

BES SERIES

OUTPUT POWER RANGE
14–50 KWe

BATTERY (LIFEPO4) CAPACITY
20.5–61.4 KWh

SOLAR INPUT POWER RANGE
21–65 KWp



CLEAN



HIGH
EFFICIENCY



ENVIRONMENTALLY
FRIENDLY



LOW NOISE



UNINTERRUPTED
POWER SUPPLY



Micro Hybrid Power Station

It is a microgrid system that provides clean, environmentally friendly, efficient, low-noise, and uninterrupted power supply systems for application scenarios such as leasing, construction, mining, communication base stations, farms, oil extraction, and isolated islands. It is also a miniature independent power supply system.

COMPONENTS OF HYBRID ENERGY SYSTEM



SOLAR POWER GENERATION

Integrated 2.5 kWp panels with support for external panels, enabling 2.5 to 65 kWp total capacity.



BATTERY MANAGEMENT SYSTEM

Monitor and optimize charging/discharging, while providing protection against overheating, overvoltage, and overcurrent to extend battery life.



INVERTER

The hybrid inverter, connected to generators, solar, and batteries, achieves DC/DC and AC/DC/AC conversions with 98% efficiency.



POWER GRID

Connected to a hybrid inverter, the grid supplies the load and controls battery charging/discharging via EMS settings.



BATTERY

Store excess solar power for later use or implement tiered pricing based on low-charge and high-discharge rates.

