Extended Energy Storage



EHS Series Energy Harvesting System

EHS Series Specification	
System Power	6 KW/ 3KW *1
Maximum Power	>10KW *2
Output voltage	Rated 48Vdc
Hydrogen production Rate	500~2000L/ hr Scalabe
Recharging Power	110/220Vac 50/60Hz
System start-up time	0 *3
Environment Temperature	0~60 *4
H2 output pressure	16Barg/ 30barg *5
Life	>20,000 hours of operation
nstallation	In-door/Out-door (IP-54)
System Dimension	120 x 60 x 140 (L x W x H, cm)
Special feature	 High Efficiency Auto water-recycling design Complete system integration Complete System Protection LCD monitoring RS 232/485 available
- Smaller and larger newer available	

1: Smaller and larger p

*2: With Battery Hybrid *3: With Batteries hybrid.

*4: Wider temperature range available *5: Higher Pressure Available



MPS Series **Motive Power** Solution

Motive Power Solution (MPS) Specification	
Continuous Power	12KW *1
Maximum Power	40KW *2
Output voltage	48Vdc/96Vdc/144Vdc *3
Battery Type	Gel / Li-ion
Weight	<80kg *4
Dimension	70 x 50 x 40 (Lx Wx H, cm) *5
Energy Storage	40Kwh~400Kwh *6
Communication	RS 232/485/ CAN-bus

*1,*2: Can be adjusted according to vehicle requirement *3:Higher voltage solutions are available *4, *5: Fuel cell modules only

*6: Onboard energy reserve or usable energy given by the nature of fast hydrogen recharging.



YC SYNERGY Co., Ltd. 10F, No. 198, Sec. 2nd, Roosevelt Rd.

Taipei 10084, Taiwan, ROC Tel: +886-2-2218-6683 Fax: +886-2-2218-7603 Email: info@ycsynergy.com.tw ycsynergy.com.tw

Extended Energy Storage

EHS Series Energy Harvesting System













EHS Series Energy Harvesting System

YC Synergy Energy Harvesting System (EHS Series) provides users with excellent using experience and low operation cost. This system works with the innovative "water cycling technology", which is the perfect combination of water electrolyzer and fuel cell that enables users to use water as the media to store the energy. Clean and comfortable working environment is also guaranteed by the EHS series. EHS series are designed for various applications. For each application, it provides different and outstanding benefits:

Telecom/ Data Center Back-up Power



Minimize maintenance and improve profits

In areas without stable grid power supply, diesel generator (DG) is commonly used as the back-up power source. Although initial cost is low, DG requires high maintenance cost over time. In addition, with the rising oil price and possible diesel theft, DG is becoming more expensive to operate.

EHS series utilize the grid power to store energy, and with self-water recycling design, EHS series requires low maintenance and fuel refill. With modular hydrogen generators, the energy recharging speed can easily adjust to different levels of grid shortages. Putting together the total cost, EHS solution provides impressive NPV and excellent payback period for users and energy service companies.

Renewable Energy Storage



Reduce batteries but enhance energy storage

Often times, layers of layers of batteries are installed to supply reliable power for unstable renewable energy at offgrid sites. High level of battery redundancy results in high cost for users due to their short life, high replacement cost and waste treatment expenditure.

This is where EHS series comes in to help solve this issue.

EHS series provides back-up energy storage for batteries, thus less batteries are necessary. It can also prevent the batteries from being overly discharged. EHS series allows off-grid renewable users to enjoy 24 hrs/365 days uninterruptible energy storage with lower storage system cost and higher level of energy security.



security.

Green Vehicle Power Solution



Make electric vehicles lighter and run further

Pure electric vehicles commonly use Gel, Lead-acid, and Liion batteries as energy sources. However, low energy density and long recharging time limit the operation time for users.

Based on the EHS series, YC Synergy has developed Motive Power Solution (MPS) for green/ electric vehicles such as boats, yachts, buses and cars. With complete Fuel Cell and Li-ion hybrid integration, MPS can greatly prolong the operating hours of these electric vehicles. It can also lessen the weight of the energy system and decrease the recharging time. This significantly enhances the efficiency and turnover of these vehicle fleets. YC Synergy's MPS is no doubt the best choice for users looking for both environmentally friendly and cost-effective transport solution.

Ultra compact design enables MPS to work with batteries without increasing the energy system weight and space. MPS's scalable modular design also allows larger power for greater demands.



Modularly designed hydrogen generators can be easily scaled up to cope with different level of grid shortage. Extended Energy Storage





Chart reflects fuel cell stack performance when operated according to Ballard's specifications.

