



HESP 12kW

Three-Phase Hybrid Solar Storage Inverter

- ☐ Compatible with 48V storage batteries
- ☐ 2 efficient, independent MPPT ports
- ☐ Separate generator port
- ☐ Support three-phase pure sine wave output
- ☐ Support time-slot function for peak-valley
- ☐ IP65 waterproof protection degree

ABOUT SRNE

- ☐ SRNE 16 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		HESP48120SH3	
AC OUTPUT			
Rated Output Power	12,000W		
Max. Output Power	24,000VA		
Rated Output Voltage	230/400Vac (three-Phase)		
Load Motor Capacity	6HP		
Rated Frequency	50/60Hz ±0.3		
Switch Time	10ms (typical)		
BATTERY			
Battery Type	Li-ion / Lead-Acid / User Defined		
Rated Battery Voltage	48V		
Battery Volatge Range	40~60Vdc		
Max. Grid/Generator Charging Current	120A		
Max. Hybrid Charging Current	260A		
Max. Discharge Current	260A		
SOLAR INPUT			
No. Of MPPT	2		
Max. Input Power	9,000W+9,000W		
Max. Input Current	22A+22A		
Max. Open Circuit Voltage	800Vdc+800Vdc		
MPPT Voltage Range	200~650Vdc/200~650Vdc		
GRID/GENERATOR INPUT			
Input Voltage Range	Phase voltage 170~280V, Line voltage 305~485V		
Input Frequency Range	50/60Hz		
Bypass Overload Current	35A		
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Max. Efficiency	≥92%		
European Efficiency	97.5%		
GENERAL DATA			
Parallel Capacity	1~6 Units		
Dimension	700*440*260mm	Humidity	0~100%
Weight	39.2kg	Cooling Method	Heat sink + intelligent fan cooling
Protection Degree	IP65		
Temperature	-25~60℃, >45℃ Derate	Communication	RS485/CAN/USB/Dry Contact
External Module (Optional)	Wi-Fi/GPRS	Topology	Transformerless
Certificate	IEC62109-1, IEC62109-2, EN61000-6-1, EN61000-6-3, FCC 15 class B, 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	DC type II/ AC type III	Surge Protection	DC type II/ AC type II

With PV input current / power limiting protection, Anti-reverse charge protection at night, AC input over-voltage protection, AC input under-voltage protection, Battery over-voltage protection, Battery under-voltage protection, Battery over-current protection, AC output short-circuit protection, Heat sink over-temperature protection, Inverter over-load protection, AC output reverse, Bypass over-current protection, Bypass phase inconsistency protection.