



# HESP 14-18kW

## Single Phase Hybrid Solar Storage Inverter

- 3 independent MPPT ports, up to 1.6 times the rated photovoltaic power.
- MPPT operating voltage: 120–500Vdc.
- PV open-circuit voltage is 600V, and the single-channel current is 42A.
- Max charge/discharge current: 380A, 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. 200A Bypass Current (Grid).
- With a three activation function (Grid/PV/Generator).
- Support time-slot function for peak-valley.
- AC coupling function.
- Separate generator port.
- Smart load function.
- 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	HESP48140S300-H	HESP48160S340-H	HESP48180S380-H
<b>AC OUTPUT</b>			
Rated Output Power	14000W	16000W	18000W
Max. Peak Power (Off-grid)	28000VA	32000VA	36000VA
Max. Apparent Power	15400VA	17600VA	19800VA
Rated Output Voltage	230Vac (L+N+PE)		
Rated Output Current	60.9A	69.6A	78.3A
Rated Frequency	50/60Hz ±0.3Hz		
Waveform	Pure sine wave		
<b>BATTERY</b>			
Battery Type	Lead-acid battery / Lithium-ion battery / User-defined		
Rated Battery Voltage	48Vdc		
Battery Voltage Range	40Vdc~60Vdc		
Max. Grid/Generator Charging Current	300A <sub>dc</sub>	340A <sub>dc</sub>	380A <sub>dc</sub>
Max. Charging/Discharging Current	300A <sub>dc</sub>	340A <sub>dc</sub>	380A <sub>dc</sub>
<b>PV INPUT</b>			
No. of MPPT Trackers	3		
No. of Strings MPPT Tracker	2+2+2		
Max. PV Access Power	28000W	32000W	36000W
Max. PV Input Power	22400W	25600W	28800W
Max. PV Input Current	42A <sub>dc</sub> + 42A <sub>dc</sub> + 42A <sub>dc</sub>		
Max. short-circuit current	63A <sub>dc</sub> + 63A <sub>dc</sub> + 63A <sub>dc</sub>		
PV Start-up Voltage	120Vdc		
Max. PV Open Circuit Voltage	600Vdc / 600Vdc / 600Vdc		
MPPT Operating Voltage Range	120Vdc~500Vdc / 120Vdc~500Vdc / 120Vdc~500Vdc		
<b>GRID/GENERATOR INPUT</b>			
Rated Input Voltage	230Vac (L+N+PE)		
Input Voltage Range	170Vac~280Vac		
Input Frequency Range	50~70Hz		
Max. Bypass Overload Current (Grid)	200A <sub>ac</sub>		
Max. Bypass Overload Current (Generator)	60.9A	69.6A	78.3A
<b>EFFICIENCY</b>			
MPPT Tracking Efficiency	>99%		
Max. Efficiency	97.6%		
European Efficiency	97%		

<b>GENERAL DATA</b>			
Parallel Capacity	1~9 Units		
Dimension (W*H*D)	480*860*313mm	Humidity	0~100%
Weight	64.7kg	Cooling Method	Heat sink + intelligent air cooling
Protection Degree	IP65	Warranty	5 years
Temperature	-40°C~60°C, >45°C Derated	Communication	RS485/CAN/USB/Dry Contact
Noise	<55dB	External Module	Wi-Fi / 4G Stic (Optional)
Certificate	IEC62109-1, IEC62109-2, EN61000-6-1, EN61000-6-3, RoHS		
<b>PROTECTION</b>			
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