power Conversion System for UUV Charging Delivered to U.S Navy

The PowerMod™ Subsea MVDC Power Distribution System by Diversified Technologies converts 10 kVDC to 375 VDC on the seafloor, transmitting up to a megawatt over thousands of kilometers at medium voltages

By **William Mackenzie** / 20 Mar 2024

A new bi-directional undersea power converter has been delivered to the U.S Navy by Diversified Technologies, Inc.

Developed as a Phase II SBIR for the U.S Navy, The PowerMod Subsea MVDC Power Distribution System features pressurized power conversion modules that measure 18" dia. (457.2 mm) and operate at depths down to 3,500 meters.

Ideal for charging unmanned underwater vehicles and other applications, the power conversion system permits grid or loop configurations with multiple power sources.

The system can be powered from high voltage onshore generators or from undersea sources such as hydro-thermal or wave power generators at 375 V, with their voltage up-converted to 10 kV. Modules provide a 90% probability of operation for 25 years.