

Overview

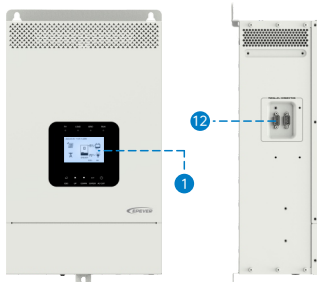
The HP-AHP20SA series is a cost-effective product. It supports multiple charging options, including utility, diesel generator, and solar. It is designed for utility bypass, inverter output, and energy management. The advanced DSP chip, along with its control algorithm, ensures rapid response times, reliability, and high conversion efficiency. Customers can efficiently utilize energy by flexibly switching between solar and utility power using customized settings. This high-quality product provides a stable power supply and is suitable for hybrid power generation systems that combine solar, utility, and oil engine sources. It meets the application requirements for customers seeking cost-effective residential power supply solutions.

Features

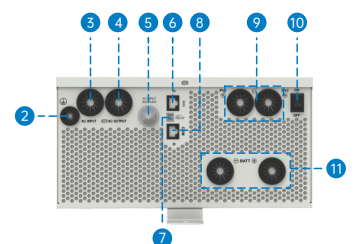
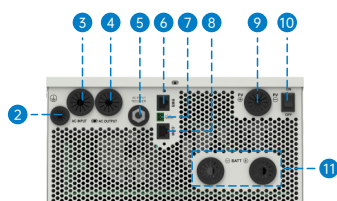
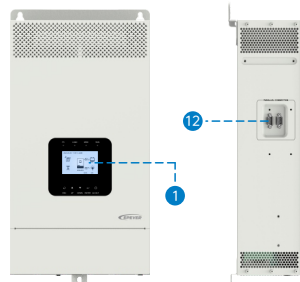
- Pure sine wave output
- Supports battery or non-battery modes
- Built-in BMS-Link module for secure battery charge and discharge control
- Lithium battery self-activation
- PFC technology reduces the demand on the power grid capacity
- Advanced MPPT technology, with Max. tracking efficiency higher than 99.5%
- HP5542-AH1050P65 supports two PV inputs to Improve PV utilization
- Supports charging from multiple types of generators
- Battery charging or discharging current limits are compatible with various types of batteries
- Adjustable maximum utility charging current for flexible configuration of utility charging power.
- Large size LCD display for better status monitoring
- RS485 communication interface with optional 4G, WiFi, or TCP modules for remote monitoring
- Built-in Bluetooth to adjust settings through EPEVER APP
- Comprehensive electronic protections
- -20°C~+50°C operating temperature range to meets more environment requirements
- A new type of all-digital energy storage integrated machine for multi-source management
- AC output supports parallel operation, standard configuration of 12 units in parallel
- AC output parallel operation supports single-phase and three-phase settings

Appearance

• HP3542-AH0650P20SA



• HP5542-AH1050P20SA

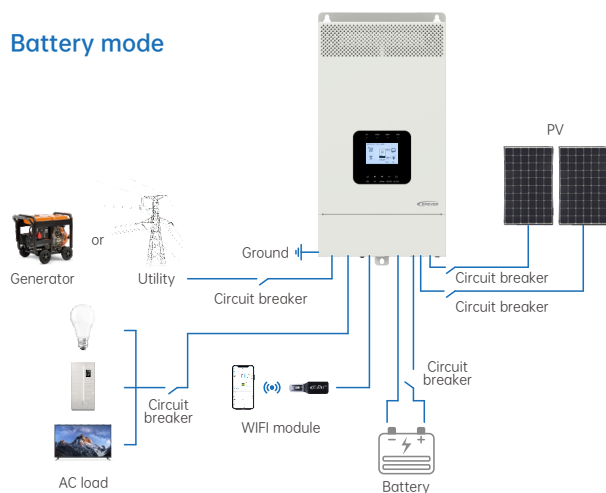


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|----------------------|-------------------------------------------------------|---------------------------------|
| ① LCD | ⑤ Utility over-current protector | ⑨ PV terminals |
| ② Grounding terminal | ⑥ BMS port (RJ45, with isolation design) | ⑩ Power switch |
| ③ AC input port | ⑦ Dry contact interface | ⑪ Battery terminals |
| ④ AC output port | ⑧ RS485 port (RJ45, with isolation design) 5VDC/200mA | ⑫ Parallel connection interface |

