Smart PV Power Cabinet Intelligent Solar Hybrid Power System for Telecom Power Solutions

Our Product Introduction

Basic Information

- Place of Origin: SHENZHEN
- Brand Name: Daxin
- Certification: IP
- Model Number: ODC-216060F1PU-40U
- Minimum Order Quantity: 1 Set
- Price: Negotiable
- Packaging Details: Wooded case with pallet
- Delivery Time: 15-25 days
- Payment Terms: T/T
- Supply Ability: 10000pcs/month

Product Specification

- Features: Modular Design
- Smart Monitoring: Centralized Control For Solar, Rectifier, Battery, And Load Management.
- Wide Compatibility: Supports Hybrid PV-wind Configurations And Grid-tie/off-grid Applications.
- ODM/OEM: Provide ODM/OEM Service
- Application Scenarios: Off-Grid Remote Sites
- Custom Solutions: Scalable Designs For 200A To 500A Systems
- Highlight: **Smart PV Power Cabinet**, **Telecom Power Solutions PV Power Cabinet**, **Intelligent Solar Hybrid Power Cabinet**

More Images

Our Product Introduction

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Product Description

Smart PV Power Cabinet - Intelligent Solar Hybrid Power System for Telecom Power Solutions

Telecom Power Solutions Intelligent Solar Hybrid Power System Product Overview:

In remote telecom base stations, unstable grid power and high infrastructure costs pose significant challenges. Traditional diesel generators are costly and unsustainable.
Our Smart PV Power Cabinet - Intelligent Solar Hybrid Power System offers a cutting-edge telecom power solution—combining solar energy, intelligent rectification,
and modular design to ensure 24/7 reliability while reducing operational costs and carbon footprint.

Smart PV Power Cabinet for Telecom Power Solution Product Details/Parameter:

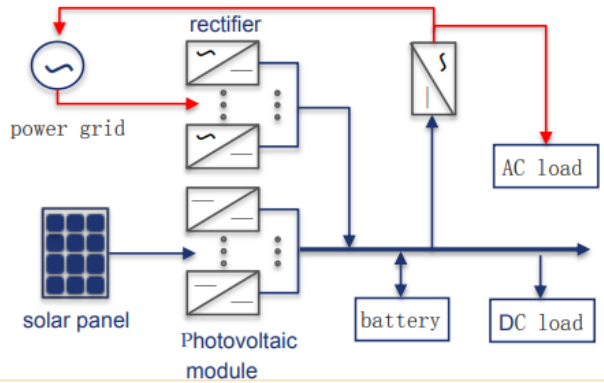
No.	Model/Specification	Parameters
1	Outdoor Cabinet	1. Dimensions: H*W*D 2100*600*600 2. Internal structure: 19-inch Rack, 40U. 3. Material: Galvanized steel. Outer panel: 1.5mm galvanized steel, PEF 20mm, fire rating meets HF-1.
2	Switching Power Supply	1. Power capacity: 400A 2. MPPT solar module: 400A 3. 19-inch rack mounting, height: 9U 4. Equipped with monitoring module, including primary and secondary load shedding.
3	Air Conditioner	1.5KW AC * 1 (optional)
4	Energy Meter	Equipped with 3-channel energy metering for multi-party power management.
5	Power Distribution Unit (PDU)	AC distribution unit * 1; DC distribution unit * 2
6	Fan	fan * 1
7	Temperature Switch	temperature switch * 1
8	LED with Switch	Door access and LED light switch * 2, LED light * 1
9	Accessories	Accessories: Mounting brackets, anchor screws, square nuts

Smart PV Power Cabinet Intelligent Solar Hybrid Power System Key Features & Advantages:

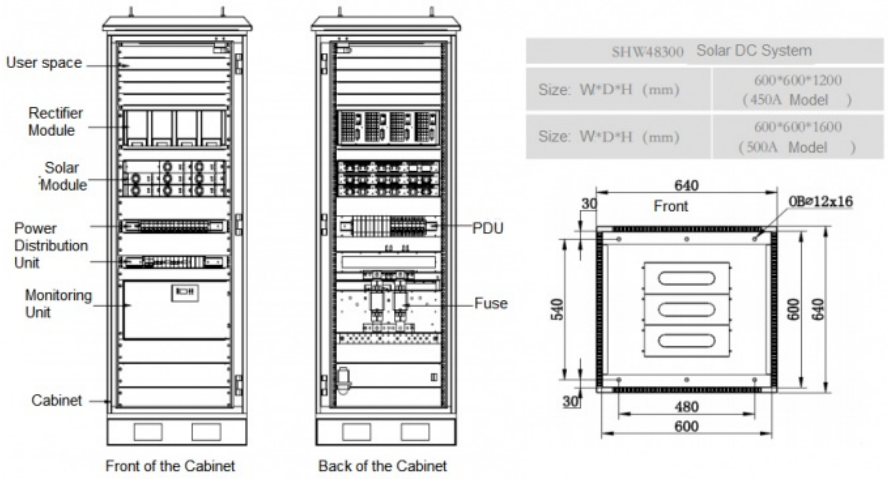
Reliable. Efficient. Sustainable.

Feature	Description
High Efficiency	MPPT efficiency >99.5%, system efficiency >96% in pure solar mode.
Modular Design	Hot-swappable rectifier/MPPT modules; supports N+X redundancy for zero downtime.
Smart Monitoring	Centralized control for solar, rectifier, battery, and load management.
Dual Energy Input	Solar prioritized, with wind/rectifier backup for uninterrupted power supply.
Wide Compatibility	Supports hybrid PV-wind configurations and grid-tie/off-grid applications.

Electrical schematic diagram of photovoltaic communication energy storage system



Structure of Solar Energy Control Cabinet:



Core Components

1. Solar MPPT Controller
Input Voltage: 60V–150V DC
Output Efficiency: >98.2%
Tracking Accuracy: >99.5%
IP Rating: IP55 (dust/water resistant)
2. Rectifier Module (SR4850G)
Input Range: 85V–300V AC
Output: 42V–58V DC
Efficiency: >95%
Temperature Range: -40°C to +75°C
3. Smart Monitoring System
Functions: Load shedding, battery testing, temperature compensation, remote control.
Interface: User-friendly display with IoT connectivity for real-time alerts.

Smart PV Power Cabinet Intelligent Solar Hybrid Power System Application Scenarios

Scenario 1: Off-Grid Remote Sites
Configuration: Solar + Battery + Diesel Backup
Workflow: Solar powers loads and charges batteries; diesel activates during low battery.

Scenario 2: Grid-Tie with Energy Sales
Configuration: Solar + Inverter + Grid Connection
Workflow: Excess solar energy feeds into the grid, reducing costs and generating revenue.

Performance Comparison

Parameter	Hybrid System	Traditional Grid-Tie
Efficiency	>98%	88% (2-stage conversion)
Reliability	Uninterrupted via MPPT	Grid-dependent
Maintenance	Hot-swappable modules	Complex inverter replacement
ROI	3–5 years	5–7 years

Why Choose Us?

Proven Expertise: Deployed in 500+ sites across harsh environments.
Custom Solutions: Scalable designs for 200A to 500A systems.
Sustainability: Reduce diesel consumption by 80% and CO_2 emissions by 50%.

On-site pictures:


北纬
41°52'
东经
113°56'
2023.08.22
德义火车站

Green Base Industrial Park, Longtian Street, Pingshan District, Shenzhen