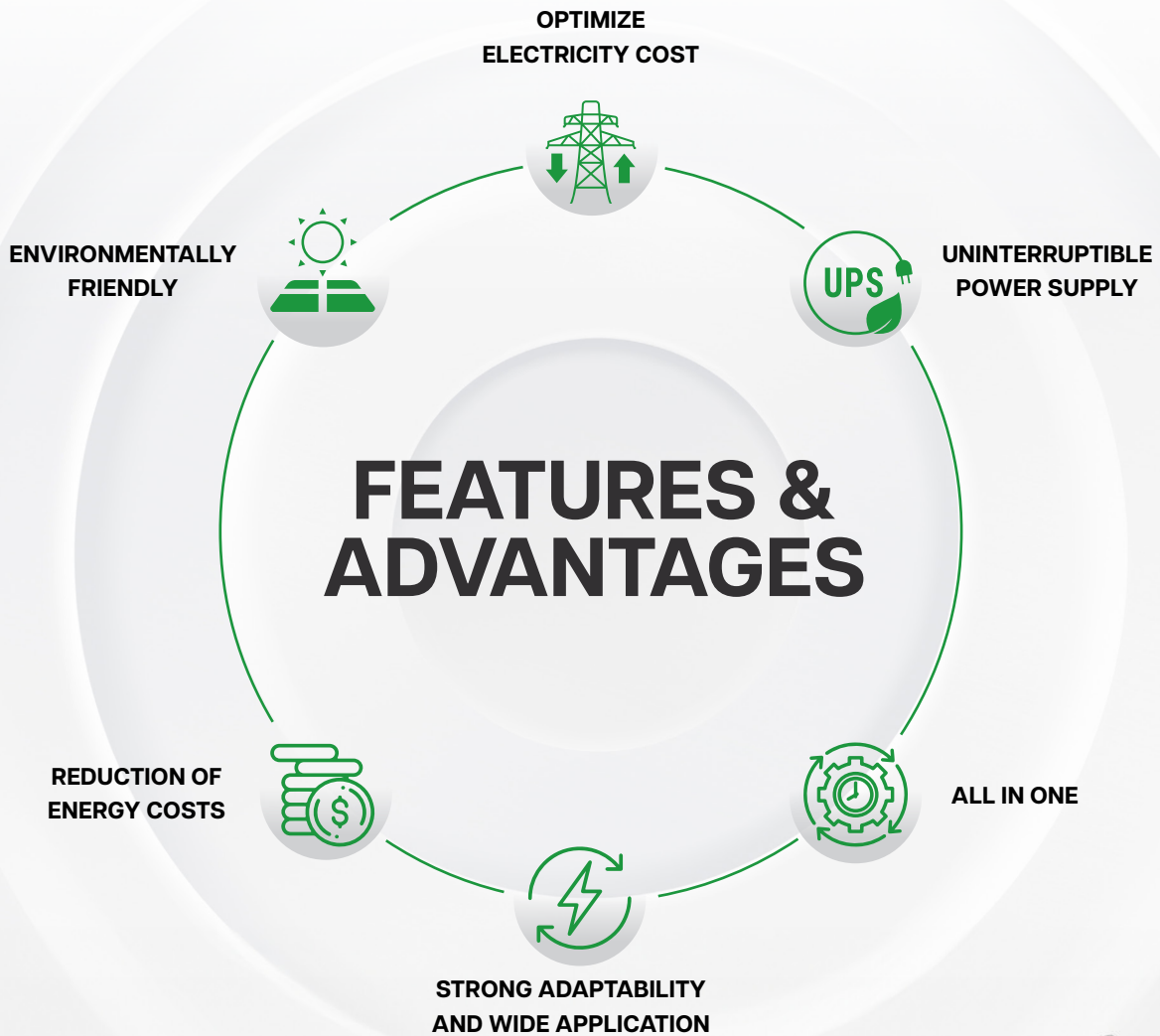


DIESEL GENERATOR SET (OPTIONAL LPG & NG FUEL)

When solar and battery power are low, the diesel generator automatically powers the load and charges the battery.



Empower Your Energy Anytime



OPTIMIZE ELECTRICITY COST

You can charge the battery during periods when electricity prices are low and discharge the battery during peak periods.

ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION

Use solar power and store excess electricity in batteries.



ENERGY INDEPENDENCE

This system can reduce your dependence on the power grid. In case of a power grid failure, solar panels, diesel generators, and batteries can act as backup power sources to provide continuous power to the load.

ALL IN ONE

Outdoor, modular design, outdoor installation, IP54 waterproof grade, using high-grade coatings, wear-resistant and scratch-resistant, durable, can be quickly moved and deployed, plug and play, can be locally and remotely controlled.

ENVIRONMENTAL BENEFITS

Used in conjunction with solar panels, it is energy-saving, environmentally friendly and saves energy expenditure.





ENERGY MANAGEMENT SYSTEM (EMS)

The BES series system combines inverters, diesel generator sets, batteries, BMS, photovoltaic panels, MPPT, and EMS into an independent product. Through software calculations, it provides users with a free energy system.



FEATURES OF EMS

SYSTEM MONITORING TO ENHANCE LIFESPAN

By monitoring battery cycles and temperature, the Energy Management System (EMS) optimizes load output, extending battery life and improving performance and ROI.



COST REDUCTION AND EFFICIENCY IMPROVEMENT, TRANSPARENT REVENUE

Optimizing battery charging for peak shaving and valley filling reduces electricity costs. In some regions, the EMS can also sell stored power to the grid for additional income.



IMPROVE RELIABILITY AND MAINTAIN GRID STABILITY

EMS ensures reliable power by seamlessly switching between diesel, solar, batteries, and the grid, making it ideal for unstable power supply situations.



EQUIPMENT MANAGEMENT, INTELLIGENT OPERATION AND MAINTENANCE

EMS offers real-time system monitoring, plus auxiliary equipment management, alarms, a knowledge base, and software updates.



ENERGY OPTIMIZATION, ENERGY CONSERVATION AND EMISSION REDUCTION

EMS optimizes solar and battery energy use, maximizing renewables, reducing fossil fuel reliance, and lowering carbon emissions.



BES Internet of Things (IoT) platform

The device can achieve the following functions by downloading the APP on the mobile phone or registering and logging in to the Powerlink IoT platform through a computer browser.



REAL-TIME MONITORING

- ✓ **Performance tracking:** Continuously monitors solar panels, batteries, and grid connections.
- ✓ **Environmental monitoring:** Tracks conditions like temperature and humidity that affect performance.
- ✓ **Photovoltaic tracking system integration:** seamlessly integrate with solar panel tracking systems and monitor meteorological conditions in real time.



REMOTE OPERATIONS

- ✓ **Remote access:** Users can control and manage the system from anywhere.
- ✓ **Automated operation:** Executes charging and discharging based on real-time data and set parameters.
- ✓ **Predictive maintenance:** Identifies potential issues early, reducing downtime and costs.
- ✓ **Maintenance alerts:** Sends notifications for scheduled maintenance and abnormal alerts.



DATA ANALYSIS

- ✓ **Usage pattern:** Analyzes energy usage to optimize the system.
- ✓ **Performance report:** Generates detailed reports on performance, efficiency, and return on investment.