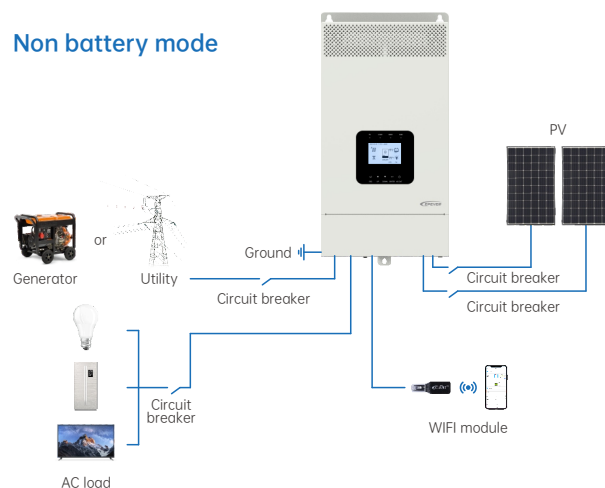
Model		HP3542-AH0650P20SA	HP5542-AH1050P20SA
Utility input	Utility Voltage	176VAC~264VAC (Default), 90VAC~280VAC (Configurable)	
	Utility Frequency	45Hz~65Hz	
	Maximum Utility Charging Current	60A	100A
	Switch Response Time	Switch Response Time – Inverter to Utility: 10ms Switch Response Time – Utility to Inverter (when the load power is higher than 100W): 20ms	
Inverter output	Inverter Rated Power (@30°C)	3500W	5500W
	3-second Transient Surge Output Power	7000W	8500W
	Inverter Output Voltage	220/230VAC±3%	
	Inverter Frequency	50/60Hz±0.2%	
	Output Voltage Waveform	Pure sine wave	
	Load Power Factor	0.2~1(VA ≤ Rated output power)	
	THDu (Total Harmonic Voltage Distortion)	≤3% (48V resistive load)	
	Maximum Load Efficiency	92%	92%
	Maximum Inverter Efficiency	94%	94%
Solar controller	PV Maximum Open-circuit Voltage	500V (At minimum operating environment temperature) 440V (At 25°C)	
	MPPT Voltage Range	85~400V	
	PV Maximum Input Power	4000W	6000W
	PV Maximum Charging Current	60A	100A
	MPPT Maximum efficiency	≥99.5%	
Battery	Battery Rated Voltage	48VDC	
	Battery Work Voltage Range	43.2VDC~60VDC	
	Battery Maximum Charging Current	60A	100A
Others	No-load Losses	<0.7A	<1.0 A
		Test condition: No PV and utility, AC out is on, fan stops@48V input	
	Standby Current	<0.15A	
		Test condition: No PV and utility, AC out is off, fan stops@48V input)	
	Work Temperature Range	-20°C~+50°C (When the environment temperature exceeds 30°C, the actual output power is reduced appropriately)	
	Storage Temperature Range	-25°C~+60°C	
	Enclosure	IP20	
	Relative Humidity	< 95% (N.C.)	
	Altitude	<4000M (If the altitude exceeds 2000 meters, the actual output power is reduced appropriately)	
Mechanical parameters	Dimension (Length x Width x Height)	534mm × 288mm × 163mm	590mm × 288mm × 163mm
	Mounting size (Length x Width)	512mm x 245mm	568mm x 245mm
	Mounting hole size	Φ9mm/Φ10mm	Φ9mm/Φ10mm
	Net Weight	12.0Kg	15.0Kg

