



SSA-HL4~5K-P1US

120V Single Phase | Hybrid Inverter (Off-Grid)

The SSA-HL4~5K-P1US is a off-grid hybrid inverter with 110V/120V single-phase output, specifically designed for residential applications across the Americas. With up to 500Vdc PV input and a 100A built-in MPPT controller, it ensures high solar conversion efficiency. The inverter supports 200% (10s) overload capacity and is compatible with solar, utility, diesel generator, and battery sources. Optional WiFi enables remote monitoring and control via mobile app or web portal.



Max. 500V PV Input for Longer and Flexible Strings



Operates with or without Battery for Flexible System



Supports PV, Battery, Grid and Diesel Generator Input



Built-in MPPT Controller for Efficient Solar Charging



Optional WiFi for Real-time Remote Monitoring



Multiple Operating Modes for Diverse Off-Grid Needs

TECHNICAL SPECIFICATION		
Model	SSA-HL4K-P1US	SSA-HL5K-P1US
AC INPUT		
Rated Voltage (V a.c.)	110 / 120 , L+N+PE	
Rated Frequency (Hz)	50 / 60	
Current (Maximum Continuous) (A a.c.)	40	50
INVERTER OUTPUT		
Rated Power (kW)	4	5
Rated Voltage (V a.c.)	100/110/120/127, L+N+PE	100/110/120, L+N+PE
Power Factor	1	
Wave Form	Pure Sine Wave	
Switch Time (ms)	<10 (Typical Value)	10 (APP/UPS mode) / 20 (GEN mode)
Inverter Efficiency (Peak)	92%	
Current (Maximum Continuous (A a.c.)	33.3	41.7
Maximum Output Overcurrent Protection	1min@102%-120%load, 10s@120%-200%load	
BATTERY		
Battery Type	Lithium / Lead-acid	
Rated Battery Voltage (V d.c.)	24	48
Battery Voltage Range (V d.c.)	21~30.2	42~60
Max.Charge Current (A d.c.)	100	
PV INPUT		
No.of MPPT Tracker / Strings	1 / 1	
Max.PV Array Power (kW)	5	5.5
Max.Dc Voltage (V d.c.)	500	
MPPT Voltage Range (V d.c.)	60 ~ 450	120 ~ 450
Start-up Voltage (V d.c.)	70	150
MPPT Maximum Charge Current (A d.c.)	100	100
Max.Input Current (A d.c.)	18	22
Isc PV (Absolute Maximum) (A d.c.)	22	26
PROTECTION & FEATURE		
Parallel Function	NO	
Protection Degree	Ip20, Indoor Only	
Other Protection	Overload, Over temperature, Short circuit	
GENERAL PARAMETER		
Storage Temperature	-15°C~+60°C (+5°F~+140°F)	
Operating Temperature	-10°C~+60°C (+14°F~+140°F)	
Humidity	5% ~ 95% (Non-condensing)	
Operating Altitude (m)	4000 (>2000 Derating)	
Noise (dB)	<50	
Machine Dimensions (W*H*D) (mm)	350*440.6*124.6 (13.78*17.35*4.91in)	
Machine Weight / N.W. (kg)	13 (28.66 lbs)	
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.