



HESP 14-16kW

Three-Phase Hybrid Solar Storage Inverter

- ☐ 2 independent MPPT ports,
up to 1.6 times the rated photovoltaic power.
- ☐ MPPT operating voltage: 160~850Vdc.
- ☐ PV open-circuit voltage is 1000V, and the single-channel current is 42A.(2 circuits totaling 84A)
- ☐ Max charge/discharge current: 300A, supporting fast charge/discharge.
- ☐ Up to 9 units can be connected in parallel.
- ☐ Battery 2-level buck-boost topology, significantly reducing current ripple and extending lifespan.
- ☐ Max. 60A Bypass Current (Grid).
- ☐ With a PV activation function .
- ☐ Support time-slot function for peak-valley.
- ☐ AC coupling function.
- ☐ Separate generator port.
- ☐ Smart load function.
- ☐ IP65 waterproof protection degree.



ABOUT SRNE

- ☐ SRNE 17 years in PV industry, committed to independent R&D and production.
- ☐ Holds over 200 patents in energy storage, with unique industry-leading technologies.
- ☐ Chooses top-quality international components to deliver high-value products to customers.
- ☐ Upholds values of customer priority, proactivity, responsibility, and innovative breakthroughs.

Model	HESP48140SHD3	HESP48150SHD3	HESP48160SHD3
AC OUTPUT			
Rated Output Power	14000W	15000W	16000W
Max. Peak Power (Off-grid)	28000VA/10S	30000VA/10S	32000VA/10S
Max. Apparent Power	14000VA	15000VA	16000VA
Rated Output Voltage	230/400Vac (3L+N+PE)		
Rated Output Current	20.3A	21.8A	23.2A
Rated Frequency	50/60Hz, ±0.3Hz		
Waveform	Pure sine wave		
BATTERY			
Battery Type	Lead-acid battery / Lithium-ion battery / User-defined		
Rated Battery Voltage	48Vdc		
Battery Voltage Range	40Vdc~60Vdc		
Max. Grid/Generator Charging Current	300Adc		
Max. Charging/Discharging Current	300Adc		
PV INPUT			
No. of MPPT Trackers	2		
No. of Strings MPPT Tracker	2+2		
Max. PV Access Power	28000W	30000W	32000W
Max. PV Input Power	22400W	24000W	25600W
Max. PV Input Current	42Adc + 42Adc		
Max. short-circuit current	60Adc + 60Adc		
PV Start-up Voltage	160Vdc		
Max. PV Open Circuit Voltage	1000Vdc / 1000Vdc		
MPPT Operating Voltage Range	160Vdc~850Vdc / 160Vdc~850Vdc		
GRID/GENERATOR INPUT			
Rated Input Voltage	230/400Vac (3L+N+PE)		
Input Voltage Range	170Vac~280Vac		
Input Frequency Range	40Hz~70Hz		
Max. Bypass Overload Current (Grid)	60Aac		
Max. Bypass Overload Current (Generator)	40Aac		
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Max. Efficiency	≥97.8%		
European Efficiency	97.2%	97.5%	97.5%

GENERAL DATA			
Parallel Capacity	1~9 Units		
Dimension (W*H*D)	706*466*313mm	Humidity	0~100%
Weight	49.5kg	Cooling Method	Heat sink + intelligent air cooling
Protection Degree	IP65	Noise	<50dB
Temperature	-40°C~60°C, >45°C Derated	Communication	RS485/CAN/USB/Dry Contact/DRM
Warranty	5 years	External Module	Wi-Fi / 4G Stic (Optional)
Certificate	IEC62109-1, IEC62109-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4 RoHS		
PROTECTION			
PV Reverse Protection	Yes	Anti-Islanding Protection	Yes
Residual-Current Monitoring	Yes	Insulation Resistance Monitoring	Yes
Output Short-Circuit Protection	Yes	Output Over-Current Protection	Yes
Over-Voltage Protection	AC type III/DC type II	Surge Protection	AC type II/DC type II