SOSEN

SSA-HL1.2~12K-P1EU Series

Single Phase | Hybrid Inverter(Off-Grid)

The SSA-HL1.2~12K-P1EU Series is a 12kW off-grid hybrid inverter for residential applications. It features a up to 450 V d.c. PV input, and built-in powerful MPPT controller for high solar conversion efficiency. It supports operation with or without batteries and compatible with solar, utility, diesel generator, and battery sources. Multiple working modes offer flexible energy management for various off-grid scenarios.

- 15-450V Wide PV Input for Longer and Flexible strings
- Dual MPPT input Maximizes Energy Yield
- Max. 160A Solar and Utility/Generator Charging
- Dual AC output for Flexible Load Management (⩾5kW)
- Optional 5-inch display screen clear and easy operation
- Optional WiFi for Real-time Remote Monitoring

TECHNICALSPECIFICATION						
Model	SSA-HL1K2-P1EU	SSA-HL2K-P1EU	SSA-HL3K6-P1EU	SSA-HL5K-P1EU_DO-E	SSA-HL6K5-P1EU_DO	SSA-HL12K-P1EU_DO
AC INPUT						
Rated Voltage (V a.c.)	208 /220 / 230 / 240 L+N+PE					220 / 230 / 240 L+N+PE
Rated Frequency (Hz)	50 / 60					
Maximum Continuous Current(Bypass mode)(A a.c.)	10	17	20	40		70
INVERTER OUTPUT						
Rated Power (kW)	1.2	2	3.6	5	6.5	12
Rated Voltage (V a.c.)	208 / 220 / 230 / 240 L+N+PE			208 /220 / 230 / 240 L1+N1+L2+N2+PE		220 / 230 / 240 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.	91%@12V d.c.	92.7%@24V d.c.	93.5% (Max)	94%@48V d.c.	94%@48V d.c.
Current (Maximum Continuous) (A a.c.)	5.2	8.7	15.6	22.7	27.3	52.5
Maximum Output Overcurrent Protection	102%~110% 1min / 110%~130% 10s 130%~150% 3s / 150% 0.2s			102%~120% 1min >120% 10s		
BATTERY						
Battery Type	Lithium / Lead-acid					
Rated Battery Voltage (V d.c.)	12	12	24	24	51.2	51.2
Battery Voltage Range (V d.c.)	10~15	10~15	21~30.2	21~30.2	42~56.4	42~56.4
Max.Charge Current (A d.c.)	120	100	100	160	120	160
PV INPUT						
No of MPPT Tracker / Strings	1 / 1					2 / 2
Max. PV Array Power (kW)	1	3	5	9	9	1 MPPT: 9 2 MPPTs: 15
Max. DC Voltage (V d.c.)	125	450	500	500	500	500
MPPT Voltage Range (V d.c.)	15~100	30~400	40~450	60~450	60~450	60~450
Start-up Voltage (V d.c.)	20	40	60	80	80	80
MPPT Maximum Charge Current (A d.c.)	60	100	100	160	120	160
Max. Input Current (A d.c.)	14	18	18	27	27	1 MPPT: 27 2 MPPTs: 22.5 Per
Isc PV (Absolute Maximum) (A d.c.)	15	22	22	30	30	30
PROTECTION & FEATURE						
Parallel Function	No	No	No	No	Yes	Yes
Protection Degree	IP20, Indoor only					
Certifications	EN IEC 62109-1/2、EN IEC 61000-6-1/3			EN IEC 62109-1、EN IEC 62109-2		\
Other Protection	Over voltage Protection; Over load protection; Short circuit protection; Over temperature protection; Surge protection					
GENERAL PARAMETER						
Storage Temperature	-15℃~+60℃					
Operating Temperature	-10℃~+50℃	-10℃~+60℃	-10℃~+50℃	-10℃~+60℃		
Humidity	20%~95% (Non-condensing)					
Operating Altitude (m)	4000 (>1000 Derating)					
Noise (dB)	<50			<55		<60
Machine Dimensions (W*H*D) (mm)	228*330*90	270*311*100	285*435*100	334*413*116	334*413*116	420*500*130
Machine Weight / N.W. (kg)	3.2	4.5	6.5	8.8	8.8	15.8
DISPLAYAND COMMUNICATION						
Display	LCD Display					5-inch LCD Display
Interface	RS485 / CAN / Dry Contact / WiFi (Optional)					

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