Single-machine application connection diagram

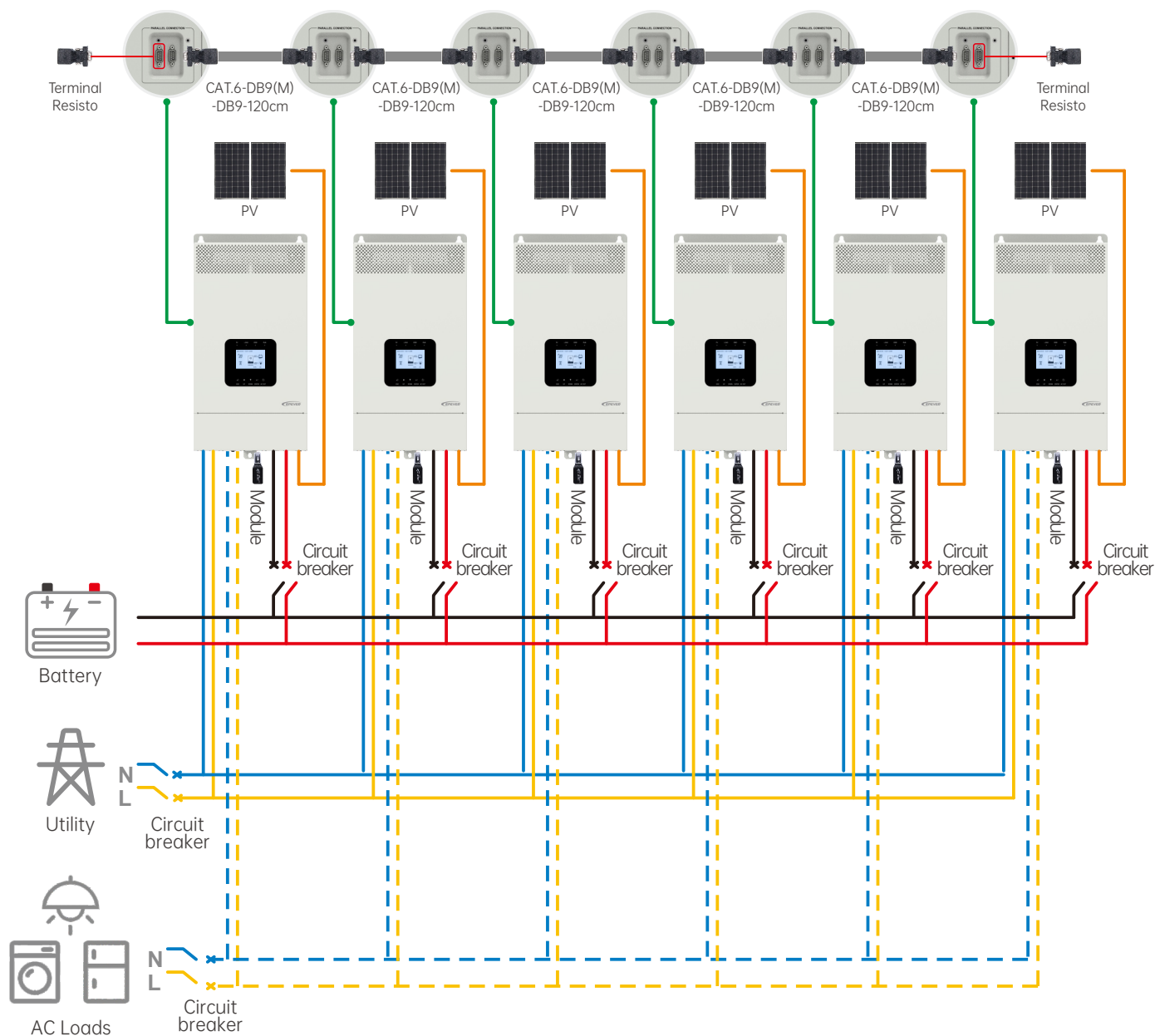
Battery mode



Non battery mode



Single phase parallel wiring diagram



Three phase parallel wiring diagram

