Haier Energy

E-BANK

All-in-One Micro Energy Storage System

Plug-and-play "real" installation free

Portable / Balcony / Residential 3-in-1

AC-coupled version | HVA-2.5/5D2ACW

Hybrid Photovoltaic version | HVA-2.5/5D2W



Minimalist installation, saving time and effort

- Grid connection port/load port, plug and play
- Data Collection Electricity Meter, Smart Wireless Connection, Magnetic Clampless Disassembly
- Multiple parallel units, smart sockets, electric meters, AI-powered one-step self-organizing network
- 10 units of grid connected wireless parallel machines with a capacity of 2.5kW/50kWh, and 4 units of off grid convergence parallel machines with a capacity of 10kW/20kWh

Ultimate safety, all-round protection

- 24-channel full-range temperature detection, precise monitoring
- Glass sealed NTC significantly improves temperature detection stability
- Circuit breaker hardware power-off protection, safe isolation
- Cycle life of 10000 times, 10-year warranty

AI smart storage, save money, less worry

- AI fault identification without shutdown, remote upgrades, AI self-maintenance
- Supports dynamic traiff/VPP, one-click AI charging & discharging strategy

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Basic Parameters	
Model	HVA-2.5/5D2W
Maximum PV Input Power	3.2 kW
Battery Energy	5.02 kWh
Rated AC Output Power	800W/2.5 kW (On-grid / Off-grid)
Overall Dimensions (W×H×D)	530 mm × 704 mm × 240 mm
Overall Weight	67 kg ± 3%
Cooling Method	Natural Cooling
Ingress Protection Rating	IP65 (Complete System)
Protection Level	I
Overvoltage/Voltage Withstand Level	Ⅱ (PV), Ⅲ (AC)
Design Service Life	10 years
PV Input Side (DC)	
Maximum PV Input Power	3.2 kW
Number of MPPT	4
Maximum Power per MPPT	800 W
Maximum Input Current per MPPT	22 A
Short-Circuit Current per MPPT	27.5 A
MPPT Operating Voltage Range	20 V ~ 60 V
Maximum DC Input Voltage	60 V
MPPT Tracking Efficiency	>99.9%
Maximum Charging Efficiency (Single PV to Battery)	≥ 96%
Battery Side (DC)	
Battery Type	$LiFePO_4$
Cell Rated Capacity	314 Ah
Battery Energy	5.02 kWh
Battery Rated Voltage	16 V
Battery Operating Voltage Range	15 V ~ 17.5 V
Maximum Charge / Discharge Power	2.5 kW
Recommended Charge / Discharge Current	157 A / 157 A (25℃)
Maximum Charge / Discharge Current	172 A / 180 A (25℃)
Charge / Discharge Efficiency	≥ 94%
Usable Depth of Discharge (DoD)	90%
Cycle Life	>10000 cycles
Grid Side (AC) - Input/Output	
Rated Grid Voltage	220 V / 230 V (L/N/PE)
Rated Grid Frequency	50 Hz / 60 Hz
Rated Input Apparent Power	3.2 kVA
Rated Output Apparent Power	2.5 kVA/800VA
Maximum Input / Output Current	16 A
Power Factor Range	0.8 (leading) ~ 0.8 (lagging)
THDi	＜3%
EPS Output	
Rated Output Voltage	220 V / 230 V (L/N/PE)
Rated Output Frequency	50 Hz / 60 Hz
Rated Output Apparent Power	2.5 kVA
Maximum Output Current	16A
THDu（Linear Load）	＜3%
Communication	
Communication Interfaces	Wi-Fi, Bluetooth, RS485, CAN
Remote Upgrade	OTA
Environmental Adaptability	
Operating Temperature	-30℃ ~ +60℃
Storage Temperature	-40℃ ~ +60℃
Operating Humidity	0-95% RH (Non-condensing, 25±2℃)
Operating Altitude	≤4000 meters（Derated operation when >2000 meters）
Maximum Operating Noise	<30 dB
Safety & Certification	
Safety	IEC 62619; IEC 62109-1; IEC 62109-2; IEC 62477-1
EMC	IEC 61000; IEC 62920
Radio Equipment Directive	EN 300328 V2.2.2; EN 301489-1 V2.2.3; EN 301489-17 V3.2.4; EN 55011; EN 18031-1; EN 18031-2
Shipping Standards	UN38.3
Grid Connection Standards	VDE 4105; EN 50549-1; EN 50549-10
Material Safety	RoHS; REACH
Regulations	EU 2023/1542