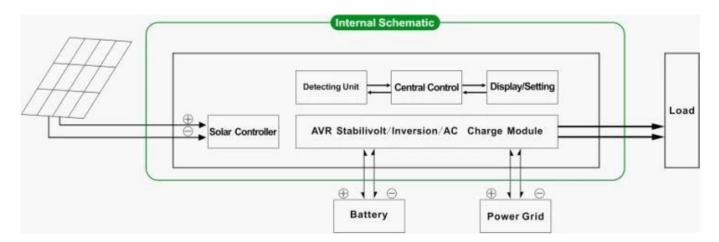
#### Introduction

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**

- Off-grid solar power system
- Solar power system with utility as complementary power

## **Feature**

- · Easy to install. To configure a solar system, customers only need to connect it with solar panels and batteries
- CPU management ,intelligent control modular design, User-friendly LCD display
- Built-in MPPT controller, high charging efficiency
- Low power consumption, high conversion efficiency
- Intellectual multi-function, convenient for customers with different using environment to fully use the solar energy
- External battery connection, convenient to expand back-up power time
- Strong load-carrying ability, low failure rate, easy maintenance and long service life (under proper operation, it may be as long as 5 years)
- Perfect protection: low voltage protection, over voltage protection, overheat protection, short-circuit protection, overloads protection
- CE / EMC / LVD/ RoHS Approvals
- Two years warranty, life-long technical supports.

### **Function**

#### 1. Charging function

- 1.1 PV charge the battery, utility will not: when PV and utility are both connected to the machine, only the PV will charge the battery when there is sunlight
- 1.2 Both PV and utility will charge the battery: when PV and utility are both connected to the machine, AC (utility) will charge the battery. In the meanwhile,

PV will also charge the battery if there is sunlight.

#### 2. Utility as complementary power function

2.1 AC first , DC standby UPS mode

When both utility and battery are connected to the machine, utility will supply power to the loads prior to the battery. When utility is cut off, the battery will automatically

continue to supply power.

2.2 DC first, AC standby UPS mode

When both utility and battery are connected to the inverter, battery will supply power to the loads prior to utility. When battery capacity is not enough, utility will continue to

supply power automatically.

#### 3. Timing function

- 3.1 Timed on/off normal working mode and sleep mode: can set specific time when to open normal output and when to close AC output to enter sleep mode.
- 3.2 Battery and utility switchable mode: can set specific time when to use battery or utility supply power (suitable for areas where electric fee is charged according to

period in different intervals).

#### 4. Recording/checking function

- 4.1 Machine fault checking: can check the machine fault information.
- 4.2 Discharge time checking: can check the discharge time of the battery.

