

PRODUCT OVERVIEW

The HES series is an all-in-one hybrid inverter which integrates solar energy storage and grid power storage with sine wave AC output. Thanks to DSP control and an advanced control algorithm, the HES series has a high response speed, high reliability and meets top industry standards.

FEATURES

- **EFFICIENT** – Advanced MPPT technology with up to 99.9% efficiency; up to 22A PV input current perfect for high power
- **WATERPROOF PROTECTION** – IP65 environmental protection for outdoor installation
- **USER FRIENDLY** – Industrial design with a modern aesthetic look; wall-mounted installation saves space
- **SAFETY** – 360 degrees of security from hardware to software; EU and North American safety approvals
- **COMMUNICATION** – Support for Li-ion battery BMS communication
- **INTELLIGENT** – Exclusive Li-ion battery BMS dual activation; scheduling function to save costs with peak demand charges

APPLICATIONS

- Emergency power supply.
- Home backup storage.
- Data storage/UPS backup systems.
- Off-grid power storage.
- Solar power storage.



Product Description

PART#	DESCRIPTION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX PV INPUT VOLTAGE	POWER OUTPUT
EV-HES4880U200-H	Split Phase Hybrid Inverter	90-140Vac	240Vac	500V+500V	8800W
EV-HES48100U200-H	Split Phase Hybrid Inverter	90-140Vac	240Vac	500V+500V	10000W
EV-HES48120U200-H	Split Phase Hybrid Inverter	90-140Vac	240Vac	500V+500V	12000W

Specifications

MODEL#	EV-HES4880U200-H	EV-HES48100U200-H	EV-HES48120U200-H
INVERTER OUTPUT			
Rated Output Power	8800W	10000W	12000W
Maximum Peak Power	17600VA	20000VA	24000VA
Rated Output Voltage	240Vac (split-phase L1+L2+N+PE)		
Load Capacity of Motors	5HP	6HP	
Rated AC Frequency	50/60Hz		
Total Harmonic Current	< 3% (rated power)		
Power Factor	-0.8~ +0.8		
DC Component	< 0.5% IN		
Switch Time	10ms (typical)		
Output Mode	Off-grid / Hybrid / On-grid		
BATTERY			
Battery Type	Lead-acid / Li-ion / User defined		
Rated Battery Voltage	48V		
Voltage Range	40~60Vdc		
Maximum MPPT Charging Current	200A		
Max. Grid/Generator Charging Current	120A		
Maximum Hybrid Charging Current	200A		
PV INPUT			
Number of MPPT Trackers	2		
Maximum PV Array Power	5500W+5500W	6500W+6500W	
Maximum Input Current	22A + 22A		
Maximum Voltage of Open Circuit	500Vdc + 500Vdc		
MPPT Voltage Range	125~425Vdc		
GRID/GENERATOR INPUT			
Input Voltage Range	90-140Vac		
Frequency Range	50/60Hz		
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Maximum Efficiency	97.5%		
European Efficiency	97%		
GENERAL			
Dimensions	440*240*700mm (1.44*0.79*2.30ft)		
Weight	37kg (81.57lb)		
Environmental Protection	IP65		
Operating Temperature Range	-25~60°C, > 45°C derated		
Noise	< 60dB		
Cooling Method	Internal Fan		

MODEL#	EV-HES4880U200-H	EV-HES48100U200-H	EV-HES48120U200-H
Warranty	5 years		
COMMUNICATION			
Embedded Interfaces	RS485 / CAN / USB / Dry contact		
External Modules (Optional)	WiFi / GPRS		
CERTIFICATION			
Safety	IEC62109-1, IEC62109-2		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B		
Rohs	Yes		

Typical System Configuration

