SOSEN

SSA-HL5~12K-P1EU_DO series

Single Phase | Hybrid Inverter(Off-Grid)

The SSA-HL5~12K-P1EU_DO 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.



- 60-450V 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-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.)	40		70
INVERTER OUTPUT			
Rated Power (kW)	5	6.5	12
Rated Voltage (V a.c.)	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)	93.5% (Max)	94%@48V d.c.	94%@48V d.c.
Current (Maximum Continuous) (A a.c.)	22.7	27.3	52.5
Maximum Output Overcurrent Protection	102%~120% 1min, >120% 10s		
BATTERY			
Battery Type	Lithium / Lead-acid		
Rated Battery Voltage (V d.c.)	24	51.2	51.2
Battery Voltage Range (V d.c.)	21 ~ 30.2	42 ~ 56.4	42 ~ 56.4
Max.Charge Current (A d.c.)	160	120	160
PV INPUT			
No of MPPT Tracker / Strings	1 / 1		2 / 2
Max. PV Array Power (kW)	9		1 MPPT: 9, 2 MPPTs: 15
Max. DC Voltage (V d.c.)	500		
MPPT Voltage Range (V d.c.)	60~450		
Start-up Voltage (V d.c.)	80		
MPPT Maximum Charge Current (A d.c.)	160	120	160
Max. Input Current (A d.c.)	27		1 MPPT: 27, 2 MPPTs: 22.5 Per
Isc PV (Absolute Maximum) (A d.c.)	30		
PROTECTION & FEATURE			
Parallel Function	No	Yes	Yes
Protection Degree	IP20, Indoor only		
Certifications	ENIEC62109-1、 ENIEC62109-2		/
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℃~+60℃		
Humidity	5% ~ 95% (Non-condensing)		
Operating Altitude (m)	4000 (>1000 Derating)		
Noise (dB)	<55		<60
Machine Dimensions (W*H*D) (mm)	334*413*116		420*528*134
Machine Weight / N.W. (kg)	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.