

High-Efficiency Home Solar Energy Storage Allin-One Cabinet Machine

Model: HJ-H05-O05/HJ-H10-O05 Power: 51.2V/5.12kwh-10.24kwh

Summary

The HighJoule home solar energy storage systems (HJ-H05-O05, HJ-H10-O05) provide reliable power solutions with military-grade LiFeCoPO4 batteries, efficient solar harvesting, pure sine wave output, and a space-saving wall-mounted design. Equipped with smart monitoring, these systems outperform many similar products in flexibility and efficiency.



High-Efficiency Home Solar Energy Storage All-in-One Cabinet Machine (HJ-H05-O05/HJ-H10-O05)

Product Features

Scalable Energy Storage

Choose between the HJ-H05-O05 (5.12kWh) for compact homes or HJ-H10-O05 (10.24kWh) for large residences. Seamlessly expand capacity as your energy needs



grow.

Military-Grade LiFeCoPO4 Batteries

Engineered with 3.2V/100Ah LiFeCoPO4 cells, which possess military-grade quality, being safer than standard LiFePO4. They can deliver 2,000+ cycles while maintaining over 80% capacity retention, ensuring long-term and reliable energy storage.

Hyper-Efficient Solar Harvesting

5,500W PV input with industry-leading 120–500V MPPT range captures 30% more weak/diffuse light than competitors.

Grid-Quality Pure Sine Wave Output

5,000W continuous / 10,000VA surge power with pure sine wave. Protects sensitive devices (e.g., medical equipment, servers) from damage.

Space-Optimized Wall-Mount Design

Ultra-slim 16cm depth wall-mounted chassis saves 80% floor space vs. cabinet-style units. Install in garages, basements, or utility rooms.

Extreme Climate Resilience

Operates at -20°C to 60°C – discharges in sub-zero winters and charges in desert heat. Outperforms rivals (0°C-45°C limits).

Tri-Network Smart Monitoring

Control via RS485 + WiFi + 4G. Track energy flows, set tariffs, and receive outage alerts remotely - no internet required.

Certified Safety & Zero Maintenance

IEC62619/UN38.3/MSDS certified. Forced air cooling extends lifespan with no user intervention.

Grid Independence, Lower Bills

Cut electricity costs by 70% with solar self-consumption and peak shaving. 100% depth discharge unlocks full capacity (vs. 80% in competitors).

Tailored Home Energy Solutions

Start with 5.12kWh (basic backup) or 10.24kWh (whole-home power). Both support 24/7 UPS-grade backup (10ms switch).



Technical Parameters

Product model		HJ-H05-O05(B-19)	HJ-H10-O05(B-20)
No.	Item	Spec	Spec
Battery parameters	Cell	LiFeCoPO4 3.2V/100Ah	LiFeCoPO4 3.2V/100Ah
	Array mode	16S1P	16S2P
	Rated capacity	51.2V100Ah	51.2V200Ah
	Capacity	5.12kWh	10.24kWh
	Operating voltage	40-58.4V	40-58.4V
	Standard charging current	100A	100A
	Communication port	RS485/CAN/232	RS485/CAN/232
PV parameters	PV input power	5500W	5500W
	PV input voltage range	120~500V	120~500V
	Number of MPPTs	1	1
AC parameters	AC input voltage rating	220V/230V/240VA C (L+N+PE)	220V/230V/240VA C (L+N+PE)
	AC input voltage	90~280VAC±3V(A	90~280VAC±3V(A



	range	PL);170~280VAC± 3V(UPS);	PL);170~280VAC± 3V(UPS);
	AC input frequency	50HZ/60HZ (Adaptive)	50HZ/60HZ (Adaptive)
	Rated output power	5000W	5000W
	Rated output voltage	220V/230V/240VA C (L+N+PE)	220V/230V/240VA C (L+N+PE)
	Waveform	Pure swirl	Pure swirl
	Transmission time(adjustable)	10 ms for computers(UPS mode) and 20 ms for home devices(APL mode).	10 ms for computers(UPS mode) and 20 ms for home devices(APL mode).
	Peak power	10000VA	10000VA
	Overload capacity	Battery Mode: 21s@105%~150% load 11s@150%~200% load 400ms@>200% load	Battery Mode:21s @105%~150% loa d11s@150%~200 % load400ms@>2 00% load
	Maximum efficiency	>98%	>98%
System Parameters	Net weight	58Kg	100Kg
	Package weight	85Kg	130Kg
	Net size(H*W*D)	850*480*160(mm)	1100*540*160 (mm)



Cooling method	Forced air cooling	Forced air cooling
Operating environment	Charge:0°C~55°C/ Discharge: - 20°C~60°C/ Stora ge:-10°C~45°C	Charge:0°C~55°C/ Discharge: - 20°C~60°C/ Stora ge:-10°C~45°C
Running humidity	5~95%, Relative humidity	5~95%, Relative humidity
Installation type	Wall-mounted	Wall-mounted
Communication mode	RS485/WIFI/4G	RS485/WIFI/4G
Authentication	IEC62619□UN38.3 □MSDS	IEC62619□UN38.3 □MSDS

Application

Compared to other similar products in the market, the HJ-H05-O05 (5.12kWh) and HJ-H10-O05 (10.24kWh) solar energy storage systems offer unique application scenarios. Equipped with military-grade LiFeCoPO4 batteries, they are safer and have a longer lifespan. They can charge and discharge normally within the extreme temperature range from -20°C to 60°C, making them suitable for areas with severe cold or hot climates. With a PV input power of 5500W and a voltage range of 120 -500V, these systems can efficiently capture solar energy and collect 30% more weak or diffuse light than competitors, which is ideal for regions with complex lighting conditions. The 5000W continuous output power and 10000VA peak power can protect sensitive devices like medical equipment and servers, making them more applicable for users who have such equipment at home or have special electricity requirements. Moreover, they support intelligent monitoring via RS485, WIFI, and 4G communication modes, enabling remote monitoring and control even without an internet connection, which can meet the needs of users in remote areas or those with unstable network conditions.

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