

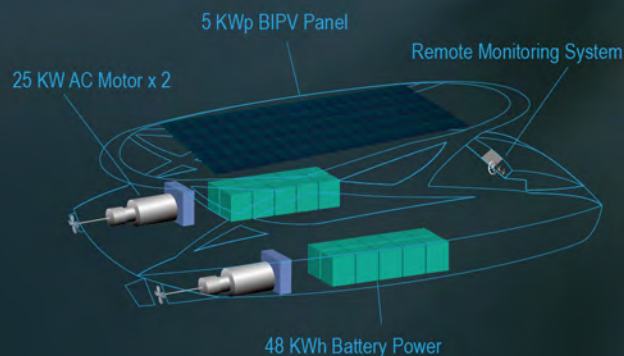
Solar-Powered Super Yacht e-Boat



Less Demand for Batteries

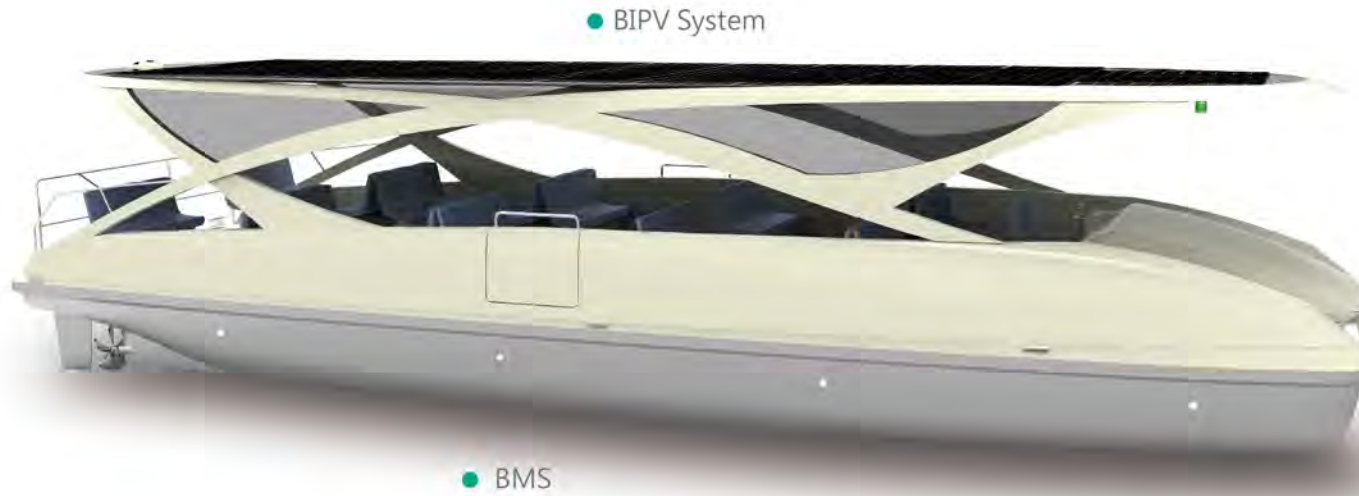
Solar Charging Efficiency Enhanced

Total Performance Improved



FEATURES SPECIFICATIONS

Cruise Range	8 hrs @ 5 knots (0.39KWH/KM)	Dimension	13.0 (L) X 4.5 (W)
Electric Motor	25 KW AC/200V x 2 · 1000 rpm	Weight	7.0 tons
Energy Source	Solar Charging, Onshore Grid Power	Passengers	2 Crews, 24~42 passengers (included 2 handicapped seats)
Lighting	LED Lamps (included underwater light)	Navigable Area	Canals, River, Lakes, Harbors
Solar Panel	5 KWp (21 pcs)	Speed	Cruise Speed 5 knots · Max. Speed 10 knots
Battery Pack	48 KWh LiFePO ₄ Battery Pack	Noise Level	70~75 db @ 6 knots
Charging Time	8 hrs		



Features

- Distributed solar MPPT (Maximum Power Point Tracking) charger. Can get the maximum possible power from photovoltaic panels.
- Battery cycle life: 2000 cycle (@100% DOD).
- Communication protocol: CAN Bus (2.0B) & RS485 (Modbus RTU).
- Integrate electromechanical system & BMS (Battery Manager System), provide utmost safety and efficiency performance.
- Low noise during voyage (70db), No air pollution, powered by cutting edge technology of LiFePO4 battery.
- 24V power system provide dynamic power adjustment, energy saving, reliability improving.
- Smart power management, Less demand for battery

installment and cost saving.

- Friendly user interface: The information presented graphically.

BIPV System (Building-integrated photovoltaics)

- Solar modules direct charge to power batteries.
- Charging Efficiency is above 94%.
- More cosmetic & transparency concern than standard PV panel.
- A perfect match for PV panels and sunshades.
- Empower distributed management capability, each solar panel has dedicated charger with MPPT function.
- Each solar charger (SC) featured with MPPT.

BMS (Battery Management System)

- Manage all the battery cells' voltage, temperature, and capacity status.
- Manage battery system's current, SOC (Status of Charge) and SOH (Status of Health).
- SD (Safety Disconnection) module prevents shortage, leakage, collision and other dangerous.
- When the battery was fully charged, each battery cell voltage difference is < 10 mV and max, and current is no more than 2.0 A .
- Protect each battery cell voltage between 2.50 ~ 3.90 V under any circumstance.
- Using the battery system at higher voltage to directly charge the 24 V battery .
- BMS communicates within system via CAN Bus & externally via CAN Bus & RS485/232.