Hybrid Solar Inverter

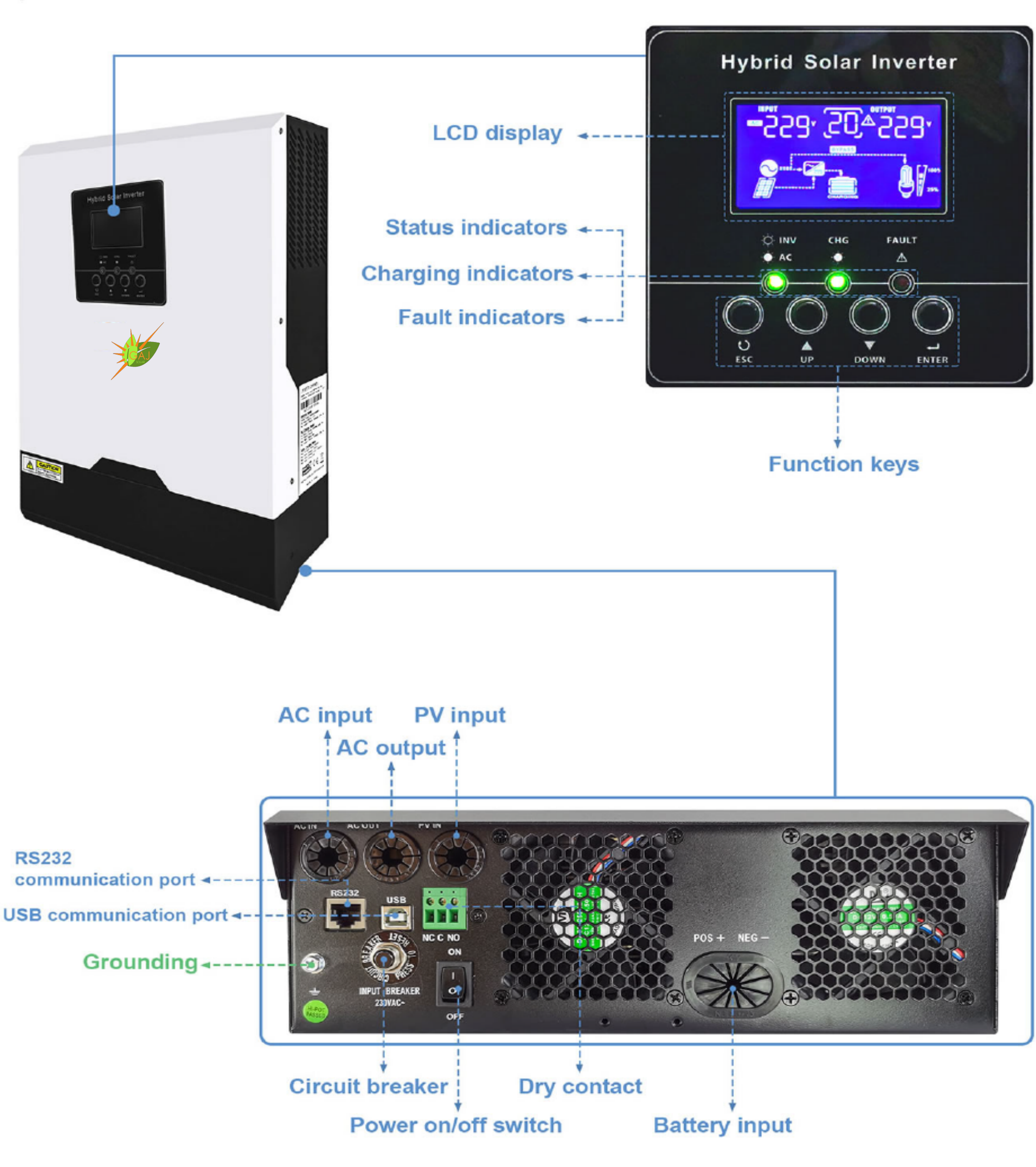
1.5KW - 5KW PV 120V-500V

Hybrid Solar Inverter 1.5KW - 5KW

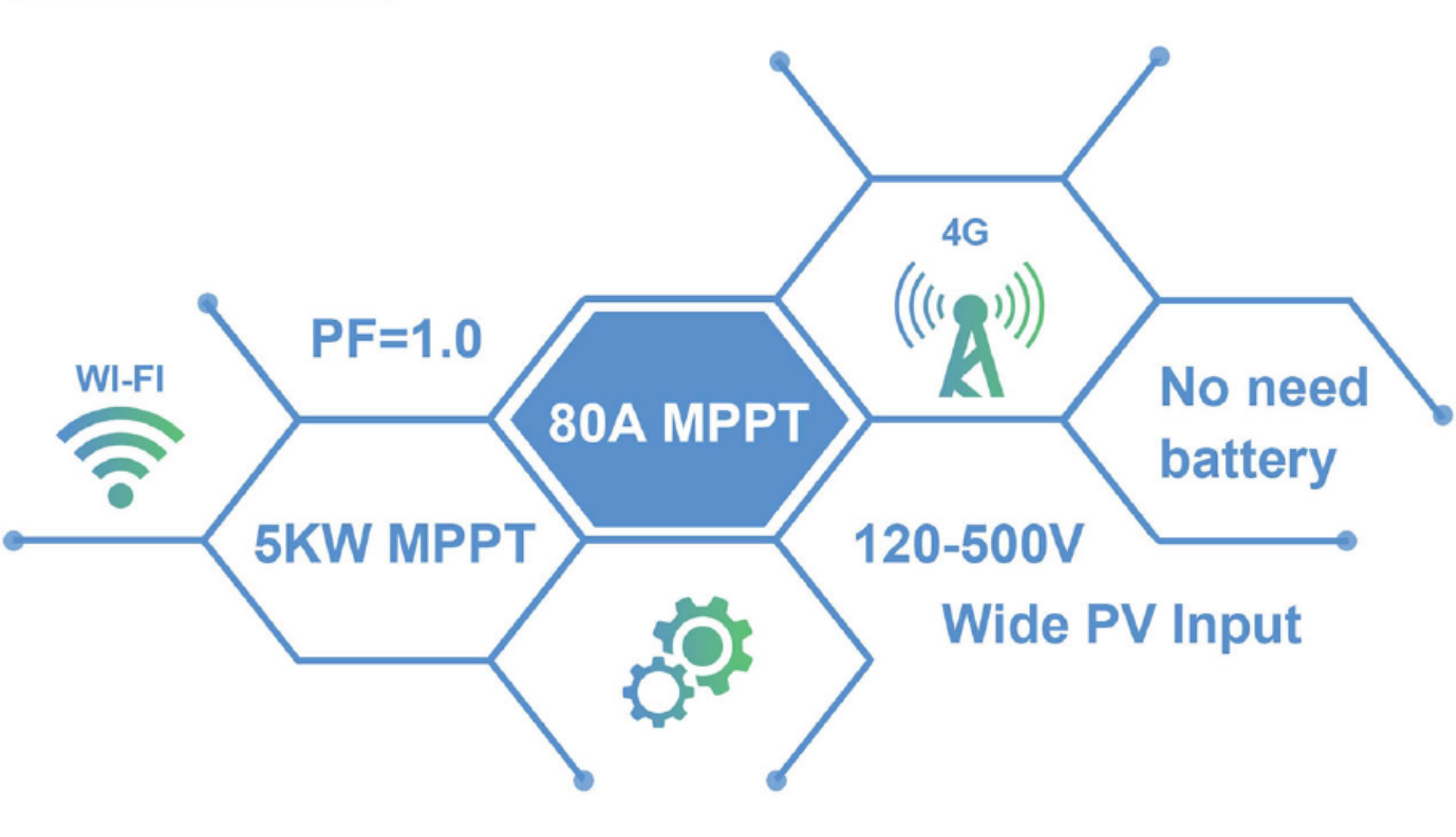
- Pure sine wave inverter
- Inverter running without battery
- Built-in MPPT solar controller
- Configurable input voltage range for home appliances and personal computers via LCD setting
- Configurable battery charging current based on applications via LCD setting
- Configurable AC/Solar Charger priority via LCD setting
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload/ Over temperature/ short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function
- Smart Wifi or 4G remote monitoring (optional)
- Parallel operation with up to 9units

Product Details

The operation and display panel include three indicators, four function keys and a LCD display, indicating the operating status and input/output power information.


Hybrid Solar Inverter
LCD display
Status indicators
Charging indicators
Fault indicators
INV
AC
CHG
FAULT
ESC
UP
DOWN
ENTER
Function keys
AC input
PV input
AC output
RS232 communication port
USB communication port
Grounding
Circuit breaker
Dry contact
Power on/off switch
Battery input

