SOSEN

SSE-HH29.9~60K-P3EU Series

Three Phase | 4 MPPTs Hybrid Inverter (HV)

The SSE-HH29.9K~60K-P3EU series hybrid inverters, from 29.9kW to 60kW, are ideal for commercial and industrial use. They support both on-grid and off-grid systems with 4 MPPTs and intelligent energy management for efficient energy conversion. Featuring SiC technology for enhanced efficiency and stability in harsh environments. Dual independent battery inputs support up to 100A charge/discharge per port and 200A parallel current, offering a comprehensive and highly competitive energy storage solution.



Superior Performance & Efficiency

- 100% three-phase unbalanced output
- 4 MPPTs, efficiency up to 99.9%
- 1.67x PV oversizing

Flexible Expansion & Compatibility

- Supports up to 8 units in parallel
- Enables AC coupling for system retrofit
- Compatible with mainstream Li-ion batteries

Intelligent Energy Management

- Integrated local and remote EMS
- Support diesel generator
- Provides open API for system integration

Dual Battery Inputs & High Current

- Dual independent battery inputs, 100A charge/discharge per port
- Up to 200A parallel current

High Safety & Reliability

- All-SiC technology for higher efficiency
- IP66 protection
- Compact design, plug & play installations

System Intelligence & Upgradability

- Supports intelligent module integration
- Modular design for easy expansion

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TECHNICAL SPECIFICATION					
Model	SSE-HH29.9K-P3EU/ SSE-HH29.9K-P3EU-S	SSE-HH30K-P3EU/ SSE-HH30K-P3EU-S	SSE-HH40K-P3EU/ SSE-HH40K-P3EU-S	SSE-HH50K-P3EU/ SSE-HH50K-P3EU-S	SSE-HH60K-P3EU/ SSE-HH60K-P3EU-S
INVERTER INPUT / OUTPUT(GRID)					
Rated Power (kW)	29.9	30	40	50	60
Rated Voltage	380 / 400Va.c.,3W+N+PE				
Rated Frequency (Hz)	50 / 60				
Power Factor Range	0.8 leading~0.8 lagging				
Max.Continuous Current (Input/Output)(A a.c.)	90.8 / 45.4	91.2 / 45.6	121.6 / 60.8	152 / 76	182.4 / 91.2
Max.Output Overcurrent Protection (A a.c.)	68.1 / 64.7	68.4 / 65	91.2 / 86.6	114 / 108.3	136.7 / 129.9
BATTERY					
Battery Type	Lithium / Lead-acid				
Battery Voltage Range (V d.c.)	150 ~ 850				
Rated Battery Voltage (V d.c.)	150	150	200	250	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)	59.8	60	80	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 / sring (A d.c.)	8*20				
Isc PV (Absolute Maximum) / sring (A d.c.)	8*30				
AC OUTPUT(EPS) / GENERATOR					
EPS Rated Output Voltage	380 / 400V a.c.,3W+N+PE				
EPS Rated Output Frequency (Hz)	50/60				
EPS Rated Output Active Power (kW)	29.9	30	40	50	60
EPS Rated Output Apparent Power (kVA)	29.9	30	40	50	60
EPS Rated Output Current (A a.c.)	45.4 / 43.2	45.6 / 43.3	60.8 / 57.7	76 / 72.2	91.2 / 86.6
Overload Capacity (Off Grid)	110% 30s / 120% 10s / 150% 0.2s				
EFFICIENCY					
MPPT Efficiency	99.90%				
Euro-efficiency	97.50%				
Max.Efficiency	98.50%				
PROTECTION & FEATURE					
Insulation Monitoring	Yes				
Residual Current Monitoring	Yes				
Parallel Function	Yes,up to 8pcs				
Protection Degree	IP66				
Certifications	IEC 62109-1/2、IEC 62477-1、IEC 61000-6-2、IEC 61000-6-4、EN 50549-1&-10、C10/11、PTPiREE 2024-10 、VDE-AR-N 4105、Netherlands ILR/E18/43 of 14 November 2018、NRS 097-2-1、UNE 217001&2/NTS 631、G99、IEC 61727、IEC 61683、IEC 62116 etc.				
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.				
GENERAL PARAMETER					
Storage Temperature	-25℃~+60℃				
Operating Temperature	-25℃ ~ +60℃ (Linely derating to 60% when exceed +45℃ ~ +60℃)				
Humidity	0%~100% (Non-condensing)				
Max.operating altitude (m)	4000				
Noise (dB)	<65				
Machine Dimensions(W*H*D) (mm)	544*880*252		544*880*278		
Machine Weight / N.W. (kg)	75		88		
DISPLAY & COMMUNICATION					
Display	App+ LED / LCD (-S version)				
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.