### BES20S



# **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.

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#### 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
- ISO CE
- 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.

## **BES20S SPECIFICATION**

| BES20S HYBRID ENERGY SYSTEM |     |       |     |
|-----------------------------|-----|-------|-----|
| Rated power (kVA/kW)        |     | 20/20 |     |
| Frequency (Hz)              |     | 50    |     |
| Phase(P)                    |     | 1     |     |
| Power factor (PF)           |     | 1     |     |
| Noise level(hybrid) dBA@7m  |     | 58    |     |
| Noise level(battery) dBA@7m |     | 50    |     |
| Voltage (AC V)              | 220 | 230   | 240 |
| Current (A)                 | 91  | 87    | 83  |

#### BATTERY SYSTEM

| Battery type                 | LiFePO4 |
|------------------------------|---------|
| Battery capacity (kWh)       | 30.7    |
| Battery voltage (DC V)       | 51.2    |
| Max charging rate            | 1C      |
| Max discharging rate         | 1C      |
| Recommended discharging rate | 1C      |

| DIESEL GENERATION SYSTEM |                |  |
|--------------------------|----------------|--|
| Engine brand/model       | Kubota / V3300 |  |
| Rated power (kVA/kW)     | 30/24          |  |
| Rated voltage (AC V)     | 240            |  |
| Fuel Tank Capacity (L)   | 100            |  |

| LOGISTICS DATA    |  |
|-------------------|--|
| Dimensions (mm)   |  |
| Dry Weight (kg)   |  |
| 40" Loading (Qty) |  |



\* 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.

| MPPT rated power (kWp)     | 21      |
|----------------------------|---------|
| Rated voltage (DC V)       | 150-425 |
| Solar panel voltage (DC V) | 175     |
| Solar panel capacity (kWp) | 2.5     |
|                            |         |

**PV SYSTEM** 

| GRID INPUT           |       |
|----------------------|-------|
| Rated power (kVA/kW) | 20/20 |

