

**FRECON**

**SP500**

**HYBRID OFF-GRID SOLAR INVERTER**



FRECON ELECTRIC (SHENZHEN) CO.,LTD

# SP500 HYBRID OFF-GRID SOLAR INVERTER

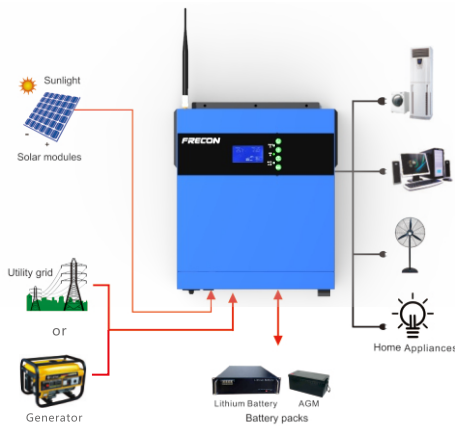
## Features

- Pure sine wave solar inverter
- Configurable output source priority
- Configurable AC/Solar charger priority
- Built-in MPPT solar charger controller
- Compatible to mains voltage or generator power
- With complete short-circuit, over-voltage, under-voltage, overload protection, etc.

## Advantages

### Solar and grid share power together

Inverter support solar power and grid power to supply the load at the same time.



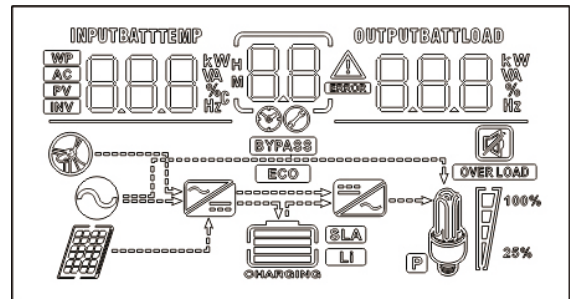
### Supports BMS

Standard with BMS communication port, intelligent battery charging design to extend battery life



### Convenient LCD operation

User can set up parameters through LCD panel easily to improve inverter performance



### Support mobile APP monitoring inverter

Built in WIFI module for mobile APP monitoring.



Model	SP500-1200-12H-H	SP500-2400-24H-H	
<b>Line Mode</b>			
Nominal AC Input Voltage/Waveform	230Vac/Sinusoidal (utility or generator)		
AC Input Range	90~280Vac(Appliances) 170Vac~280Vac(UPS)		
Max AC Input Voltage	300Vac		
Nominal Input Frequency	50Hz / 60Hz (Auto detection)		
AC Input Frequency Range	40~65±1Hz; (>42 or <63±1Hz comeback)		
Output Short Circuit Protection	Circuit Breaker		
Efficiency (Line Mode)	>95% ( Rated R load, battery full charged )		
Transfer Time	10ms typical (UPS)		
	20ms typical (Appliances)		
<b>Utility Charging Mode</b>			
Charging Algorithm	3-Step		
AC Charging Current (Max)	60Amp (@VI/P=230Vac)	60Amp (@VI/P=230Vac)	
Bulk Charging Voltage	Flooded Battery	14.6Vdc	29.2Vdc
	AGM / Gel Battery	14.1Vdc	28.2Vdc
Floating Charging Voltage	13.5Vdc	27Vdc	
<b>Invert Mode</b>			
Rated Output Power	1.5KVA/1.2KW	3KVA/2.4KW	
Output Voltage Waveform	Pure Sine Wave		
Output Voltage/Frequency	230Vac±5%/50Hz		
Peak Efficiency	94%		
Overload Protection	5s@≥150% load; 10s@110%~150% load		
Surge Capacity	2* rated power for 5 seconds		
Nominal Battery Input Voltage	12Vdc	24Vdc	
Cold Start Voltage	11.5Vdc	23.0Vdc	
High DC Cut-off Voltage	15.5Vdc	31Vdc	
No Load Power Consumption	<25W	<30W	
<b>MPPT Solar Charging &amp; Invert Mode</b>			
Max. PV Array Power	2000W	3000W	
PV Array MPPT Voltage Range	60~300Vdc		
Max. PV Array Open Circuit Voltage	350Vdc		
Max Charging Current	60Amp		
<b>Other Information</b>			
Safety Certification	CE		
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature Range	-10°C to 50°C		
Storage Temperature	-15°C~ 60°C		
Enclosure	IP21		
Dimension D*W*H( mm)	110x260x355	110x260x355	
Net Weight(kg)	5.2	5.5	

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