Key Features


WI-FI
PF=1.0
80A MPPT
4G
No need battery
5KW MPPT
120-500V
Wide PV Input

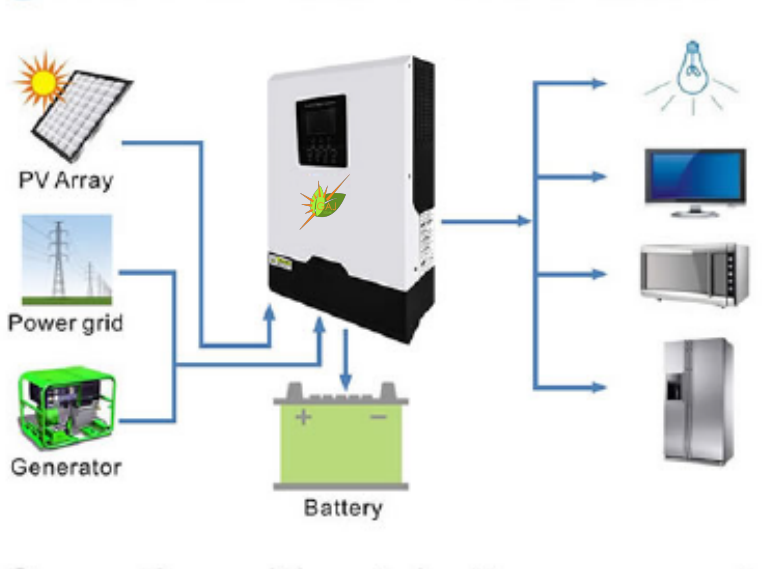
Technical Data

MODEL	Glory M1500 HHS-24	Glory M3000 HHS-24	Glory M5000 HHS-48	Glory M5000 HHP-48
Capacity	1.5KVA/1.5KW	3KVA/3KW	5KVA/5KW	5KVA/5KW
Parallel Capability	NO	NO	NO	YES, 9units
INPUT				
Nominal Voltage	230VAC			
Acceptable Voltage Range	170-280 VAC (For Personal Computers),90-280 VAC (For Home Appliances)			
Frequency	50/60HZ (Auto sensing)			
OUTPUT				
Nominal Voltage	220/230VAC ± 5%			
Surge Power	3000VA	6000VA	10000VA	10000VA
Frequency	50Hz/60Hz			
Waveform	Pure Sine Wave			
Transfer Time	10ms (For Personal Computers) ; 20ms (For Home Appliances)			
Peak Efficiency (PV to INV)	97%			
Peak Efficiency (Battery to INV)	93%			
overload Protection	5s@>=150% load; 10s 110%~150% load			
Crest Factor	3:1			
Admissible Power Factor	0.6~1(inductive or capacitive)			
BATTERY				
Battery Voltage	24 VDC		48 VDC	48 VDC
Floating Charge Voltage	27 VDC		54 VDC	54 VDC
Overcharge Protection	33 VDC		63 VDC	63 VDC
Charging Method	CC/CV			
Solar Charge & AC Charge				
Solar Charge Type	MPPT			
Max. PV Array Power	2000W	4000W	5000W	5000W
Max. PV Array Open Circuit Voltage	500 VDC			
PV Array MPPT Voltage Range	120VDC~450 VDC			
Maximum Solar Input Current	10A	15A	18A	18A
Maximum Solar Charge Current	60A	80A	80A	80A
Maximum AC Charge Current	40A	60A	60A	60A
Maximum Charge Current	60A	80A	80A	80A
Communication Interface	USB/RS232/Dry-contact			
Environment				
Operating Temperature	(-10℃~50℃)			
Storage Temperature	(-15℃~60℃)			
Humidity	5% to 95% Relative Humidity (Non-condensing)			

