

SSE-HL8~24K-P3EU

Three Phase | 2 MPPTs Hybrid Inverter (LV)

The SSE-HL8~24K-P3EU series is a leading three-phase low-voltage hybrid inverter designed for residential and small commercial applications, supporting 8~24kW systems. It features up to 500A charge/discharge current and three battery inputs for versatile energy storage solutions. Built with advanced SiC technology and a robust full aluminum IP66-rated enclosure, it delivers high efficiency, reliability, and durability. The inverter supports a wide voltage input range (154~286V), automatic 50/60Hz frequency adaptation, strong surge resistance, and 150% unbalanced three-phase output.



Extreme Climate Adaptability

- Full-load operation, 45°C without derating



High Battery Compatibility

- Max. 500A charge/discharge, supports three battery inputs



Wide Grid Adaptability

- 154V~286V input, 50/60Hz auto-adaptation, built-in SPD



High Surge & Unbalanced Output

- 2× load surge for 10s, 150% three-phase unbalanced output



Flexible System Expansion

- Up to 8 units parallel, supports AC coupling for retrofit



SiC + Full Aluminum + IP66

- High efficiency, lightweight, IP66 protection

TECHNICAL SPECIFICATION							
Model	SSE-HL8K-P3EU	SSE-HL10K-P3EU	SSE-HL12K-P3EU	SSE-HL15K-P3EU	SSE-HL18K-P3EU	SSE-HL20K-P3EU	SSE-HL24K-P3EU
INVERTER INPUT / OUTPUT (GRID)							
Rated Power (kW)	8/8	10/10	12/12	15/15	18/18	20/20	24/24
Rated Voltage	380 / 400 V a.c., 3W+N+PE						
Rated Frequency (Hz)	50 / 60						
Power Factor Range	0.8 leading ~ 0.8 lagging						
Switch Time (ms)	< 20						
Current (Maximum Continuous) (A a.c.)	24/12	29/15	35/17	43/22	52/26	58/29	60/35
Max Output Overcurrent Protection	400 V a.c. / 100 A a.c.						
BATTERY							
Battery Type	Lithium / Lead-acid						
Battery Voltage Range (V d.c.)	40 ~ 60						
Rated Battery Voltage (V d.c.)	51.2						
Max Charge Current (A d.c.)	200	250	280	375	430	450	500
Max Discharge Current (A d.c.)	200	250	280	375	430	450	500
PV INPUT							
No. of MPPT Tracker / Strings	2 / 2+2						
Max. PV Array Power (kW)	16	20	24	30	36	40	48
Max DC Voltage (V d.c.)	1000						
MPPT Voltage Range (V d.c.)	150 ~ 950 V d.c.						
Start-up Voltage (V d.c.)	180						
Max. Input Current (A d.c.)	4*20						
Isc PV (Absolute Maximum) (A d.c.)	4*30						
AC OUTPUT (EPS)							
EPS Rated Output Voltage	380 / 400 V a.c., 3W+N+PE						
EPS Rated Output Frequency (Hz)	50 / 60						
EPS Rated Output Active Power (kW)	8	10	12	15	18	20	24
EPS Rated Output Apparent Power (kVA)	8	10	12	15	18	20	24
EPS Rated Output Current (A a.c.)	12	15	17	22	26	29	35
Overload Capacity (Off Grid)	200% 10s						
EFFICIENCY							
MPPT Efficiency	99.90%						
Euro-efficiency	97.00%			97.20%			
Max. Efficiency	97.50%			98.00%			
PROTECTION & FEATURE							
Insulation Monitoring	Yes						
Residual Current Monitoring	Yes						
Parallel Function	Yes						
Protection Degree	IP66						
Certifications	EN IEC 62477-1, EN IEC 62109-1/2, EN IEC 61000-6-2, EN IEC 61000-6-4, EN50549-1/10						
Other Protection	Output over voltage, Output over current, Short circuit, Surge, Temperature, Anti-Islandmg						
GENERAL PARAMETER							
Storage Temperature	-25°C ~ +60°C						
Operating Temperature	-25°C ~ +60°C (Linely derating to 60% when exceed +45°C ~ +60°C)						
Humidity	0-95% (Non-condensing)						
Altitude (m)	4000 (>2000 Derating)						
Noise (dB)	<40			<45			
Machine Dimension(W*H*D) (mm)	448*660*265						
Machine Weight / N.W. (kg)	35			40			
DISPLAY & COMMUNICATION							
Display	LCD + APP						
Interface	RS485 / WiFi / CAN / DRM (Optional:Bluetooth / 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.