SOSEN

SSE-HL5~10K-P1EU-SC

Single Phase | 2 MPPTs Hybrid Inverter (LV)

The 5~10kW low-voltage single-phase hybrid inverter offers residential users a cost-effective, reliable energy solution. Dual MPPTs and PV oversizing maximize solar yield, while <10 ms on/off-grid switching keeps essential loads powered. With high charge/discharge capability, wide-temperature operation, and full protection features, it ensures stable, long-term performance. The IP65-rated LCD, paired with a mobile app, provides real-time monitoring and control—giving homeowners efficiency, reliability, and peace of mind in one compact system.



- 1.5× PV Oversizing, Supports Battery Charging at Full Load
- Dual MPPTs with 4 PV Strings, Up to 550V per String
- <10 ms On-grid/Off-grid Switching for Backup Power
- Max. 200A Charge/Discharge for High-capacity Battery Cells
- 150% Peak Load Capability for Demanding Applications
- IP65-rated LCD, Supports Real-time Monitoring via App

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TECHNICAL SPECIFICATION				
Model	SSE-HL5K-P1EU-SC	SSE-HL6K-P1EU-SC	SSE-HL8K-P1EU-SC	SSE-HL10K-P1EU-SC
INVERTER INPUT/OUTPUT (GRID)				
Rated Power (kW)	5	6	8	10
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.)	21.7	26.1	34.8	43.5
Max Output Overcurrent Protection	250 V a.c. / 100 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.)	120	135	180	200
Max Discharge Current (A d.c.)	120	135	180	200
Reverse Connect Protection	Yes			
PV INPUT				
No. of MPPT Tracker/Strings	2 / 2+2			
Max. PV Array Power (kW)	7.5	9	12	15
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.)	26 / 26			
Isc PV (Absolute Maximum) (A d.c.)	34 / 34			
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)	5	6	8	10
EPS Rated Output Apparent Power (kVA)	5	6	8	10
EPS Rated Output Current (A a.c.)	21.7	26.1	34.8	43.5
Overload Capacity (Off Grid)	110%, 600s / 120%, 10s / 150%, 0.02s			
EFFICIENCY				
MPPT Efficiency	99.20%			
Euro-efficiency	96.50%			
Max. Efficiency	97.00%			
PROTECTION & FEATURE				
Insulation Monitoring	Yes			
Residual Current Monitoring	Yes			
Parallel Function	Yes			
Protection Degree	IP65			
Certifications	EN IEC 62109-1/2、EN IEC 62477-1、EN IEC 61000-6-1/3、EN 50549-1&-10 ETC.			
Other Protection	Over voltage, Over current, Over temperature, Short circuit, Active anti-islanding etc.			
GENERAL PARAMETER				
Storage Temperature	-25°C ~ +60°C			
Operating Temperature	-25℃ ~ +60℃ (Linely derating to 10% when exceed +45℃ ~ +60℃)			
Humidity	0-95% (Non-condensing)			
Altitude (m)	2000 (>2,000 Derating)			
Noise (dB)	<60			
Machine Dimension(W*H*D) (mm)	361*545*222			
Machine Weight / N.W. (kg)	25			
DISPLAY & COMMUNICATION				
Display	LCD + APP			
Interface	RS485 / CAN / WiFi / Bluetooth			

- 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.