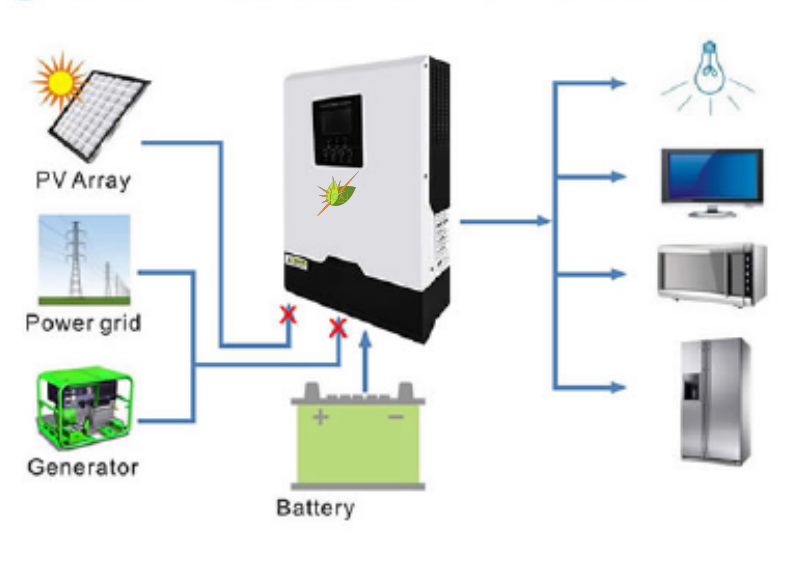
System Diagram

Operation with battery connected

① Solar Power and AC Power available

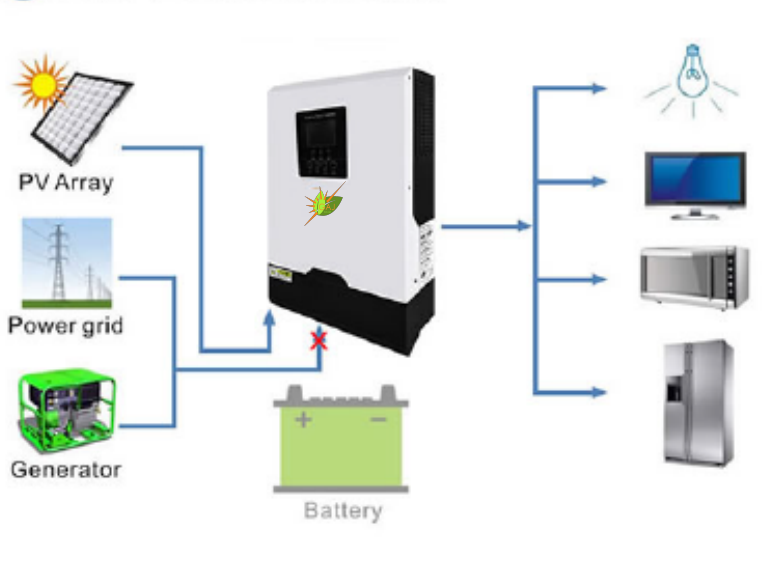

PV Array
Power grid
Generator
Battery

② Solar Power and AC Power not available

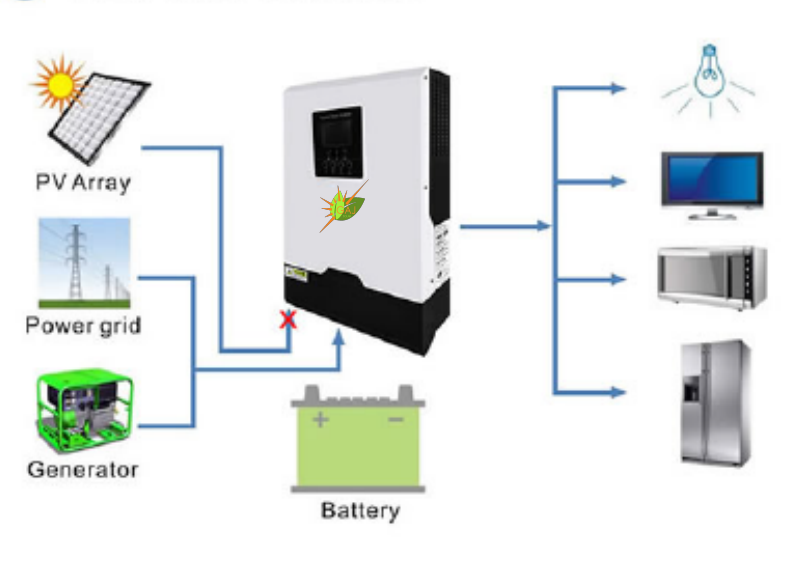

PV Array
Power grid
Generator
Battery

Operation without battery connected

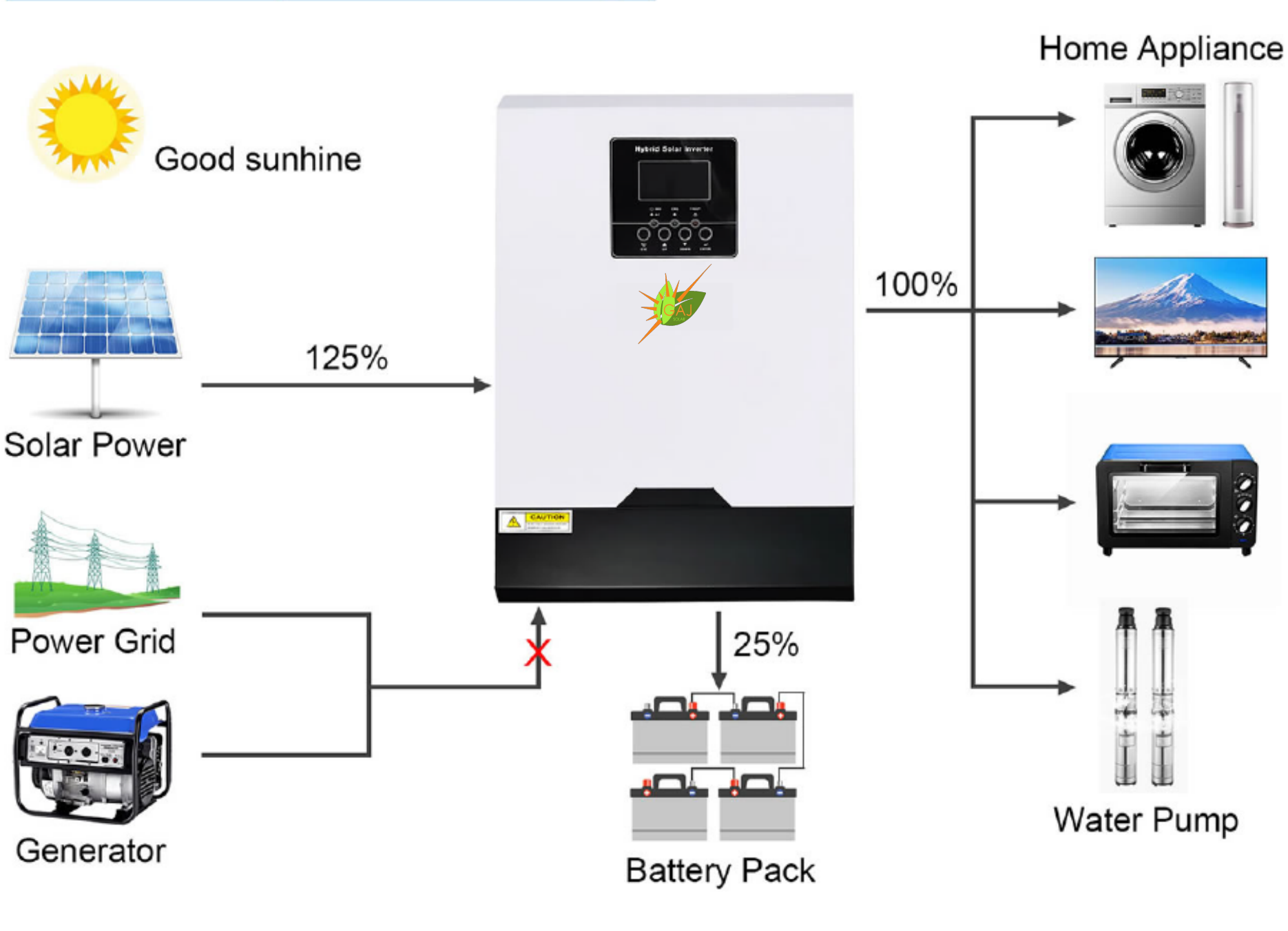
③ Solar Power available


PV Array
Power grid
Generator
Battery

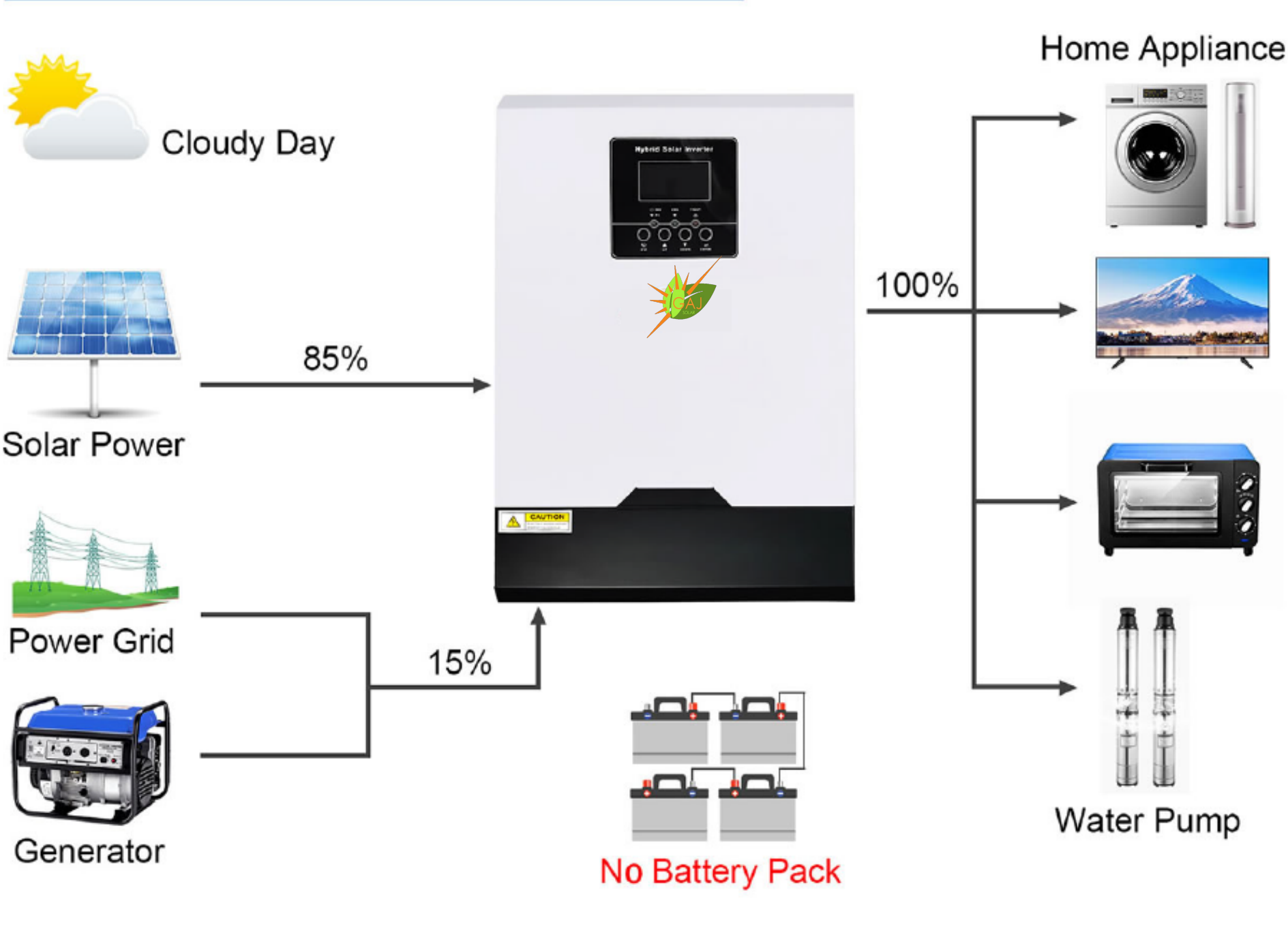
④ AC Power available


PV Array
Power grid
Generator
Battery