SECURITY CONTROL

- ✓ **Data encryption:** Ensures secure communication and data storage to prevent threats.
- ✓ **Access control:** Manages user access and permissions to prevent unauthorized use.



ENERGY DISPATCH

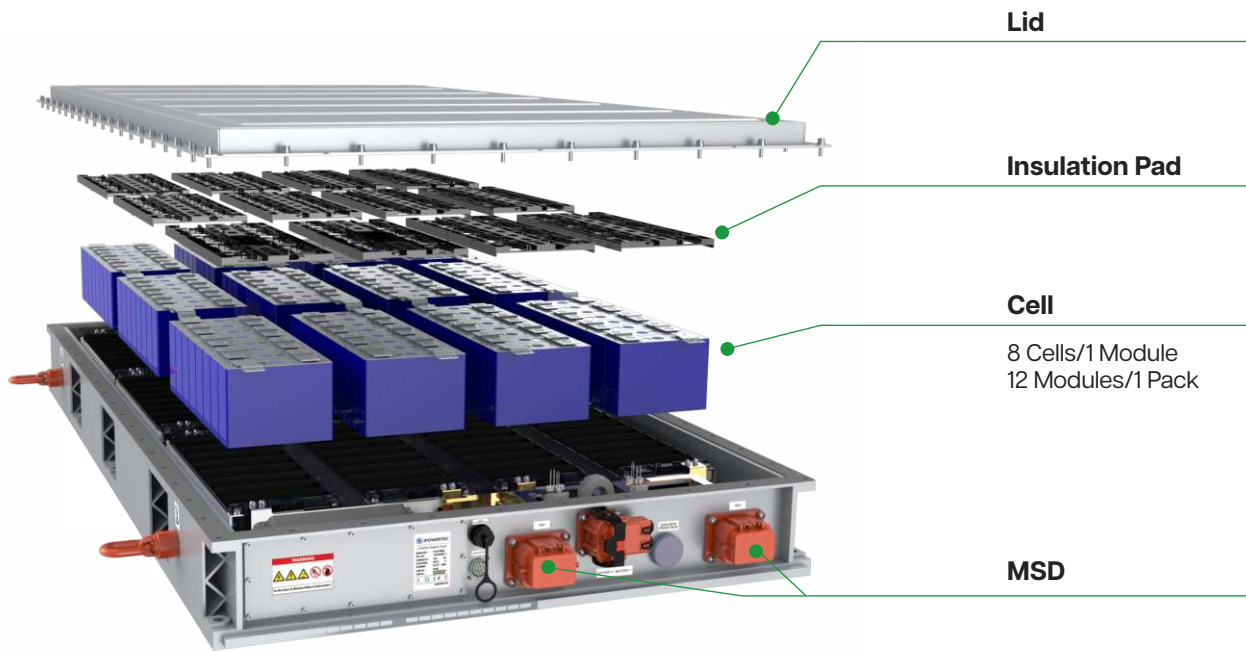
- ✓ **Energy optimization:** Allocates energy to balance loads and reduce peak demand costs.
- ✓ **Demand response:** Adjusts energy storage and release based on grid demand and prices.
- ✓ **Grid interaction:** Manages energy flow between hybrid systems, renewable energy, and the grid.



FRIENDLY INTERFACE

- ✓ **User-friendly dashboard:** Provides a comprehensive dashboard for monitoring and control.
- ✓ **Customizable settings:** Allows users to customize settings based on their energy needs and preferences.

