

EHR | BATTERY POWER GENERATOR

A Smart Energy Storage and Distribution System,
guaranteeing zero noise & emissions.

HIPOWER®
A YANMAR COMPANY



What is the EHR?

HIPOWER SYSTEMS **EHR | BATTERY POWER GENERATOR** is an energy storage and distribution system, which can operate independently, guaranteeing zero noise and emissions. Also, the **EHR** can be integrated into a hybrid power generation system using diesel or spark-ignited generators or connected to the grid and photovoltaic modules. The main goal of the **EHR** is to guarantee a higher energy efficiency and optimize emissions and noise.

HICORE®
HIPOWER SYSTEMS

HICORE is the management system that lets operators select the most favorable power source for a specific load condition at any given time. It can be integrated with diesel and spark-ignited generators or connected to public electricity grids and renewable energy sources.





EHR plays a crucial role in integrating renewable energy sources, ensuring a consistent & reliable supply of energy.

100% User Friendly

Easy system configuration and handling. Smart guidance throughout the start-up process with smart assistant, making it easy to operate the unit.

Always Connected

Get all the performance information you need through C4CLOUD, which comes pre-installed on the unit. Monitor, read and analyze all the performance and load profile information locally or remotely to optimize your site's power solution.

Mode of use | How does the EHR work?

The pre-configured working mode selector allows the user to configure the Battery Power Generator for different applications or modes of use: Plug & Play, Peak Shaving, UPS, Load Sharing, Low Loading, and Power Booster.

The goal of these modes is to optimize energy production by increasing efficiency, flexibility, and sustainability, while also reducing total emissions.

Nominal Power - **From 20 kVA to 60 kVA**



Plug & Play

To ensure immediate start-up, the Plug & Play mode allows the EHR to automatically determine the best operational option at any given moment based on continuous analysis of the load profile and the connected sources.

Peak Shaving

In some cases, generators are subjected to load spikes above the optimal power (>70%), which means the generator has to be oversized to assume them. This leads to increased operating costs, higher fuel consumption, and higher CO2 emissions.

UPS

Provides power in case of a power failure, with a response time of 20 ms. Perfect for critical sectors during power outages.

Load Sharing

If an additional working source with a generator set or network is needed, the EHR can synchronize the output powers, providing the additional power that is needed.

Low Loading

Most of the time, diesel generators spend much of their service life inefficiently running at light loads (<30%), resulting in pollution, fuel waste, and wet stacking.

Power Booster

This working mode is specially designed to allow the EHR to absorb the inrush current caused by the electrical motor starting. The EHR will directly power the load, and the generator will only start when required.

EHR | Features & Benefits

Automatic BYPASS for Uninterrupted Power

Auto Bypass — Provides a backup redundancy to carry the site load. If the battery goes out of working mode (based on an alarm status), the auto bypass feature keeps a live bus connection to the generator, ensuring no loss of power to the site.

Smart & Connected. HICORE provides intuitive operation & intelligent energy management, while C4CLOUD enables remote monitoring, diagnostics, & system information via 3G/4G connectivity.

Zero Noise & Zero Emissions, making it ideal for urban, night-time, and noise-sensitive applications.

Transport Efficiency. The design includes a lifting eye, towing & winching chassis, forklift pockets, & anti-theft features. Optional single-unit trailer available.

Renewable Energy Integration. Ready to connect Plug & Play PV panels to the system. Including up to *8 kW MPPT, we can integrate renewable energies into any working mode, increasing efficiency.

**Model 40/60 Split Phase includes 4 kW MPPT.*

Robust Design. The canopy can withstand extreme environmental conditions & temperatures ranging from -5°F to 122°F. The canopy has best-in-class primer & powder coating. A galvanized frame is optional.

Accessibility & Maintenance. Removable side doors & a roof door. Easy access to change air filters. Virtually maintenance-free, the EHR requires a weekly battery maintenance charge (monthly minimum); the final 5% may take 1–2 hours.

ONE ASSET, MULTIPLE APPLICATIONS

The EHR can operate independently or alongside generator sets, the grid, and renewable energy sources, giving rental companies a versatile solution that can serve a wider range of customer requirements.

Helping companies reduce operating costs, expand application capabilities, and deliver cleaner, quieter, more reliable mobile power.

EHR BATTERY POWER GENERATOR 60 Hz. MODELS

		EHR 20/40	EHR 30/60	EHR 40/60	EHR 60/130
Nominal power	kVA	20	30	40	60
Storage capacity	kWh	42.6	56.8	56.8	127.8
Voltage (60 Hz)	VAC	240V/120V	208V/120V	240/120V	208V/120V
Lifespan (90% DoD)	Cycles	6000			
Battery management system		LFP batteries with built-in BMS			
Recharge time / Maintenance time*					
• Recharge time	h	2.34	2.45	2.17	3.1
• Maintenance recharge (@DoD%)	h	11.17	14.90	14.90	19.6
Dimensions (L x W x H)	in	65 x 43.30 x 71			88.5 x 47.2 x 81.8
Weight	lbs	2837	2976	3373	5985.5

*Considering a total system efficiency of 0.829 (Inverter 0.95 | Battery 0.9 | Wiring 0.97)

MODEL		EHR 20/40	EHR 30/60	EHR 40/60	EHR 60/130
Nominal power	kVA	20	30	40	60
Storage capacity	kWh	42.6	56.8	56.8	127.8
Discharge autonomy*					
• 100% Of the rated power	h	1.47	1.31	1.09	1.61
• 75% Of the rated power	h	1.97	1.75	1.46	2.14
• 50% Of the rated power	h	2.95	3.12	2.18	3.22
• 25% Of the rated power	h	5.90	5.24	4.37	6.43

*Considering a total system efficiency of 0.829 (Inverter 0.95 | Battery 0.9 | Wiring 0.97). DoD@90%

Hybridization
EHR + Generator

The **EHR** can operate as a main power source, reducing emissions and noise to zero. It can also be combined with a diesel or spark-ignited generator to enable intelligent load management. Fuel consumption and CO2 emissions are reduced drastically in these combined working scenarios.

Perfect Match!

- Improves the genset load profile, using smart technology
- Avoids oversizing the genset to start electrical motors
- Extend generator life and preserve equipment resale value.
- Reduces maintenance checks by up to 50%
- Reduce fuel consumption by up to 40%
- Reduce Operating Costs



LOW OPEX.
THE SMARTER WAY TO POWER.
Game-Changer for Your Fleet!

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