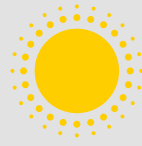


HYBRID INVERTER CHARGER

Solar Power Line



3000W

3500W



POPSAIL hybrid inverter charger is the excellent combination of Solar Charging, AC/Generator Charging, Battery Interting and Auto Transfer Switch(AC/DC) to be a convenient power solution for off grid applications. Designed for 48VDC battery bank, it is compatible for Lithium battery, Lead-Acid or Gel by customized setting.

In the AC mode with the solar charging, this inverter will turn your system to be the Uninterrupted Power Supply system. With the integrated MPPT solar charging module the battery bank can be ensured in the optimal performance, solar energy is captured maximally by MPPT to maintain the battery.

The integrated LCD screen gives more free of system working condition monitor, specific parameters setting and working mode setting. Equipped with multiple features and functions, POPSAIL Solar Power Line hybrid inverter charger is an ideal option for 48V system.

Features

- 80A MPPT solar charger combined, integrated 120A(AC+Solar) charge capacity
- 4 charging mode: Solar Only, AC priority, Solar priority and integrated charge
- Pure sine wave output prevents failures and damage to sensitive equipment
- High peak capacity for seamless switching on of complex and heavy loads
- Exhaust ventilation fans allow for excellent heat dissipation, extending the system's life.
- Dynamic LCD and intelligent LEDs provide system information and identify any errors.
- **Split Phase / Three Phase available by stacking set**
- Power save mode for energy saving

Protection

- Over / Low DC input voltage (allows parameters setting)
- Output overload protection
- Output short circuit protection
- Over temperature protection

Application



48V RV



Off Grid



Communication Stations

Function Setting Screen



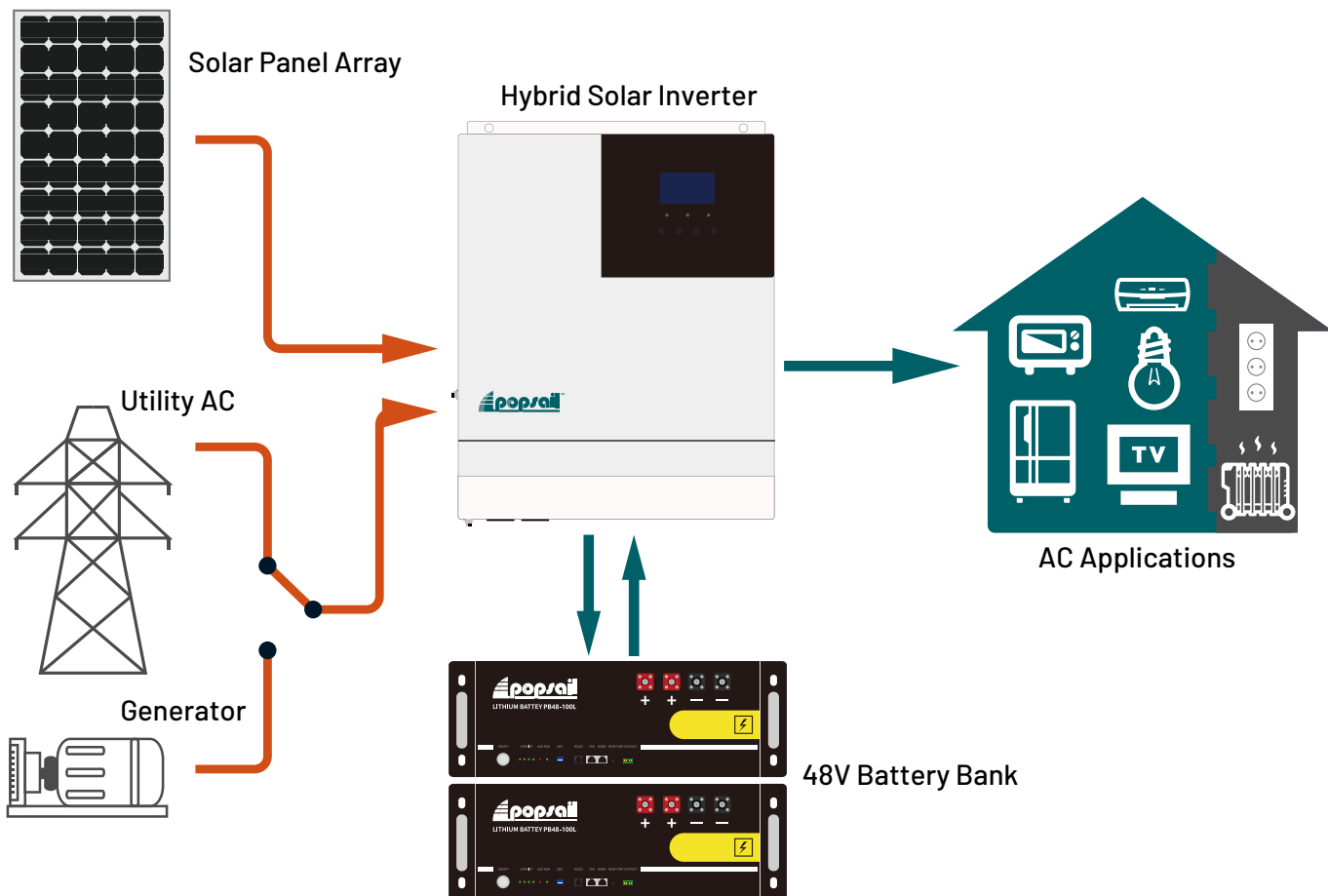
Parallel (Max. 6 units)



3-Phase
(3500W Ver.)



