

Embedded Power Supply System

CNH Series

CE FC RoHS



Introduction

- The CNH Hybrid Power Supply System is designed for telecom power systems, providing core equipment with highly reliable, high-performance, calable, and flexible power solutions. Compatible with base station powered by grid only, solar only, diesel-solar hybrid, utility grid peak shaving and valley filling (energy storage) and solar-grid hybrid with energy storage.

*Product dimensions and parameters refer to the latest documents;

*The product shall be subject to the actual item.

▪ Safe and Reliable

Modular isolation design ensures that single failure does not affect overall system operation. Power module employ electrically isolated circuits to keep it away from interference effectively, enhance system immunity and electrical safety for long-term stable and reliable performance.

▪ Efficient and Flexible

Functional modules support hot-swapping and can be flexibly configured to meet customer and scenario requirements. Designed for easy installation, maintenance, and scalability.

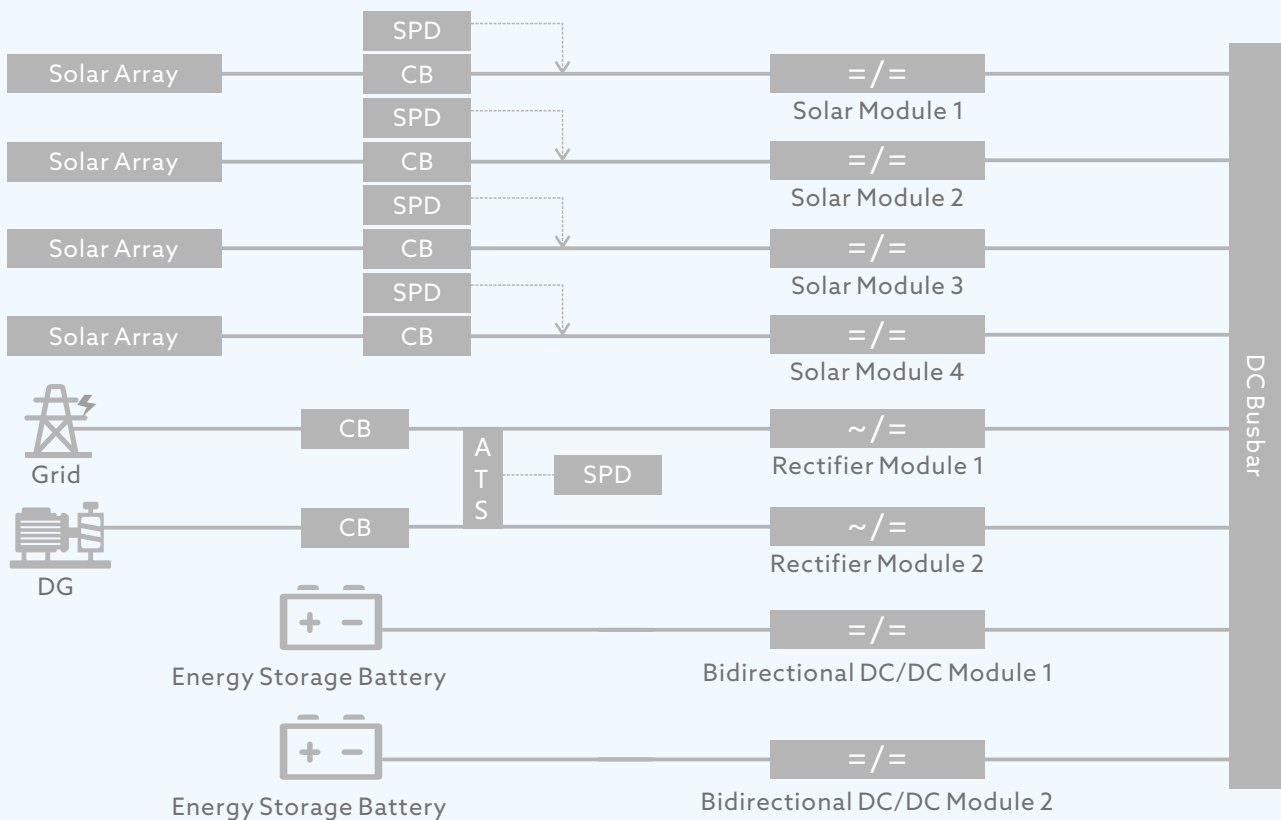
▪ Integrated Design:

Deeply Integration: Solar + Storage + Grid Backup in a compact design.
Modular & Prefabricated: Ensures easy scalability and simplified maintenance. Built-In Smart Monitoring: Enables on-site human-machine interaction or remote online smart management. AI Predictive Maintenance: Proactive maintenance that shifts from reactive to active service.

▪ Cost-Effective:

Compatible with standard cabinets, saving space and installation costs; supports future expansion for additional energy needs; integrates efficiently with multiple clean energy sources, helping to reduce carbon emissions and achieve energy saving and emission reduction.

Schematic Diagram of Standard Model



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Configuration

Configuration of 400A CNH Embedded Power Supply System		
Product Name	Model	Specifications
Embedded Power Supply System	CNH	19-inch Embedded Telecom Power Supply System (6U 400A) - supports up to 8 functional modules
Functional Module	Monitoring Module	Built-in 1U monitoring module (standard) with RS485 communication for centralized system monitoring and management
	Solar Charge Controller Module	50A 1U, standard 4 modules (max. 6 modules, pre-configured before shipment)
	Bidirectional DC/DC Module	50A 1U, standard 2 modules (max. 8 modules, pre-configured before shipment)
	Rectifier Module	50A 1U, standard 2 units (max. 8 modules, pre-configured before shipment)
Solar Power Distribution Units	PV Input	Circuit Breaker 32A/2P*6PCS (standard)
	PV SPD	TC40-220D/2P*4PCS (standard)
AC Power Distribution Units	AC Input	Circuit Breaker 63A/2P*2PCS (for grid and diesel power)
	AC SPD	TC40-275/2P *1PCS
Specifications of Functional Module		
Solar Charge Controller Module	BX48D3000RBM	Rated power: 3000W; Wide voltage range input: (120Vdc-420Vdc); Rated output current: 50A(Max 60A)/57V
Bidirectional DC/DC Module	CX48D3000NBM	Rated power: 3000W; Wide adjustable voltage range: (40Vdc-60Vdc); Rated output current: 50A(Max 60A)
Rectifier Module	RX48A3000RBM	Rated power: 4500W; Input voltage range: (176AC-264AC) Rated output current: 50A /54V

***Note:** The above is the standard configuration. Customized designs are available based on customer requirements and actual site conditions.