

SSE-HH30~70K-P3US Series

Three Phase | 4 MPPTs Hybrid Inverter | US Standard (HV)

The SSE-HH30~70K-P3US series is a high-performance hybrid inverter line built for North America commercial and industrial applications. It supports seamless on/off-grid switching, dual high-current battery ports up to 200A, and intelligent energy management. With models designed for standard three-phase four-wire systems, it suits both light commercial and large-scale facilities. Featuring advanced SiC technology, IP66 protection, and up to 2× bypass current, it ensures reliable performance in demanding conditions.



Native Compatibility with US Grids

- 120/208V & 277/480V for all commercial needs
- Supports mixed single and three-phase loads
- Simplifies wiring and lowers cost



Seamless On/Off-Grid Operation

- Smooth grid/off-grid switching
- Operates reliably with or without batteries
- Grid & generator inputs, 2× bypass current



Dual Battery Ports, 200A Total Output

- 2 high-voltage battery inputs, 100A per port
- Up to 200A total charge/discharge current
- Flexible with high-capacity battery systems



Exceptional Energy Conversion

- 100% unbalanced three-phase output
- 4 MPPTs with up to 99.9% efficiency
- 2× PV oversizing, up to 100kW



Durable & All-Weather Ready

- Advanced SiC for peak efficiency
- IP66-rated for harsh outdoor use
- Compact, plug-and-play installation



Scalable & Smart Energy Control

- Up to 8 in parallel for system expansion
- AC-coupling for easy system upgrades
- Built-in EMS and cloud monitoring & OTA

TECHNICAL SPECIFICATION		
Model	SSE-HH30K-P3US / SSE-HH30K-P3US-S	SSE-HH70K-P3US / SSE-HH70K-P3US-S
INVERTER INPUT / OUTPUT(GRID)		
Rated Power (Input/Output) (kW)	60 / 30	140 / 70
Rated Voltage	120 / 208 Va.c.,3W+N+PE	277 / 480 Va.c.,3W+N+PE
Rated Frequency (Hz)	50 / 60	
Power Factor Range	0.8 leading~0.8 lagging	
Switch Time (ms)	<20	
Max.Continuous Current (Input/Output) (A a.c.)	166.6 / 83.3	168.6 / 84.3
Max.Output Overcurrent Protection (A a.c.)	124.9	126.5
BATTERY		
Battery Type	Lithium / Lead-acid	
Battery Voltage Range (V d.c.)	150 ~ 700	300-800
Rated Battery Voltage (V d.c.)	150	300
Max.Charge Current (A d.c.)	2*100	
Max.Discharge Current (A d.c.)	2*100	
Reverse Connect Protection	Yes	
PV INPUT		
No.of MPPT Tracker / Strings	4 / 2+2+2+2	
Max.PV Input Power (kW)	60	100
Max.DC Voltage (V d.c.)	1000	
MPPT Voltage Range (V d.c.)	150~850	
Start-up Voltage (V d.c.)	200	
Max.Input Current / string (A d.c.)	8*20	
Isc PV (Absolute Maximum) / string (A d.c.)	8*30	
AC OUTPUT(EPS) / GENERATOR		
EPS Rated Output Voltage	120 / 208 Va.c.,3W+N+PE	277 / 480 Va.c.,3W+N+PE
EPS Rated Output Frequency (Hz)	50 / 60	
EPS Rated Output Active Power (kW)	30	70
EPS Rated Output Apparent Power (kVA)	30	70
EPS Rated Output Current (A a.c.)	83.3	84.3
Overload Capacity (Off Grid)	110% 30s / 120% 10s / 150% 0.2s	
EFFICIENCY		
MPPT Efficiency	99.90%	
Euro-efficiency	97.00%	
Max.Efficiency	98.00%	
PROTECTION & FEATURE		
Insulation Monitoring	Yes	
Residual Current Monitoring	Yes	
Parallel Function	Yes,up to 8pcs	
Protection Degree	IP66	
Certifications	UL1741, FCC Part 15B, UL1547,UL1998,UL1699B,HECO SRD 2.0,CEC efficiency	
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.	
GENERAL PARAMETER		
Storage Temperature	-25℃~ +60℃	
Operating Temperature	-25℃~ +60℃ (> +45℃ Derating)	
Humidity	0%~95% (Non-condensing)	
Max.operating altitude (m)	4000 (>2000 Derating)	
Noise (dB)	<75	
Machine Dimensions(W*H*D) (mm)	544*953*278	
Machine Weight / N.W. (kg)	90	
DISPLAY & COMMUNICATION		
Display	App+ LED/ LCD (-S version)	
Interface	RS485 / WiFi / CAN / DRM / Bluetooth (Optional: LAN / Meter)	

- The AC voltage and frequency range can differ according to the grid standards of each country.
- Please note that all specifications are subject to change without prior notice.