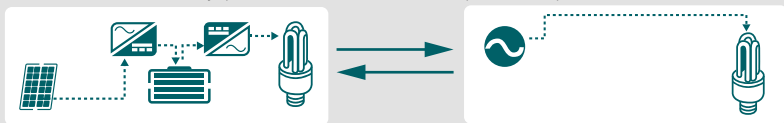
120V/240V Split Phase
(3500W Ver.)



Working Mode:

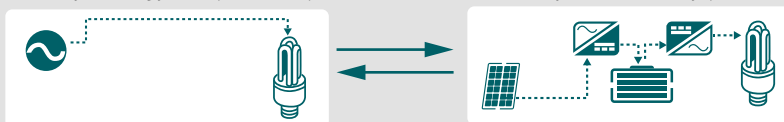
PV Priority

In this mode only the incoming solar energy and battery power are used to power the loads. This can maximize the use of green energy when selecting PV priority in Battery Charging Mode to achieve overall energy conservation and emission reduction. Upon there being no more usable solar energy or the battery voltage drops to a low voltage setpoint, then the unit will switch to utility power to continue to power up the loads. It is recommended to be in this mode for relatively stable areas.



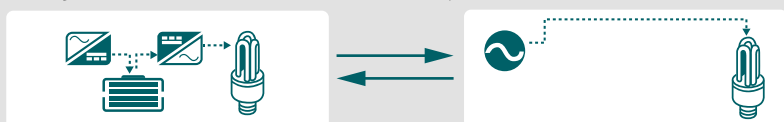
Utility Priority

Equivalent to a backup UPS for use in unstable areas of the grid, Utility will provide power to the loads as priority. Solar and battery energy will provide power to the loads only when utility power is not available.



Inverter Mode

The Battery energy will supply power to the loads. Utility provides power to the loads only when battery voltage drops to low voltage which maximizes the use of DC power.



PINV3000-S-US**PINV3500-S-US****AC Mode**

Rated Input Voltage	110/120Vac	110/120Vac
Input Voltage Range	(90Vac~140Vac) \pm 2%	(90Vac~140Vac) \pm 2%
Rated Frequency	50Hz / 60Hz(auto work)	50Hz / 60Hz(auto work)
Frequency Range	46.7Hz~55.3Hz(50Hz) / 56.7Hz~65.3Hz(60Hz)	
Efficiency	>95%	>95%
Switch Time (AC-Inverting)	10ms	10ms
Max. Bypass Power	4800VA	4800VA

Inverting Mode

AC Output Waveform	Pure Sine Wave	
Rated Output Power (VA)	3000	3500
Rated Output Power (W)	3000	3500
Power factor	1	
Regulated Output Voltage	120VAC	120VAC
Regulated Output Frequency	50Hz \pm 0.3Hz / 60Hz \pm 0.3Hz	50Hz \pm 0.3Hz / 60Hz \pm 0.3Hz
Max. Efficiency	>91%	>90%
Overload Protection	Load @102%~110% (\pm 10%) – alarm and shutdown after 5 mins Load @110%~125% (\pm 10%) – alarm and shutdown after 10 sec Load > 125% (\pm 10%) – alarm and shutdown after 5 sec	Load @102%~110% (\pm 10%) – alarm and shutdown after 5 mins Load @110%~125% (\pm 10%) – alarm and shutdown after 10 sec Load > 125% (\pm 10%) – alarm and shutdown after 5 sec
Peak Power	6000VA	7000VA
Motor Load Capacity	2HP	2HP
Rated DC Input Voltage	48VDC (initial start >44VDC)	48VDC (initial start >44VDC)
DC Input Voltage Range	40.0~60.0VDC \pm 0.6VDC (Selectable)	
Idle Consumption	Power saving: 25W; Normal: 45W	Power saving: 25W; Normal: 48W

AC Charge

Max. Charge Current	40A	
Charge Voltage Range	40.0~60.0VDC	40.0~60.0VDC
Battery Type	LiFePO4, Lead-Acid, Gel, Flood	
Over Charge Protection	Alarm & Shutdown after 1 min.	

MPPT Solar Charge

PV Open Circuit Voltage	145VDC	145VDC
PV Input Voltage Range	60~145VDC	60~145VDC
MPPT Voltage Range	60~115VDC	60~115VDC
Battery Voltage Range	40.0~60.0VDC	40.0~60.0VDC
Max. Solar Charge Current	80A	80A

PINV3000-S-US

PINV3000-S-US

General

Safety Regulation	CE(EN62040-1)	
EMC Regulation	EN62040-2, C2	
Working Temperature	-15 °C ~55 °C	
Storage Temperature	-25 °C ~60 °C	
Humidity	5%~95% (PCB in Anti-corrosion)	
Cooling	Fans (Auto speed control)	
Communication	USB/RS485(Wifi/GPRS)/Dry Contact	
Weight	10.8 Kgs	10.8 Kgs

Installation Dimension:

