

Flexible Energy Solutions

Charge and Swap at Anytime and Anywhere

Enneagon Energy Xiaojiu Mobile
Charging and Swapping System



Addressing Energy Challenges, Seize green opportunities

Regardless of your industry, we can provide tailored solutions.



• Wind/Solar Power Plant Owners

“Generated electricity cannot be transmitted, watching helplessly as it goes to waste, resulting in lost revenue?”



• Station Operator

“Traditional charging and swapping stations have long construction cycles, cumbersome procedures, and high costs?”



• Project Engineering Manager

“New construction site without power? High connection fees and slow approvals? Diesel generators are noisy, expensive, and polluting?”



• Grid/Emergency Response Manager

“Emergency power outage repair, urgent power supply task—traditional generator trucks are costly and noisy?”

All-in-One Mobile Energy Platform

A vehicle is a mobile green energy station.

- **Plug-and-play:** Drive to the site, plug it in, and power is supplied instantly—no waiting, no infrastructure required.
- **Multi-functional integrated system:** Optional AC/DC conversion equipment adapts to diverse multi-source energy requirements.
- **Smart Green:** Clean battery energy storage delivers quiet operation and zero emissions, plus intelligent scheduling to help you save money.



Xiaojiu Battery Swap Vehicle (Ultra-Fast Swap)

4-6 minute ultra-fast battery swapping, highly compatible, intelligent and efficient, suitable for power-constrained environments and scenarios requiring frequent location changes.



Mobile Charging and Energy Exchange Management System (Intelligent Brain)

Adopting an onboard integrated solution, this system is designed for energy management during charging and discharging in mobile power supply vehicles. It provides interactive control functions to enable AC and DC charging and discharging.



Xiaojiu Power Supply Vehicle (Energy Storage and Power Supply Core)

Dual-platform high-capacity power supply: - Power batteries (picture above) - Container-based energy storage (picture below) Integrated storage, charging, and swapping battery design Supports rapid charging and discharging Highly efficient and stable.



Mobile Battery Swapping



*DC-DC Power Cabinet (DC Direct Connection)

High-efficiency DC voltage conversion, stable power regulation, compatible with mobile energy storage systems, direct connection to DC systems, enabling V2V functionality.



*PCS Power Cabinet (AC/DC Conversion)

High-efficiency AC/DC conversion, intelligent charge/discharge management, compatible with mobile energy storage systems, stable and reliable with space-saving design.



Mobile Charging

Core Scenarios and Benefits

Empowering industries across the board, delivering tangible value.

Scenario 1: Renewable Energy/Wind and Solar Curtailment Scenario Solution

Solution: Absorbing curtailed wind and solar power, turning electricity costs into revenue

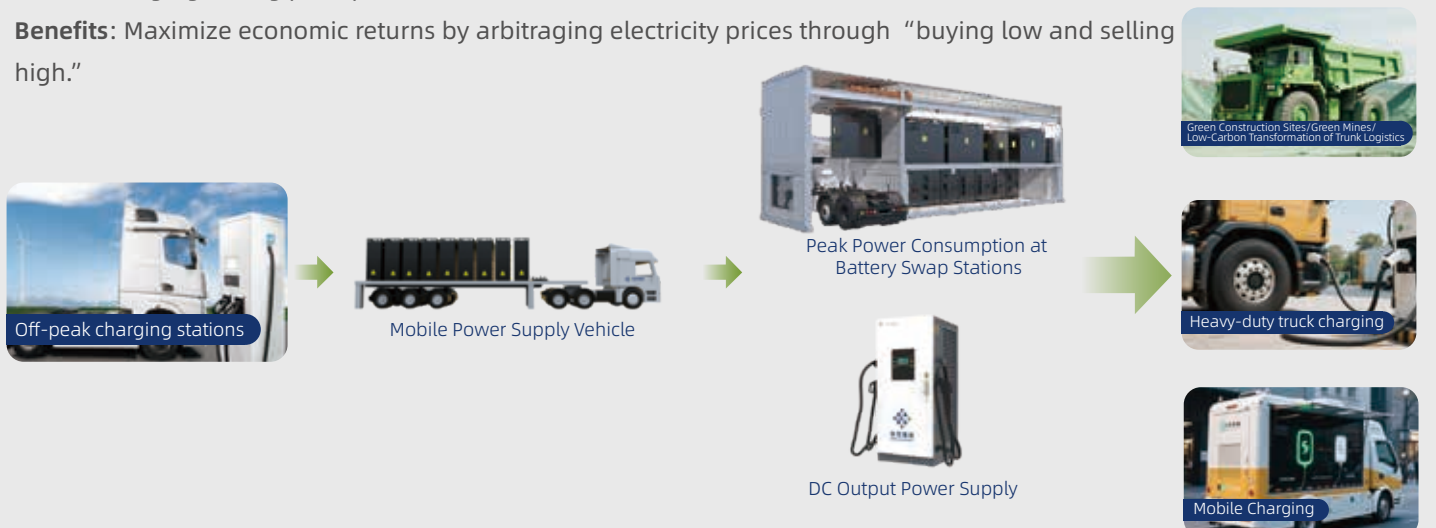
Benefits: Enhancing green electricity utilization, directly converting wasted power into income



Scenario 2: Peak-Valley Arbitrage Scenario Solution

Solution: Utilize mobile power supply vehicles as large-scale “power banks,” charging during off-peak hours and discharging during peak periods.

Benefits: Maximize economic returns by arbitraging electricity prices through “buying low and selling high.”



Xiaojiu MobileCharging and Swapping System: More Than Just Mobility—Professional and Reliable

- **Fast:** 4-6 minute ultra-fast battery swapping, industry-leading robotic swapping technology, low parking precision requirements.
- **Efficient:** 96% peak system efficiency, peak shaving and valley filling, utilizing off-peak electricity for charging, significantly reducing energy costs.
- **Compatibility:** Compatible with mainstream battery models, dual-platform design for power batteries and energy storage batteries, with flexible capacity configurations (500-2000kWh).
- **Intelligence:** Intelligent cloud platform management, remote real-time monitoring, and fault alerts put energy management at your fingertips.
- **Stable:** Multiple layers of security protection, high protection rating, adaptable to various harsh environments, safe and reliable.

Scenario 3: Mobile Battery Swapping

Solution: Mobile Recharging (Charging/Battery Swapping)

Benefits: 5-minute rapid battery swapping. By establishing a mobile swapping network using mobile power supply vehicles (8-bay power battery platform) and mobile swapping vehicles, vehicle uptime increases by 40%, and fleet TCO decreases by 20%.



Other Scenarios 1: Green Construction Sites and Mines

Solution: Replace diesel generators to provide temporary construction power

Benefits: For a site consuming 300kWh daily, achieve over 30% reduction in electricity costs, deliver zero noise and zero emissions, and establish a green brand image



Other Scenario 2: Emergency Power Supply

Solution: Rapid Response, Silent Power Supply

Benefits: Quick Deployment, Silent Operation, Safeguarding the Power Lifeline



Powerful performance, driven by a solid core.

XiaoJiu Battery Swap Vehicle Standard Solution

Technical Specifications for XiaoJiu Battery Swap Vehicles	
Applicable Vehicle Models	Heavy-duty truck
Battery Swap Model	Top-hoist
Battery swap time	≤6min
Compatible Battery Swapping	282/350/400
Equipment Service Capability	168 times/24H
Operating Temperature Range	-45°C~70°C
Operating Humidity Range	5%-95%RH
Use Altitude	Standard Edition: ≤2000m; High Altitude: ≤4000m
Wind Resistance Rating	≤Level 12
Seismic Resistance	Seismic design intensity ≤ 7 degrees, ≤ 0.15g
Startup Method	Scan the QR code, one-button start
Operating Model	Fully automated battery swapping, station-end supervision, Enneagon cloud monitoring
Whole-Site Protection	Gull-wing door design, LED display, voice prompts
Applicable Scenarios	All-scenario

EMS Energy Management System Parameters		
1.Hardware Specifications Industrial-grade server/industrial PC, recommended configuration		
CPU	Quad-core 3.1GHz or above	
RAM	16GB or above	
Hard disk	500 GB or above	
Display	Dedicated graphics card with at least one VGA port	
Ethernet	The motherboard provides at least two 10/100/1000Mbps Ethernet controllers.	
I/O Interface	At least 4 RS232/485 interfaces; at least 2 USB 2.0 ports	
Expand	Supports PCI/PCIe/mini PCIe expansion	
2.Software Parameters		
Category	subitem	Requirements
Operational Response Performance	Page Switch	Less than 1 second
	Historical Data Query	Less than 3 second
	Report File Export	Less than 5 second
Data Communication Performance	Control command issuance	Less than 1 second
	Real-time alert pop-up	Less than 3 second
	Remote signaling refresh time	Less than 5 second
	Telemetry Refresh Time	Less than 10 second
Operational Response Performance	Processor usage	Less than 50% on average
	Memory usage	Less than 60% on average
	Network bandwidth	Less than 30% on average
Data Communication Performance	Event Log	Over 10 years
	Data Logging	Over 1 years
	System Alarms and Failures	Over 5 years
	System Control Commands	Over 5 years
	Remote signal position change	Over 3 years
	Configuration Changes	Permanent storage

