



## A More Sustainable Future



### Introduction

This series of product is a module design of inverter and built-in MPPT controller, which has the advantages of high conversion efficiency, low power consumption and strong load-carrying ability. With intelligent control, customers can set charging mode, (Utility as complementary power) AC first mode or DC first mode, timed inversion mode and timed utility mode, timed on / off sleep mode. This is the currently the most advanced inverter & controller hybrid in the world.

### Application

1. Off-grid solar power system
2. Solar power system with utility as complementary power

### Feature

1. Easy to install. To configure a solar system, customers only need to connect it with solar panels and batteries;
2. CPU management, intelligent control, modular design, User-friendly LCD display;
3. Built-in MPPT controller, high charging efficiency;
4. Low power consumption, high conversion efficiency;
5. Intellectual, multifunction, convenient for customers with different using environment to fully use the solar energy

6. External battery connection, convenient to expand back-up power time;
7. Strong load-carrying ability, low failure rate, easy maintenance and long service life  
(Under proper operation, it may be as long as 5 years);
8. Perfect protection: low voltage protection, over voltage protection, overheat protection, short-circuit protection, overloads protection;
9. CE / EMC / LVD / RoHS Approvals;
10. Two years warranty, life-long technical supports.

#### Parameter

Parameter Model		5000W
Rated Output Power		5000W
Peak Power		10000W
Battery (Lead-acid battery)		48V
Charging Parameter		
Charge Mode (setting)		PV charge
		PV charge + utility charge
MPPT Solar Controller	Voltage	24V / 48V
	Current	40A
	Max PV Input Voltage	100V
	PV Charge Efficiency	95% to 99%
	Max PV Input Power	2272W
Utility	AC Charge Current	0 ~ 15A
	Charge Mode	3-Stage Charging
Inversion parameter		
AC Output	Voltage	220V ± 3% or 230V ± 3 or 240V ± 3% or 100V ± 3% or 110V ± 3% (optional)
	Frequency	50Hz ± 0.5 or 60Hz ± 0.5 (optional)
Output wave type		Pure sine wave output, waveform distortion rate ≤ 3
Overload ability		> 120% 1 min, > 130% 10s
Power Consumption (Under normal working mode)		0.4A
Power Consumption (Under sleep mode)		1-6W

Inverter Conversion Efficiency	85% to 92%	
Utility Mode		
AC Input	Voltage	220V ± 35% or 110V + 35% (optional)
	Frequency	The same as utility
AC Output	Voltage	220V ± 5% or 110V + 5% (optional)
	Frequency	The same as utility
Overload Ability	> 120% 1 min, > 130% 10s	
(AC first or DC first) priority		
UPS Output (setting)	AC first, DC standby	
	DC first, AC standby	
Switch Time	<5ms (AC to DC / DC to AC)	
Power On (Setting)	Set by users	
	Timed open / close AC output automatically	
General Parameter		
Display	Display Mode	LCD + LED
	Display Information	Input voltage, output voltage, output frequency, battery capacity, Load condition, Status Information
Protection	Overload output, short-circuit, high-voltage input, low-voltage input, overheat	
Environment	Temperature	-10 °C ~ 50 °C
	humidity	10% to 90%
	Altitude	≤4000m
Size W × D × H (mm)	450 * 246 * 468	
Packing Size W × D × H (mm)	540 * 300 * 518	
Net Weight (kg)	35	
Gross Weight (kg)	41	

Connection Diagram

# I-P-HPC-Series System



I-P-HPC-Series Inverter+Solar Controller



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