

SSA-HL1.2~5.5K-P1EU

Single Phase Hybrid Inverter (Off-Grid)

The SSA-HL1.2~5.5K-P1EU series, ranging from 1.2kW to 5.5kW, are perfect for residential and indoor applications, delivering efficient energy conversion and flexible storage solutions. With an integrated MPPT controller and equalize charge control, they enhance battery performance and lifespan. Supporting up to 6kW PV input power, they seamlessly combine PV and utility loads. The system is expandable with 9 parallel units, and optional WiFi allows for easy remote monitoring and management.



Integrated MPPT controller



6kW maximum PV input power



Up to 6 parallel units



Combined PV and utility load



Optional WiFi for remote monitoring



Work with or without battery

TECHNICAL SPECIFICATION					
Model	SSA-HL1K2-P1EU	SSA-HL3K6-P1EU	SSA-HL5K-P1EU	SSA-HL5K5-P1EU	SSA-HL5K-P1EU_DO
AC INPUT					
Rated Voltage	120V a.c., L+N+PE				
Rated Frequency (Hz)	50 / 60				
Current (Maximum Continuous) (A a.c.)	10	20	40	40	40
INVERTER OUTPUT					
Rated Power (kW)	1.2	3.6	5	5.5	5
Rated Voltage	120V a.c., L+N+PE				L1+N1+L2+N2+PE
Power Factor	1				
Wave Form	Pure Sine Wave				
Switch Time (ms)	<10 (Typical)				
Inverter Efficiency (Peak)	90.5%@12V d.c.	92.7%@24V d.c.	94%@48V d.c.	94%@48V d.c.	94%@48V d.c.
Current (Maximum Continuous) (A a.c.)	5.2	15.6	22.7	25	22.7
Maximum Output Overcurrent Protection	102%~110% 1min / 110%~130% 10s / 130%~150% 3s / 150% 0.2s				
BATTERY					
Battery Type	Lithium / Lead-acid				
Rated Battery Voltage (V d.c.)	12	24	48	48	48
Battery Voltage Range (V d.c.)	10-15	21 ~ 30.2	42 ~ 56.4	42~56.4	42~56.4
Max.Charge Current (A d.c.)	120	100	80	100	80
PV INPUT					
No of MPPT Tracker / Strings	1 / 1				
Max. PV Array Power (kW)	1	5	6	6	6
Max. DC Voltage (V d.c.)	125	500	500	500	500
MPPT Voltage Range (V d.c.)	15~100	40 ~ 450	120~430	120~430	120 ~ 430
Start-up Voltage (V d.c.)	20	60	120	120	120
MPPT Maximum Charge Current (A d.c.)	60	100	80	100	80
Max. Input Current (A d.c.)	14	18	18	18	18
Isc PV (Absolute Maximum) (A d.c.)	15	22	22	22	22
PROTECTION & FEATURE					
Parallel Function	No	No	Yes (up to 6 pcs, optional)	No	Yes (up to 9pcs, optional)
Protection Degree	IP20, Indoor only				
Certifications	CE (IEC62109-1), EN61000 NRS				
Other Protection	Overload, Over temperature, Short circuit				
GENERAL PARAMETER					
Storage Temperature	-15°C ~ +60°C				
Operating Temperature	-10°C ~ +50°C				
Humidity	20% ~ 95% (Non-condensing)				
Operating Altitude (m)	4000 (> 1000 Derating)				
Noise (dB)	<50				
Machine Dimensions (W*H*D) (mm)	330*228*90	285*435*100	315*470*120	315*470*120	315*528*120
Machine Weight / N.W. (kg)	3.2	6.5	8.6	8.6	9.6
DISPLAY AND COMMUNICATION					
Display	LCD Display (Display Running Mode, Loads / Input / Output etc.)				
Interface	RS485 / CAN / Dry Contact / WiFi (Optional)				

• Please note that all specifications are subject to change without prior notice.

[1]: SSA-HL5K-P1EU_DO is a dual output model with two output ports.