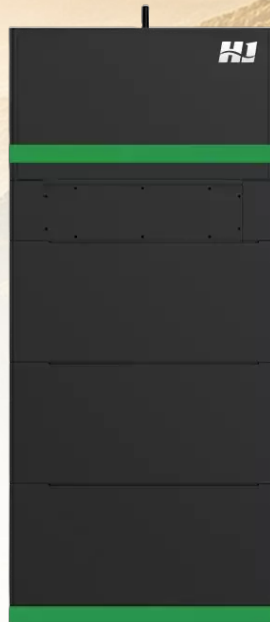


Stackable HESS: 5-16kWh All-in-One Home Energy Storage (IP65)

Model: HJ-H05-H05/HJ-H10-H05/HJ-H15-H05 Power:
5.3kwh;10.6kwh;15.9kwh

Summary

HighJoule's stackable HESS: 5.3-15.9kWh modular home storage with IP65 rating. Features Li-ion/Lead-acid compatibility, 99.9% MPPT efficiency, and <10ms grid backup. Ideal for solar-powered homes.



Stackable HESS: 5-16kWh All-in-One Home Energy Storage (IP65) (HJ-H05-H05/HJ-H10-H05/HJ-H15-H05)

Product Features

Tailored Model Options

HighJoule's All-In-One Single-Phase Stacked HESS offers three optimized models: HJ-H05-H05(k-7), HJ-H10-H05(k-8), and HJ-H15-H05(k-9). Their modular design enables flexible capacity scaling from 5.3kWh to 15.9kWh through battery stacking, precisely matching household to small business energy demands. Each 5.3kWh module adds

only 50kg weight while maintaining a unified 740×220mm footprint, solving space-limited installations.

Hybrid Battery Innovation

Uniquely supporting Li-ion/Lead-acid dual compatibility (80-467V range), it pioneers legacy battery integration. LFP cells deliver 6,000 cycles at 90% DoD with intelligent cycling; Lead-acid buffers peak loads, extending lithium lifespan to 7,000+ cycles – 40% longer than single-battery systems. Military-grade IP65 enclosure ensures operation from -25°C to 50°C.

Solar-Harvesting Supremacy

Equipped with dual MPPT trackers that boast an impressive 99.9% efficiency and feature an ultra-wide voltage range from 100V to 550V with a startup voltage of 100V. Even when 30% of the solar panels are shaded, it can still maintain a yield higher than 97%. With a maximum PV input power of 10kW and a tolerance for up to 580V, it's well-prepared for high-voltage solar arrays in the future. Compared to conventional inverters, it can generate an additional 127+ hours of electricity per year.

Grid Intelligence & Backup

It achieves a backup switching time of less than 10ms, which is three times faster than the industry standard, via magnetic relays. Key differentiating features include: a maximum output current of 27.2A that enables it to directly power 3HP air conditioners; a THDv (Total Harmonic Distortion of voltage) of less than 3% to safeguard sensitive medical and laboratory equipment; an adjustable power factor within the range of -0.8 to +0.8 to avoid grid penalty fees; and it is certified with VDE-AR-N4105/G99, ensuring seamless integration with the grids in the EU, UK, and AU regions.

Certified Longevity

Backed by global certifications: Battery Safety: UN38.3 + IEC62619, Grid Compliance: AS/NZS 4777.2 + CEI0-21, Lifespan: 10-year warranty with 80% capacity retention after 6,000 cycles (25°C).

Technical Parameters

Product Parameters

Product model	HJ-H05-H05(k-7)	HJ-H10-H05(k-8)	HJ-H15-H05(k-9)
BATTERY PORT			
Battery Type	Li-on/ Lead-acid		
Nominal Battery Voltage [V]	96		
Battery Voltage Range [V]	80-450		80-467.2
Max. Charging Current [A]	60	60	60
Max. Discharging Current [A]	60	60	60
INPUT PV			
Max. PV Input Power [kW]	10		
Max. PV Input Voltage [V]	580		
MPPT Range[V]	100-550		
Start-up Voltage [V]	100		
Max. Input Current[A]	15/15		

Max. Short Circuit Current [A]	18.75/18.75		22.5/22.5
MPPT Trackers	2		
MPPT Trackers	1/1/1		
GRID PORT			
Rated Output Power [kVA]	5/4.6(DE)	5/4.6(DE)	6
Max. Output Current [A]	22.7	22.7	27.2/26
Max. Output Apparent Power [kVA]	5/4.6(DE)	5/4.6(DE)	6
Max. Input Power [kVA]	10	10	11.5
Rated Grid Voltage [Vac]	230	230	220/230
Grid Voltage Range [Vac]	180-270		
Rated Grid Frequency [Hz]	50/60		
Power Factor	-0.8~+0.8		
THDi			

Application

HighJoule's Stackable HESS (Models HJ-H05/H10/H15) delivers 5.3-15.9kWh truly

modular capacity with industry-unique Li-ion/Lead-acid dual compatibility (80-467V). Engineered for critical scenarios: ☑☑ Sun-scarce homes: Dual 99.9%-efficiency MPPT + 100V startup outperforms rivals by 127+ annual solar hours in low-light. ✂ Retrofit-ready sites: Patented lead-acid buffering slashes 40% battery costs while maintaining 6,000 cycles @ 90% DoD on LFP cells. ☑☑ Sensitive equipment zones: 5% THDv in competitors). IP65 armor (-25°C operation) + 52A charge/discharge enables hurricane-prone clinics and peak-shaving shops to achieve industry-low \$0.08/kWh.

Contact Us

For catalog requests, pricing, or partnerships, please visit:
<https://www.highjoule.com>



Scan QR Code
Visit Our Website