SOSEN

SSE-HL3~8K-P1EU Series

Single Phase | 2 MPPTs Hybrid Inverter (LV)

The SSE-HL3~8K-P1EU series is a single-phase hybrid inverter tailored for residential use, supporting 3–8kW systems and delivering cost-effective energy storage solutions.It offers 1.5x PV oversizing, up to 160A charge/discharge current, and <10ms UPS switching.With support for AC/DC coupling and up to 8 units in parallel, plus smart load management and generator compatibility, it ensures flexible and reliable power for modern homes.



- AC/DC Coupling & Generator Compatible
- Up to 8 Units Parallel Flexible Expansion
- <10ms UPS Function for Uninterrupted Power
- 160A High-Capacity Battery Support
- Smart Load Management for Energy Optimization
- IP65 Rated with Silent Operation

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TECHNICAL SPECIFICATION								
Model	SSE-HL3K-P1EU/ SSE-HL3K-P1EU-S	SSE-HL3K6-P1EU/ SSE-HL3K6-P1EU-S	SSE-HL4K-P1EU/ SSE-HL4K-P1EU-S	SSE-HL4K6-P1EU/ SSE-HL4K6-P1EU-S	SSE-HL5K-P1EU/ SSE-HL5K-P1EU-S	SSE-HL6K-PIEU/ SSE-HL6K-PIEU-S	SSE-HL7K-P1EU/ SSE-HL7K-P1EU-S	SSE-HL8K-P1EU/ SSE-HL8K-P1EU-S
INVERTER INPUT/OUTPUT (GRID)								
Rated Power (kW)	3	3.6	4	4.6[1]	5[2]	6	7	8
Rated Voltage	220 / 230 / 240 V a.c., L+N+PE							
Rated Frequency (Hz)	50 / 60							
Power Factor Range	0.8 leading ~ 0.8 lagging							
Switch Time (ms)	< 10							
Current (Maximum Continuous) (A a.c.)	13	16	17	20	21	26	30.4	34.8
Max Output Overcurrent Protection	250 V a.c. / 60 A a.c.							
BATTERY								
Battery Type	Lithium / Lead-acid							
Battery Voltage Range (V d.c.)	45 ~ 58							
Rated Battery Voltage (V d.c.)	51.2							
Max Charge Current (A d.c.)	60	70	80	90	100	110	140	160
Max Discharge Current (A d.c.)	60	70	80	90	100	110	140	160
Reverse Connect Protection	Yes							
PV INPUT								
No. of MPPT Tracker/Strings	2 / 1+1							
Max. PV Array Power (kW)	4.5	5.4	6	6.9	7.5	9	10.5	12
Max DC Voltage (V d.c.)	550							
MPPT Voltage Range (V d.c.)	120 ~ 500							
Start-up Voltage (V d.c.)	120							
Max. Input Current (A d.c.)	16 / 16						18 / 18	
Isc PV (Absolute Maximum) (A d.c.)	24 / 24							
AC OUTPUT (EPS) / GENERATOR								
EPS Rated Output Voltage	220 / 230 / 240 V a.c., L+N+PE							
EPS Rated Output Frequency (Hz)	50 / 60							
EPS Rated Output Active Power (kW)	3	3.6	4	4.6	5	6	7	8
EPS Rated Output Apparent Power (kVA)	3	3.6	4	4.6	5	6	7	8
EPS Rated Output Current (A a.c.)	13	16	17	20	21	26	30.4	34.8
Overload Capacity (Off Grid)	120% 10s / 150% 200ms							
EFFICIENCY								
MPPT Efficiency	99.20%							
Euro-efficiency	95.30%							
Max. Efficiency	96.50%							
PROTECTION & FEATURE								
Insulation Monitoring	Yes							
Residual Current Monitoring	Yes							
Parallel Function	Yes,up to 8pcs							
Protection Degree	IP65							
Certifications	EN IEC 62109-1/2、EN IEC 62477-1、EN IEC 61000-6-1/3、EN 50549-1&-10、G99/G98、NRS 097-2-1、UNE 217001&2/NTS 631 etc.							
Other Protection	Overload, Over temperature, Short circuit , Active anti-islanding method etc.							
GENERAL PARAMETER								
Storage Temperature	-25°C ~ +60°C							
Operating Temperature	-25℃ ~ +60℃ (Linely derating to 60% when exceed +45℃ ~ +60℃)							
Humidity	0-100% (Non-condensing)							
Altitude (m)	<2000							
Noise (dB)	<35						<56	
Machine Dimension(W*H*D) (mm)	506*556*206						506*556*211	
Machine Weight / N.W. (kg)	25						30.6	
DISPLAY & COMMUNICATION								
Display	App+ LED / LCD (-S version)							
Interface	CAN / RS485 / Bluetooth / WiFi (Optional: 4G / DRM)							

- 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.

[1]: The grid feed in power for VDE-AR-N 4105 is limited 4600VA & 20A.

[2]: The grid feed in power for AS/NZS 4777.2 is limited 4999VA & 21.7A.