When solar power is enough


Good sunhine
Solar Power
125%
Power Grid
Generator
25%
Battery Pack
100%
Home Appliance
Water Pump

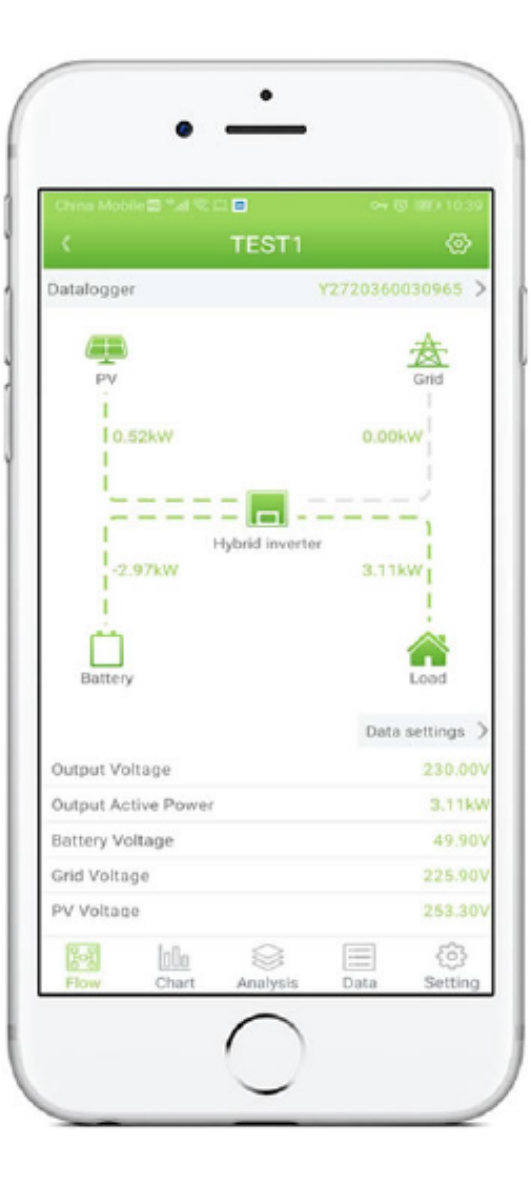
When solar power is not enough


Cloudy Day
Solar Power
85%
Power Grid
Generator
15%
No Battery Pack
100%
Home Appliance
Water Pump

Smart System Wi-Fi or 4G Monitor

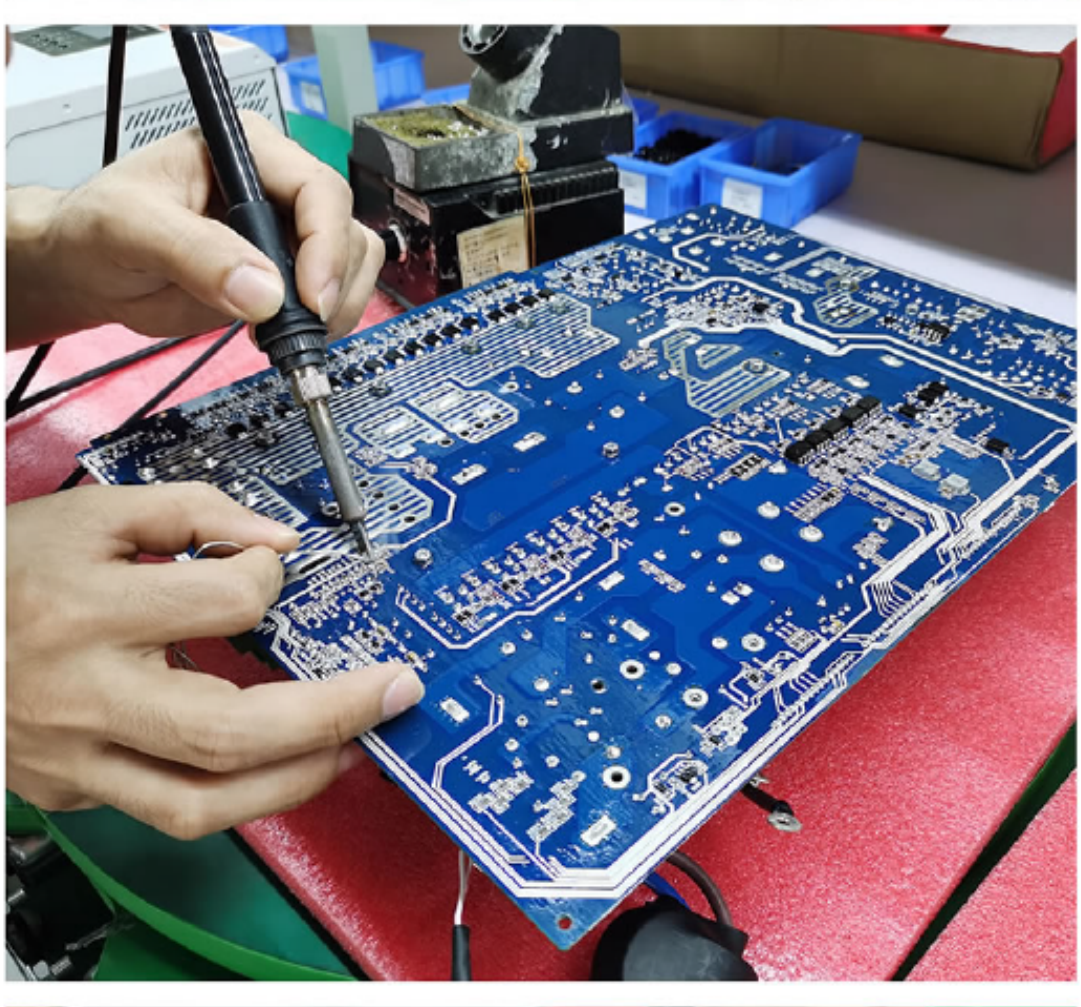
Available to check the system working status through the Wi-Fi or 4G monitor（optional）

