



HESP series



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 100A 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	HESP4840S100-H	HESP4846S100-H	HESP4855S100-H	HESP4860S100-H
INVERTER OUTPUT				
Rated Output Power	4000W	4600W	5500W	6000W
Max.Peak Power	8,000VA	9,200VA	11,000VA	12,000VA
Rated Output Voltage	230Vac			
Load Capacity of Motors	4HP			
Rated AC Frequency	50Hz/60Hz			
Total Harmonic Current	< 3%			
Power Factor	1			
Permitted parallel number	1~6(sing/three phase)			
Switch Time	10ms (typica)			
Output mode	off-gri(default) / On-grid / Hybrid			

BATTERY		PV INPUT	
Battery Type	Lead-acid/Li-ion/UserDefined	Num. of MPPT Trackers	2
Rated Battery Voltage	48V(minimumstartingvoltage44V)	Max.PV Array Power	6600W
Voltage Range	40~58Vdc	Max.Input Current	22A
Max.MPPT Charging Current	80A	Max.Voltage of Open Circuit	500Vdc
Max.Mains/Generator Charging Current	60A	MPPT Voltage Range	120~450Vdc
Max.Hybrid Charging Current	100A		

MAINS/GENERATOR INPUT	
Input Voltage Range	UPS mode :170~280Vac ; APL mode : 90~280Vac
Frequency Range	50/60Hz
Maximum bypass overload current	40A

GENERAL	
Dimensions	556*345*182mm (1.82*1.13*0.60ft)
Weight	19.2kg (42.311)
Protection Degree	IP65
Operating Temperature Range	Operating: -25~55℃, >45℃derated; Storage:-25~60℃
Noise	≤60dB
Humidity range	0%~100%
Cooling Method	Forcedaircooling,variablespeedoffan
Warranty	5years

COMMUNICATION	
Embedded Interfaces	RS485 / CAN / USB / Dry contact
External Modules	Wi-Fi
CERTIFACATION	
Safety	IEC62109-1, IEC62109-2
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B
Rohs	Yes
EFFICIENCY	
MPPT Tracking Efficiency	99.9%
Max.Efficiency	92%

MODEL	HES80SH3	HES100SH3	HES120SH3
INVERTER OUTPUT			
Rated Output Power	8000W	10000W	12000W
Max.Peak Power	8,8000VA	11,000VA	13,200VA
Peak Power(off grid)	2 times of rated power, 10 S		
Rated grid Output Current	11.5A	14.4A	17.3A
Max. grid Output Current	12.7A	15.9A	19.1A
Power Factor	0 . 8		
Rated AC Frequency	50/60Hz		
AC voltage range	380~415V		
Total Harmonic Current	THD<3% (Linear load<1.5%)		
Output mode	Off-grid(default)/On-grid /Hybrid		
BATTERY			
Battery Type	Lead-acid /Li-ion /User Defined		
Voltage Range	125~600Vdc		
Max. Charging Current	50A		
Max. Discharging Current	50A		
PV INPUT			
Num. of MPPT Trackers	2		
No. of Strings Per MPPT Tracker	1+1		
Max. DC Input Power	6000W+6000W	7500W+7500W	9000W+9000W
Max. PV Input Voltage	500V+500V		
PV Input Current	15A+15A		
MPPT Voltage Range	180~850Vdc		
Min. PV Input Voltage/Start-up Voltage	125V/180V		
MAINS/GENERATOR INPUT			
Rated input Frequency and Voltage	50/60Hz,3L+N+PE,220/380V:230/400V;240/415V		
Rated apparent power	16000W	20000W	24000W
Max.input Rated apparent power from grid	13200W	17600W	22000W
Max. grid Input Current	25.5A	31.9A	38.2A
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Euro-eta	97.2%	97.5%	
Max.Efficiency	97.9%	98.3%	
GENERAL			
Dimensions	620*550*230mm		
Weight	35kg		
Protection Degree	IP65		
Operating Temperature Range	-15°C~55°C (°F~°F)		
Noise	≤30dB		
Warranty	5 years		
COMMUNICATION			
Embedded Interfaces	RS485 /CAN		
External Modules	WiFi/GPRS		
CERTIFACATION	IEC62109-1.IEC62109-2.CEI-021.VDE4105.VDE0124		
Safety	EN61000-6-1.EN61000-6-3.FCC 15 class B		
EMC			