

6 kW / 16 kWh ALL-IN-ONE ENERGY STORAGE SYSTEM

YJC-HES-L- A-6kW/16kWh



ALL-IN-ONE INTEGRATED INVERTER & BATTERY

All-in-one inverter and LFP battery drastically reduce wiring and installation time so you get a turnkey system with lower upfront and labour costs.



SPACE-SAVING, COST-EFFICIENT FOOTPRINT

Compact, rack-ready housing saves floor space and cuts BOS (balance-of-system) expenses so homeowners enjoy professional storage without a premium price.



ECONOMICAL HOME STORAGE WITH SMART PEAK-SHAVING

Designed for modern households, the 6kW/16kWh combo delivers affordable daily backup and intelligent peak-shaving to reduce grid bills and improve self-consumption.



LONG-LIFE LIFEPO₄ BATTERY – FEWER REPLACEMENTS

High-durability LiFePO₄ cells rated 8,000 cycles ensure years of reliable capacity, cutting lifetime replacement and ownership costs.



INTELLIGENT MONITORING, ROBUST SAFETY & INSTANT BACKUP

Integrated smart BMS, IP65 protection and ultra-fast 10ms transfer deliver active cell management, weather-proof reliability and seamless power continuity during outages.



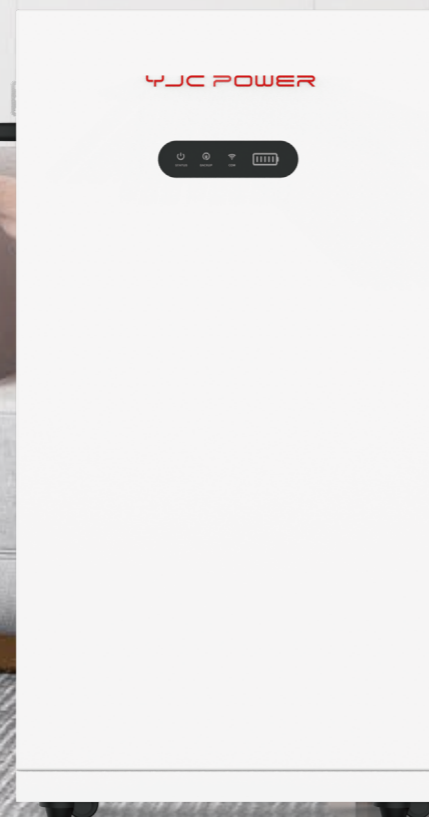
Cloud-Connected Centralized Energy Management

Cloud platform integration enables efficient, centralized energy management, real-time fleet monitoring and data-driven optimization across sites.



Remote Upgrades & Fault Diagnostics – Lower On-Site Maintenance

Supports remote firmware upgrades and fault diagnostics to minimize on-site service needs, shorten downtime and reduce O&M costs.



Model	YJC-HES-L- A-6kW/16kWh
Battery Specifications	
Battery Type	LiFePO ₄
Cell Capacity	314 Ah
Nominal Voltage	51.2 Vdc
Voltage Range	40 ~ 58.4 Vdc
Nominal Energy	16.07 kWh
Rated Charge/Discharge Current	100A
Maximum Continuous Charge/Discharge Current	100A
Pack Configuration	1P16S
Number of Packs	1 Pack
Cycle Life	≥ 8000 cycles
PV Terminal Parameters	
Max. PV Input Power	9000 W
Max. PV Voltage	600 Vdc
MPPT Voltage Range	100–500 Vdc
MPPT Voltage Range (Full Load)	250–520 Vdc
Rated PV Voltage	360 Vdc
Max. PV Input Current / Isc	16 / 20 Adc
Number of MPPTs	2
Input Strings per MPPT	2
AC Input Terminal Parameters	
Max. AC Input Power	10000 W
Max. Continuous Input Current	43.5 Aac
Max. Continuous Input Power (Grid → Battery)	6000 W
Max. Continuous Input Current (Grid → Battery)	26.1 Aac
Rated Input Voltage / Frequency	230 Vac (L/N/PE) 50/60 Hz
Input Voltage Range	170–280 Vac
AC Output Terminal Parameters	
Rated Output Active Power	6000 W
Rated Output Current	26.1 Aac
Rated Output Voltage / Frequency	230 Vac (L/N/PE) 50/60 Hz
Output Voltage Range	180–270 Vac
Power Factor Range	0.8 Leading to 0.8 Lagging
THDi	< 3%
Backup Load Rating	
Rated Backup Output Power	5000 W
Rated Backup Output Current	21.7 Aac
Rated Backup Output Voltage / Frequency	230 Vac (L/N/PE) 50/60 Hz
Backup Output Voltage Range	180–270 Vac
THDu (Linear Load)	< 3%
Conversion Time	< 10 ms
Efficiency	
Max. Efficiency	97.6%
European Efficiency	97.3%
Max. Battery / AC Efficiency	94.7%
MPPT Efficiency	99.9%
Protection	
Insulation Resistance Monitoring	Integrated
Residual Current Monitoring	Integrated
Reverse-Polarity Protection (DC Input)	Integrated
Anti-Islanding Protection	Integrated
AC Over-Current Protection	Integrated
AC Short-Circuit Protection	Integrated
AC Over-Voltage Protection	Integrated
Surge Protection Level	Type II (DC), Type II (AC)
Remote Shutdown	Integrated
DC Switch	Standard Supply
SYSTEM PARAMETERS	
Dimensions (W × D × H) mm	680 × 230 × 1280 mm
Weight	185 kg ± 10 kg
Cooling Method	Intelligent Forced Air Cooling / Natural Convection
Maximum Efficiency	≥ 90%
Installation Method	Wall/Floor mounting
Operating Temperature Range	-20 ~ 50 °C (derating above 45 °C)
Operating Humidity	0 ~ 95% RH (non-condensing)
Storage Temperature Range	-15 ~ 60 °C
Noise Level	≤ 70 dB
IP Rating	IP65
Corrosion Protection Level	C3
Maximum Operating Altitude	3000 m (derating above 2000 m)
Display	LED
Communication Interfaces	WiFi / Ethernet/RS485
Activation Method	AC / PV Activation
Certifications	UN38.3, IEC 62619, IEC62477, IEC61000