

Bidirectional charging for marine folding containers





Overview

What is a mobile charging node (MCN)?

The mobile charging node (MCN) is essentially an AUV that can harvest the solar energy when it surfaces and also harvest the thermal-difference (thermal-gradient) energy by conducting repeated descending and ascending motion. However, the mobile charging node should not be replaced by the AUV which carries out the observation missions.

Can ubwpt-based docking station achieve bidirectional power transfer in simulated seawater?

Two independent controllers are developed for the H-bridge converters to achieve bidirectional power transfer between AUV and the docking station in simulated seawater without real-time feedback. The rest of this paper is organized as follows. Section 2 introduces the UBWPT-based docking station.

What is the energy source of a docking station?

Overall, the energy source of existing docking stations is roughly classified into four types: (1) lithium battery packs/fuel cells [3], (2) surface vessels [4], (3) seafloor cabled observatories [5], and (4) mooring systems [6].



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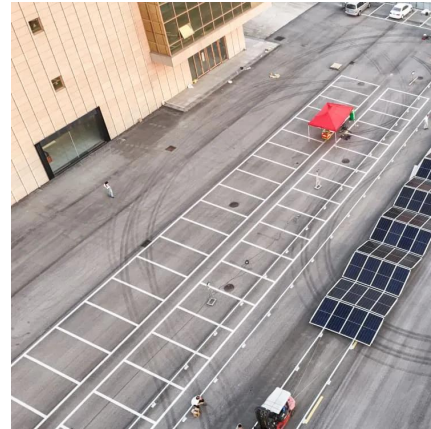
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Bidirectional Charging for Electric Boats, Paving the Way for ...

Aqua superPower unveiled its ground-breaking bidirectional charging technology at the University of Plymouth, marking their demonstration debut of Virtual Bunkering for Electric Vessels (VBEV).



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