

SSE-HL8~24K-P3EU-S

Three Phase | 2 MPPTs Hybrid Inverter (LV)

The SSE-HL8~24K-P3EU-S 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 415A 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 per phase), 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. 415A charge/discharge, supports three battery inputs



Wide Grid Adaptability

154V~286V per phase input, 50/60Hz autoadaptation, 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-S	SSE-HL10K-P3EU-S	SSE-HL12K-P3EU-S	SSE-HL15K-P3EU-S	SSE-HL18K-P3EU-S	SSE-HL20K-P3EU-S	SSE-HL24K-P3EU-S
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				48		
Max Charge Current (A d.c.)	180	220	250	315	375	390	415
Max Discharge Current (A d.c.)	180	220	250	315	375	390	415
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)	110% 600s / 120% 300s / 150% 60s / 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	IEC 62109-1/2, IEC 62477-1, IEC 61000-6-1, IEC 61000-6-3, EN 50549-1&-10, NRS 097-2-1, IEC 61727, IEC 61683, IEC 62116						
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)	<65			< 75			
Machine Dimension(W*H*D) (mm)	448*660*265						
Machine Weight / N.W. (kg)	45			48			
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.