



# HES series

## Hybrid Solar Inverter

HES4880U200-H  
HES48100U200-H

HES48120U200-H



### Efficient

- Advanced MPPT technology with up to 99.9% efficiency
- Up to 22A PV input current perfect for high power

### User-friendly

- Industrial design with a modern aesthetic look
- Easy to install and simple to use

### All-in-one

- Solar Charger Controller up to 200A charging current
- Support for Li-ion battery BMS communication

### Reliable

- Outputs high quality pure sine wave AC power
- IP65 protection degree for outside installation

### Safety

- 360 degrees of security from hardware to software
- EU and North American safety approvals

### Intelligent

- Exclusive Li-ion battery BMS dual activation
- Time-slot function to save cost with peak-valley

MODEL	HES4880U200-H	HES48100U200-H	HES48120U200-H	CAN BE SET
<b>INVERTER OUTPUT</b>				
Rated Output Power	8800W	10000W	12000W	
Max.Peak Power	17,600VA	20,000VA	24,000VA	
Rated Output Voltage	240Vac (split-phase L1+L2+N+PE)			✓
Load Capacity of Motors	5HP	6HP		
Rated AC Frequency	50/60Hz			✓
Waveform	pure sine wave			
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			
<b>BATTERY</b>				
Battery Type	Lead-acid / Li-ion / User Defined			✓
Rated Battery Voltage	48V			
Voltage Range	40~60Vdc			✓
Max.MPPT Charging Current	200A			✓
Max.Mains/Generator Charging Current	120A			✓
Max.Hybrid Charging Current	200A			✓
<b>PV INPUT</b>				
Num. of MPPT Trackers	2			
Max.PV Array Power	5,500W + 5,500W		6,500W + 6,500W	
Max.Input Current	22A + 22A			
Max.Voltage of Open Circuit	500Vdc + 500Vdc			
MPPT Voltage Range	125~425Vdc			
<b>MAINS/GENERATOR INPUT</b>				
Input Voltage Range	90~140Vac			
Frequency Range	50/60Hz			
<b>EFFICIENCY</b>				
MPPT Tracking Efficiency	99.9%			
Max.Efficiency	97.5%			
European Efficiency	97%			
<b>GENERAL</b>				
Dimensions	440*240*700mm (1.44*0.79*2.30ft)			
Weight	37kg (81.57lb)			
Protection Degree	IP65			
Operating Temperature Range	-25~60°C, >45°C derated			
Noise	<60dB			
Cooling Method	Internal Fan			
Warranty	5 years			
<b>COMMUNICATION</b>				
Embedded Interfaces	RS485 / CAN / USB / Dry contact			✓
External Modules (Optional)	Wi-Fi / GPRS			✓
<b>CERTIFACATION</b>				
Safety	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B			
Rohs	Yes			