

CDG Series Simplified Hybrid Power Supply System (50A-200A)

CE FC RoHS



Product Introduction

- The CDG Series is designed specifically for simplified base stations, supporting multi-energy hybrid, energy saving and emission reduction projects. It supports wall-mounted and pole-mounted installation.

It is suitable for applications such as pure electric base stations, pure solar base stations, solar-diesel hybrid base stations, grid peak shaving and valley filling (energy storage), and energy storage for solar PV systems.

▪ Highly Integrated, Flexible Deployment:

Adopting an integrated design of deep fusion of “Solar + Storage + Backup”, the system achieves high integration, significantly reducing installation space and construction costs. It can quickly and flexibly adapt to various new-build and retrofit scenarios, completely eliminating the traditional multi-system stacking approach.

▪ Safe and Reliable, Stable Operation:

Key modules adopt an electrical isolation design, effectively suppressing interference and improving system immunity and electrical safety, ensuring the long-term stable and reliable operation of the energy system.

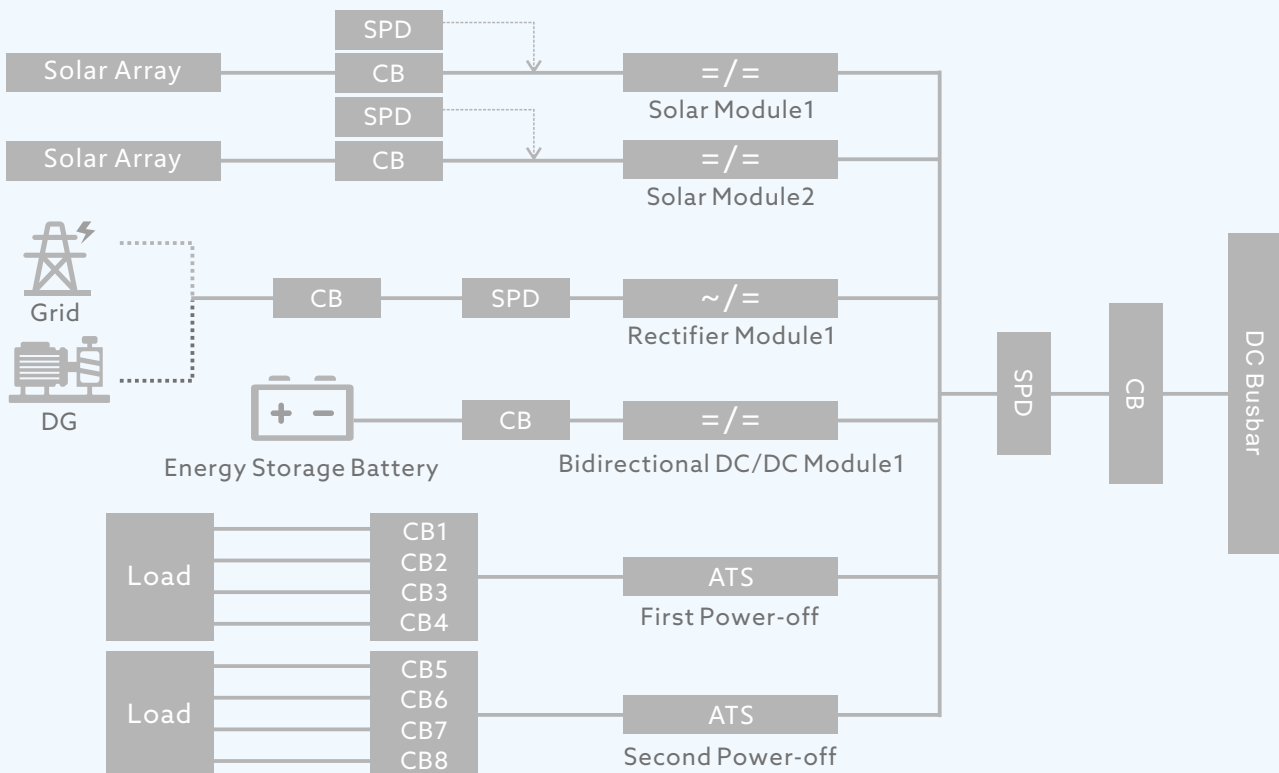
▪ System Maintenance, Business Continuity:

The core power modules adopt a fully modular design and support online hot-swapping, significantly shortening maintenance time and enabling system maintenance without shutdown, ensuring continuous business operation.

▪ Intelligent Coordination, Continuous Evolution:

Multiple modules within the system work together intelligently, supporting on-demand configuration and unified monitoring. It is suitable for various installation scenarios, with continuous equipment upgrades to facilitate future expansion and meet evolving project requirements. Combined with different clean energy sources, it helps achieve energy saving and emission reduction.

Standard Machine Electrical Principle Diagram



CDG Series Simplified Hybrid Power Supply System 200A

Product Name	Model	Configuration parameters
Hybrid Power Supply System	CDG48R200	Wall-mounted Simplified Hybrid Power Supply System; supports up to 4 built-in functional modules (50A*4)
Functional Modules	Monitoring Module	Built-in 1 monitoring module, adopting RS485 communication for centralized system monitoring and management.
	Solar Power Module	50A 1U, standard 2 modules (max. 4 modules, pre-configured before shipment)
	Bidirectional DC/DC Module	50A 1U, standard 1 modules (max. 4 modules, pre-configured before shipment)
	Rectifier Module	50A 1U, standard 1 modules (max. 4 modules, pre-configured before shipment)
Solar Power Distribution Units	Solar Input	Circuit Breaker 32A/2P*2PCS (standard) (customizable upon request)
	Solar SPD	TC40-220D/2P*2PCS (standard) (customizable upon request)
AC Power Distribution Units	AC Input	Circuit Breaker 63A/2P*1PCS (for grid and diesel power)
	AC SPD	TC40-275/2P *1PCS
DC Distribution Unit	Energy Storage Output	Circuit Breaker 125A/2P*1PCS
	Output Surge Protection	TC40-110VDC/1P*1PCS
	Load Power-Off DC Output	Supports Primary and Secondary Power Shutdown Functions: Primary Power Shutdown Distribution: 4-way 32A 1P × 2PCS, 16A 1P × 2PCS Secondary Power Shutdown Distribution: 4-way 32A 1P × 2PCS, 16A 1P × 2PCS (The specifications and quantity of circuit breakers can be customized according to requirements.)
Functional Module Parameters		
Solar Power Module	BX48D3000RBM	Rated Power: 3000W Wide Voltage Range Input: 120Vdc-420Vdc Rated Output Current: 50A (Maximum 60A) / 57V
Bidirectional DC/DC Module	CX48D3000NBM	Rated Power: 3000W Wide Range Single-Phase Input: 40Vdc-60Vdc Rated Output Current: 50A (Maximum 60A)
Rectifier Module	RX48A3000RBM	Rated Power: 3000W Input Voltage Range: 176Vac-264Vac Rated Output Current: 50A / 54V

***Attention:** The above specifications are for the standard model. Customized designs can be provided based on customer requirements and actual application scenarios.