Standard Solution for Xiaojiu Power Supply Vehicles

EMPS Xiaojiu Power Supply Vehicle System Technical Specifications		
Project	Specifications	Note
Equipment Model	EMPS-770-E400	
Number of workstations	2/4/6/8	Optional
Base plate	Compatible with Enneagon upper frame powertrain	Customizable
Equipment Installation Dimensions	13000*2500mm (L*W) (H≤1500mm)	8-Station Dimensions
Equipment Weight	Approximately 40 tons including batteries	8-Station Weight
Altitude	≤2000 m	Exceeding the underclocking usage
Relative humidity	5% ~ 95%	
Operating ambient temperature	-30°C ~ 50°C	High-Altitude Version
Wind Resistance Rating	Non-working ≤ Level 12, Working ≤ Level 8	
Lightning Protection Performance	Equipped with a vehicle grounding network, multiple grounding points via grounding rods, and surge protectors.	
Insulation Properties	Communication/V2G Power Cabinet: 220/380VAC, insulation resistance ≥0.5MΩ; DC-DC Power Cabinet: 1000VDC, insulation resistance ≥10MΩ;	
IP Rating	V2G Power Cabinet/DC-DC Power Cabinet/Communication Power Cabinet: IP54; Power Battery Box (After Connection): IP67	
Seismic Resistance	Seismic Design Intensity: 7 degrees, 0.15g	
Noise Resistance	Overall noise level is less than 75 dB	
Design life	5 years	

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Technical Specifications for DC-DC Power Cabinet

Rated Power	320kW
DC Input Voltage	250 ~ 825VDC
Peak Efficiency	97%
Connection Method	High-voltage connector
Charging Method	Dual-port simultaneous output, parallel charging, supports switching charging gun output
External Plug Cable	Supports one machine with two plugs
Supported Standards	National Standard
Rated Output Current	500A
Output Voltage	200 ~ 1000VDC (High-pressure mode)
Auxiliary Power Supply (for vehicle BMS)	1.0 class
Accuracy Class of DC Electricity Meter	Scan the QR code, one-button start
DC Insulation Monitoring	Insulation resistance values below 500Ω/V trigger an alarm but allow charging. Insulation resistance values below 100Ω/V prohibit charging.
Protection Rating	IP54
Cooling method	Intelligent Air Cooling



Technical Specifications for PCS Power Cabinet

	Project	Parameters
Environmental Parameters	Operating Temperature Range	-20°C-60°C (Derating above 45°C)
	Altitude	2000m (Derating above 2000m)
	Relative humidity	0-95%
Basic Parameters	Rated Power	320kW
	Heat Dissipation Method	Air-cooled, independent air duct
	Host Computer Communication Interface	CAN/RS485
	BMS Communication Interface	CAN/RS485
	Protection Rating	IP65
	Corrosion Protection Grade	C5
	AC Parameters	Rated Voltage
Grid Connection Type		Three-phase three-wire compatible with three-phase four-wire systems
Rated Frequency		50Hz
Rated Current		450A
Maximum Current		500A
Power Factor		> 0.99
THDi		< 3%
DC Component		< 0.5%In
Efficiency		≥98%(maximum)
DC Parameters	Operating Voltage Range	550V-1000V
	Maximum Charge/Discharge Current	250A
	Constant Current Range	550V-600V
	Constant Power Range	600-950V
Protective Function	AC Lightning Protection	Yes
	Reverse Polarity Protection	Yes
	AC Short-Circuit Protection	Yes
	Over-temperature Protection	Yes
	Anti-Isolation Protection	Yes
	Insulation Resistance Monitoring	Yes



Shanghai Enneagon Energy Technology Co.,Ltd

Shanghai Enneagon Energy Technology Co., Ltd., established in Shanghai in 2014, is a high-tech enterprise and a nationally recognized “Little Giant” enterprise specializing in providing new energy electric vehicle charging and battery swapping technologies, products, and system solutions. The company's product portfolio encompasses power battery box assemblies, charging and battery swapping equipment, power electronic devices, and digital cloud platforms. Through the interconnection and interaction enabled by its IoT cloud platform, the company has positioned itself as a leading provider of integrated energy and transportation system solutions.

Headquartered in Xuhang Town, Jiading District, Shanghai, the company occupies over 55,000 square meters. It has developed comprehensive capabilities in the new energy electric vehicle sector, including system integration, equipment R&D and manufacturing, engineering survey and construction, solution design, and after-sales operations. The company delivers end-to-end charging and battery swapping services and has successfully undertaken and operated related projects across China. Committed to providing customers with safe, efficient, and reliable charging and battery swapping experiences, Shanghai Enneagon Energy Technology Co., Ltd. continues to advance its industry leadership.

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Committed to becoming a leading provider of integrated transportation and energy system solutions



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