



# HESP 14-18kW

## Three-Phase Hybrid Solar Storage Inverter



- 3 independent MPPT ports, up to 1.6 times the rated photovoltaic power.
- PV open-circuit voltage is 600V, and the single-channel current is 40A.
- Support fast charging, Max. charging/discharging current is 350A.
- Separate generator port.
- Smart load function.
- AC coupling function.
- Support time-slot function for peak-valley.
- Up to 9 units can be connected in parallel, forming a 162kW commercial and industrial system.
- Max. 200A Bypass Current (Grid).
- With a dual activation function (grid or PV).
- Supports 150% single-phase unbalanced load
- Three-phase input/output without N wire function.

## 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	HESP48140UH3	HESP48160UH3	HESP48180UH3
<b>AC Input/Output Data</b>			
Rated AC Input/Output Active Power	14000W	16000W	18000W
Max. AC Input/Output Apparent Power	15400VA	17600VA	19800VA
Rated AC Input/Output Current	44.5A/38.8A	50A/44.5A	55.5A/50A
Max. AC Input/Output Current	44.5A/38.8A	50A/44.5A	55.5A/50A
Peak Power (off-grid)	28000VA	32000VA	36000VA
Load Motor Capacity	9HP	10HP	11HP
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range	120/208V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	60Hz/40Hz-70Hz		
Grid Connection Form	3L+N+PE		
THD	<3% (of nominal power)		
<b>Battery Input Data</b>			
Battery Type	Lead-acid battery / Lithium-ion battery / User-defined		
Number of Battery Input	2		
Battery Voltage Range	40V-60V		
Max. Grid/Generator Charging Current	300A	330A	350A
Max. Hybrid Charging Current	300A	330A	350A
Max. Discharging Current	300A	330A	350A
Charging Strategy for Li-ionBattery	Self-adaption to BMS		
<b>PV Input Data</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 Voltage	600V/600V/600V		
Start-up Voltage	120V		
Max. PV Input Current	40A+40A+40A		
Max. Input Short-Circuit Current	50A+50A+50A		
MPPT Voltage Range	120V-500V		
<b>Grid/Generator Input</b>			
Input Voltage Range	Phase voltage: 90V-140V, line voltage: 156V-243V		
Input Frequency Range	40Hz-70Hz		
Max. Bypass Overload Current (Grid)	200A		
<b>Efficiency</b>			
MPPT Tracking Efficiency	99.9%		
Max. Efficiency	97.5%		
CEC Efficiency	97%		
<b>General Data</b>			
Parallel Capacity	1~9 Units		
Dimension	18.90x33.86x12.32 in	Humidity	0~100%
Weight	129 lbs	Cooling Method	Heat sink + intelligent air cooling
Protection Degree	IP65	Noise	<55dB
Temperature	-13~140°F, >113°F Derated	Communication	RS485/CAN/USB/Dry Contact
Warranty	5 years	External Module	Wi-Fi/4G Stick (Optional)
Certificate	UL 1741-2021 (UL1741SB), CSA C22.2 No 107.1-16, IEC62109-1, IEC62109-2, EN61000-6-1, EN61000-6-3, FCC 15 class B		
<b>Protection</b>			
PV Lightning Protection	Yes	Anti-islanding Protection	Yes
Leakage Current Detection	Yes	Insulation Resistor Detection	Yes
Output Overcurrent / Shorted Protection	Yes	PV Input Reverse Polarity Protection	Yes
Overvoltage Category	AC type III/DC type II	Surge protection	AC type II/DC type II