BATTERY (LIFEPO4) PACK



High Energy Density



Safety and Stability



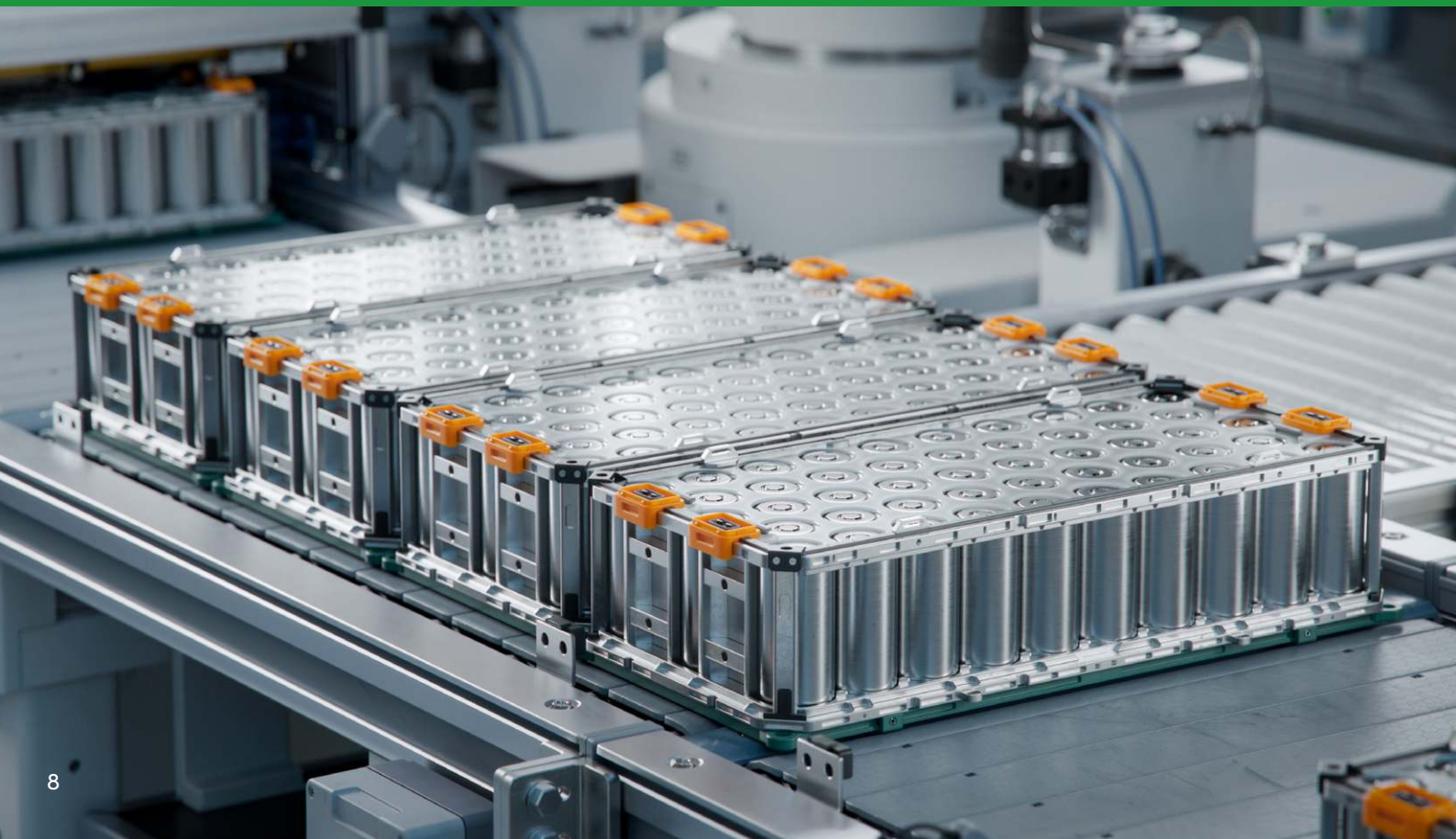
Long Cycle Life



Wide Temperature
Tolerance



Eco-Friendly





SPECIFICATIONS

Model	Output power		Battery capacity	Rated power of diesel generator		Fuel tank capacity	Solar power generation capacity	Dimensions LxWxH	Dry weight
	kVA	kW	kWh	kWh	kW	L	kWp	mm	kg
BES14S	14	14	20.5	18	14	100	21	2280x1400x2509	2450
BES17S3	17	17	25.1	23	18	100	32	2300x1400x2509	2520
BES27S3	27	27	30.7	40	32	200	39	2300x1400x2509	2632
BES34S3	34	34	50.3	45	36	200	52	2300x1450x2570	3000
BES50S3	50	50	61.4	63	50	200	65	2300x1450x2570	3250

STANDARD CONFIGURATION

Energy storage battery	10-inch HMI display	Panel AC output switch	PV panel
Diesel generator set	Fuel tank	Inverter	EMS system
Outdoor thermal insulation and waterproof box	MC4 PV connection port	Multi-way power output socket (AC)	IoT Internet of Things platform usage license
Power input	Output terminal (power supply)	Fire extinguishing system	Ventilation fan

OPTIONAL CONFIGURATION

Solar Tracking System (STS)	Portable solar tracking system (PSTS)	Fixed solar kit
-----------------------------	---------------------------------------	-----------------

