

Overview

The HP-AL-S series is a household energy storage product, with a built-in battery. It supports solar and utility charging options, as well as a DC to AC inverter output. Advanced DSP chip with its control algorithm ensures high response speed, reliability, and conversion efficiency. The unique compartment design isolates the heat dissipation channels from the components, providing superior resistance to dust, moisture, and fog. Customers can achieve efficient energy utilization by flexibly using solar energy or utility power via customized settings. Most importantly, this product ensures stable power supply and is widely used in low or no power areas.

Features

- Built-in GEL battery.
- Advanced MPPT technology, with max. tracking efficiency higher than 99.5%.
- PFC technology reduces the demand on the power grid capacity.
- Pure sine wave output.
- Strong anti-impact performance to apply to various types of load.
- · Support multiple types of generators.
- Fast transfer between inverter and utility output less than 20ms.
- Multiple DC output ports.
- 4.5-inch LCD display for better status monitoring.
- Comprehensive electronic protections
- · All-in-one, easy connection, easy use.
- Unique compartment design provides outstanding protective performance.
- RS485 communication interface with optional 4G or Wi-Fi modules for remote monitoring.







Technical Specifications

	Model	HPS1022-AL0210	HPS1522-AL0210	HPS2522-AL0315
Utility input	Utility Rated Voltage	220VAC		
	Utility Voltage	176VAC~285VAC		
	Uitility Frequency	45Hz-65Hz		
	Utility Maximum Work Current (Charging + Bypass)	2.2A for charging+4.5A for bypass@220VAC	2.8A for charging+6.8A for bypass@220VAC	3.5A for charging+11.4A for bypass@220VAC
	Switch Response Time	Switch Response Time – Utility to Inverter: <15ms Switch Response Time – Inverter to Utility: 0ms		
	AC Input Overload Relay	HAVE		
Inverter output	Inverter Rated Power (@25°C)	1000W	1500W	2500W
	5-second Transient Surge Output Power	1500W	2000W	4000W
	Inverter Output Voltage	220VAC±3%		
	Inverter Frequency	50Hz/60Hz±0.2%		
	Output Voltage Waveform	Pure sine wave		
	Output Voltage Harmonic Distortion Rate	≤3% (Resistive load)		
	Output Gradual Start		HAVE	
Solar controller	PV Maximum Input Withstand Voltage	95V	95V	145V
	PV Maximum Input Power	500W	600W	850W
	Solar Controller Type	MPPT		
	MPPT Maximum efficiency	>99.5%		
	MPPT Voltage Range	30V~80V	30V~80V	30V~120V
	MPPT Input Channels	One way	One way	One way
	PV Maximum Charging Current	16.5A	21A	30A
Battery	Battery Type	GEL		
	Nominal Battery Voltage	24VDC		
	Battery Work Voltage Range	21VDC -30VDC		
	Battery Work Temperature Range	Discharging Mode: -20°C ~ 55°C; Charging Mode: 0°C ~ 40°C		
	Battery Capacity	55Ah*2	70Ah*2	120Ah*2
DC output	DC 12V Port	12V2A*2		
	USB-A Port	5V3A*2		
	TYPE C (USB-C) Port	TYPE C-100W * 1pcs (support PD3.0 and multiple protocols) TYPE C-5V/3A * 1pcs		
	DC Output Switch	HAVE		
Others	Work Temperature Range	-20°C~55°C (when the environment temperature exceeds 25°C, the charging power and load power will be reduced appropriately; working of full load is not supported.)		
	Enclosure	IP20		
	Communication Method	RS485 (GRPS/ BlueTooth/ WiFi optional)		
	LCD	Monochrome LCD, English interface		
	Warranty	Two years		
	Dimension (Length x Width x Height)	255x406x541mm (with floor mats and handles)	288x449x586mm (with wheels and handles)	435x504x574.5mm (with wheels and handles)