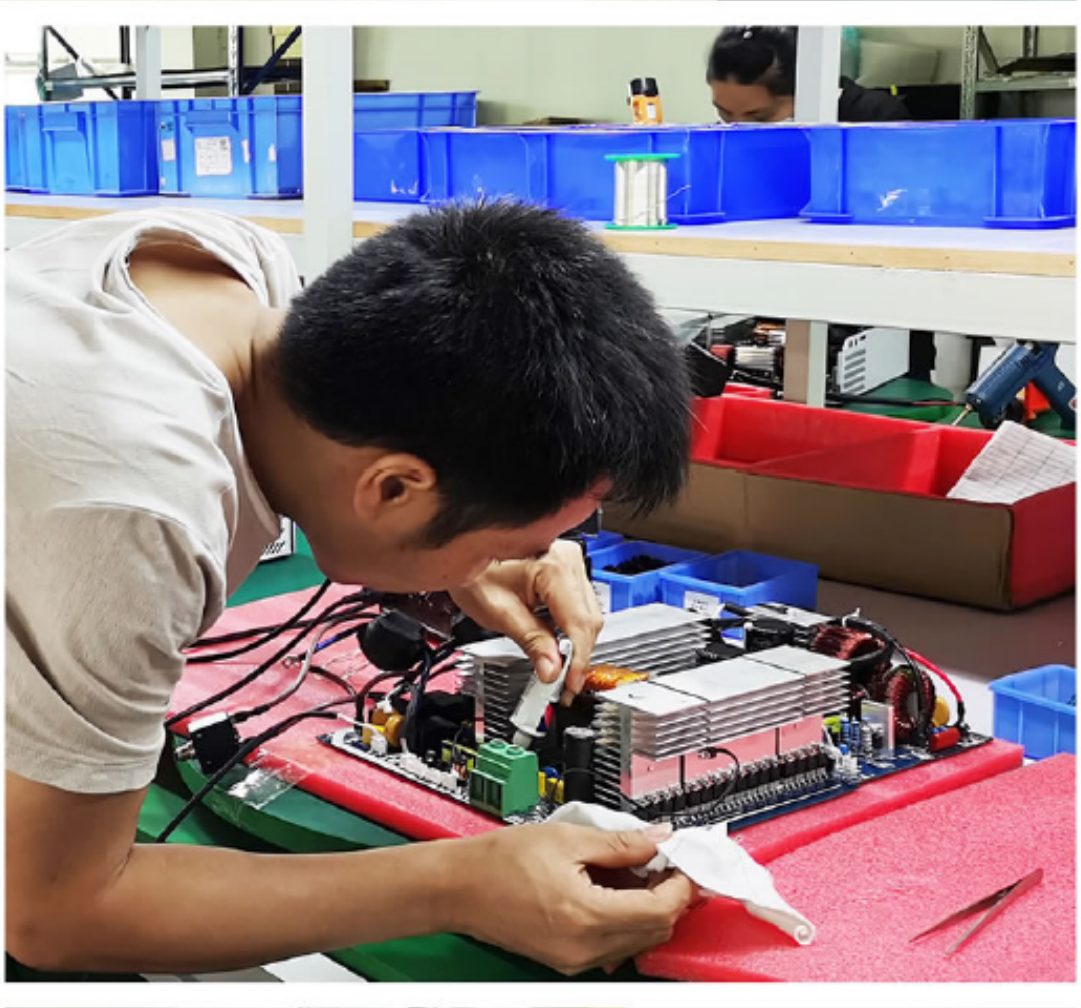
WI-FI RTU
WiFi or 4G


TEST1
Datalogger
PV
Grid
Hybrid inverter
Battery
Load
Data settings
Flow
Chart
Analysis
Data
Setting

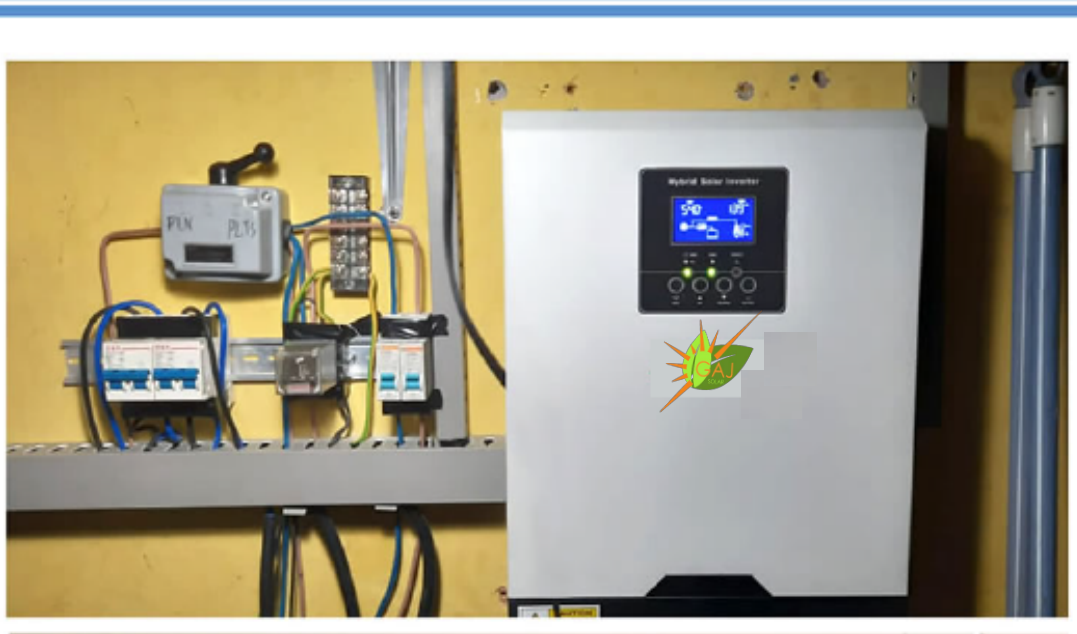
Output Voltage 230.00V
Output Active Power 3.11kW
Battery Voltage 49.90V
Grid Voltage 225.90V
PV Voltage 253.30V

Production line





Applications



Packaging