

Microgrid System

The BES Series is an advanced hybrid micro-grid solution that seamlessly integrates solar panels, battery storage, and a diesel generator. Designed for efficiency and sustainability, it offers the flexibility to charge and discharge power to the grid, making it ideal for peak load support, long-term low-power operation, and backup power.

Product Features

- Smart energy management system
- AC/DC power conversion system
- PV charging system
- LiFePO4 liquid-cooled battery pack
- RCD leakage protector
- Plug and play interface
- Leak-proof large capacity tank
- Super-silent structure
- Remote cooling system
- Fire safety system

Certification Standards



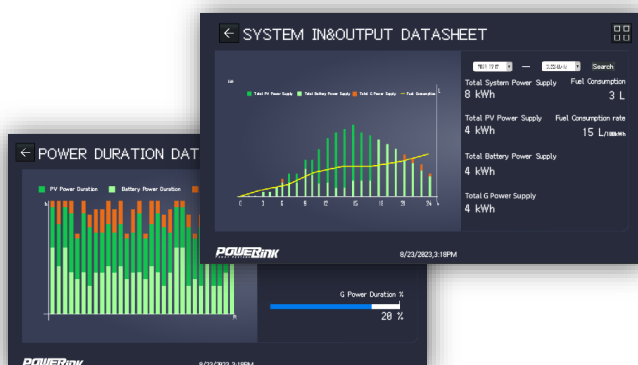
- UN 38.3
- IEC 62619
- IEC 62477
- IEC 62933-2-1
- CE Declaration of Conformity
- VDE-AR-N 4110
- EN-50549-1
- UL 1973

Intelligent Energy Management



Switch the control mode with one button

- Hybrid mode: through smart scheduling and distribution, powered by PV system, battery system, diesel generation system individually or in combination.
- Battery mode: Powered by PV system and battery system.



Flexible generation of daily/monthly/annual operation data reports, users can adjust the system control strategy according to economic benefits.

BES50S3 SPECIFICATION

BES50S3 HYBRID ENERGY SYSTEM

Rated power (kVA/kW)	50/50		
Frequency (Hz)	50		
Phase(P)	3		
Power factor (PF)	1		
Noise level(hybrid) dBA@7m	58		
Noise level(battery) dBA@7m	50		
Voltage (AC V)	380	400	415
Current (A)	76	72	70

PV SYSTEM

MPPT rated power (kWp)	65
Rated voltage (DC V)	150-850
Solar panel voltage (DC V)	245
Solar panel capacity (kWp)	3.5

GRID INPUT

Rated power (kVA/kW)	50/50
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BATTERY SYSTEM

Battery type	LiFePO4
Battery capacity (kWh)	82.9
Battery voltage (DC V)	160-800
Max charging rate	1C
Max discharging rate	1C
Recommended discharging rate	1C

DIESEL GENERATION SYSTEM

Engine brand/model	Perkins / 1104D-TG2
Rated power (kVA/kW)	60/48
Rated voltage (AC V)	415
Fuel Tank Capacity (L)	200

LOGISTICS DATA

Dimensions (mm)	2300 x 1450 x 2570
Dry Weight (kg)	3250
40" Loading (Qty)	8



* Data is subject to change without prior notice as new products are always developed.
Please contact iGO2Zero or local agent with any doubts or for more information.