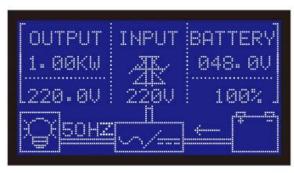
### **Parameter**

Rated Output Power   1500W   24V/48V (optional)   24V/48V
Battery Lead-acid battery   Charging Parameter   Charge Mode   Setting   PV charge   PV c
Lead-acid battery □   Charging Parameter  Charge Mode □ setting □   Voltage
Charging Parameter  Charge Mode setting PV charge PV charge PV charge + utility charge  Voltage 24V/48V  Current 25A  Max PV Input Voltage PV Charge PV
PV charge PV charge + utility + ut
PV charge + utility charge  Voltage
Voltage   24V/48V   Current   25A   Max PV Input   Voltage   PV Charge   Efficiency   Max PV Input   Power   48V 1420W   AC Charge   Current   Charge Mode   3-Stage Charging
Current Z5A  Max PV Input Voltage PV Charge Efficiency Max PV Input Power AC Charge Current Charge Mode Current Charge Mode Current Charge Mode Current Charge Mode Tequency AC Output Prequency Coverload ability Coverload ability Coverload Solvet Consumption Cover
MPPT Solar Controller  PV Charge Efficiency Max PV Input Power AC Charge Current Charge Mode Dillity AC Output  Prequency Dower Consumption under normal working mode) Power Consumption Under Sleep mode) Prequency Dillity Mode AC Input AC Input AC Output  Max PV Input Voltage Efficiency Difficiency Diffic
MPPT Solar Controller  Voltage Efficiency Max PV Input Power AC Charge Current Charge Mode Current Charge Mode Brequency AC Output  AC Output  Voltage Prequency Dutput wave type Pure sine wave output, waveform distortion rate≤3 Dutput working mode) Dunder normal working mode) Dunder Seep mode) Dunder Consumption under sleep mode) Dunder Seep mode) Dutput Wodage Prequency Dividing Power Consumption under sleep mode) Dutput Wodage Power Conversion Efficiency  Jtility Mode  AC Input  AC Output  Voltage Power Consumption Under Seep mode) Dividing Power Conversion Efficiency  Jtility Mode  AC Input  AC Output  Voltage Power Conversion Efficiency  Voltage Power Conversion The same as utility Dividing Prequency The same as utility Diverload Ability Dividing Input
Efficiency  Max PV Input Power  AC Charge Current Charge Mode  AC Output  AC Output  AC Output  AC Output  Dutput wave type Power Consumption under normal working mode)  Power Consumption under sleep mode) Inverter Conversion Efficiency  Voltage  AC Input  Voltage  Voltage  Voltage  AC Output  Prequency  Solv±3% or 230V±3 or 240V±3% or 100V±3% or 110V±3% [optional] [] 120% 1 min, []130% 10s  24V: 0.5A  48V: 0.4A  Power Consumption under sleep mode) Inverter Conversion Efficiency  Voltage AC Input  Voltage Prequency  Voltage Frequency  Voltage Prequency  The same as utility  Voltage Frequency  The same as utility  Deverload Ability
Power   A8V 1420W     AC Charge   Current   Charge Mode   3-Stage Charging     Nversion parameter     AC Output   Frequency   Frequency   50Hz±0.5 or 60Hz±0.5
AC Charge Current Charge Mode 3-Stage Charging  nversion 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]]  Dutput wave type Pure sine wave output, waveform distortion rate≤3  Deverload ability [120% 1 min, [130% 10s]]  Power Consumption under normal working mode) 24V: 0.5A  Power Consumption under sleep mode) noverter Conversion efficiency (Significancy Power Consumption under sleep mode) 1-6W  Itality Mode  AC Input Voltage 220V±35% or 110V+35%[optional] Frequency The same as utility (Significance) The same as utilit
Utility Current Charge Mode 3-Stage Charging    Charge Mode   Charge Mo
AC Output    Voltage
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) 24V: 0.5A  48V: 0.4A  Power Consumption under sleep mode) noverter Conversion efficiency  Itility Mode  AC Input Voltage 220V±35% or 110V+35%[optional]  Frequency The same as utility  AC Output Frequency The same as utility  Overload Ability [120% 1 min][130% 10s]  AC Girst or DC first) priority
AC Output   Frequency   Frequency   S0Hz±0.5 or 60Hz±0.5   optional
Output wave type Overload ability  I 120% 1 min, □130% 10s  24V: 0.5A  48V: 0.4A  1-6W  85%~92%  85%~92%  Itility Mode  AC Input Voltage Frequency Frequency The same as utility Overload Ability  I 10V+5%□optional□ Frequency The same as utility I 120% 1 min□□130% 10s  AC first or DC first) priority
Overload ability
Power Consumption under normal working 48V: 0.5A  Power Consumption under sleep mode)  Power Conversion Efficiency  Jtility Mode  AC Input  AC Output  Voltage Frequency Frequency The same as utility  Voltage Frequency The same as utility  The same as utility  Overload Ability  Diverload Ability  Jan 24V: 0.5A  48V: 0.4A   1-6W  85%~92%  85%~92
under normal working mode)  48V: 0.4A  1-6W  nverter Conversion Efficiency  Jtility Mode  AC Input  AC Output  Voltage Frequency  The same as utility  Voltage Frequency  The same as utility  The same as utility  The same as utility  The same as utility  Yoltage Frequency  The same as utility
AC Output  AC Output  AC Output  AC Output  AC Input  AC Output  AC Output  AC Inst or DC first) priority  AC first or DC first)  AS V: 0.4A  1-6W  85%~92%
under sleep mode)  nverter Conversion  Efficiency    S5%~92%
Ifficiency  Jtility Mode  AC Input  AC Output  Voltage  120V±35% or 110V+35%[optional]  Frequency  Voltage  120V±5% or 110V+5%[optional]  Frequency  The same as utility
Voltage   220V±35% or 110V+35% optional   Frequency   The same as utility     Voltage   220V±5% or 110V+5% optional   Frequency   The same as utility     Voltage   220V±5% or 110V+5% optional   Frequency   The same as utility     Overload Ability   0120% 1 min   0130% 10s     AC first or DC first) priority
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
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
Frequency The same as utility  Overload Ability
Overload Ability ☐120% 1 min☐130% 10s  AC first or DC first) priority
JPS Output∏setting∏ AC first, DC standby
DC first, AC standby
Switch Time
Power On Set by users
]setting[] Timed open / close AC output automatically
General Parameter
Display Mode LCD+LED
Display Display Input voltage, output voltage, output frequency, battery Information capacity, Load condition, Status Information
Overload output, short-circuit, high-voltage input, low-voltage input, overheat
Temperature -10°C□50°C
Invironment humidity 10% 90%
Altitude ≤4000m
Size W×D×H(mm) 438*208*413

Packing Size $W \times D \times H(mm)$	520*310*460
Net Weight (kg)	17
Gross Weight (kg)	18

## **Products photos**









# I-P-HPC-Series System



I-P-HPC-Series Inverter+Solar Controller