

# PH1800 PLUS SERIES (2KW-5.5KW)

High Frequency on/off hybrid solar inverter

**Shenzhen Must Energy Technology Co.,Ltd.**

Tel: +86 13682553172

Email: [hpower@mustpower.com](mailto:hpower@mustpower.com)

Web: [www.mustpower.com](http://www.mustpower.com)

**MUST<sup>®</sup>**

# MUST

## PH1800 PLUS SERIES (2KW-5KW)

High Frequency on/off hybrid solar inverter



(2KW-3KW)



(3KW-5.5KW)

### INTRODUCTION

PH1800 Plus series hybrid solar inverter, it can realize self-consumption and feed-in to the grid from solar energy with best solution according to your setting. During the daytime solar power can run your home appliances and if there is extra solar power it will feed-in to the grid or you can choose to save them on the battery to backup when power failure or nighttime.

### FEATURES

- Rated Power 2KW-5.5KW
- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current suits different types of batteries
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Multiple communication for USB, RS-485, Modbus
- Monitoring software & Wifi Kit for real-time status display and control
- Parallel operation up to 3 units



Rated power  
2kw-5.5kw



Battery Voltage  
24VDC/48VDC



MAX charging current  
140A



WIFI remote  
monitoring



Multi Protection



High frequency above  
93% high efficiency



Wide AC input  
90-280V



Lead-acid/Lithium Battery  
Optional



### WIFI COMMUNICATION

You can download this app on your cellphone and monitor the whole system, you will know how much electricity the system generate and sell to utility.



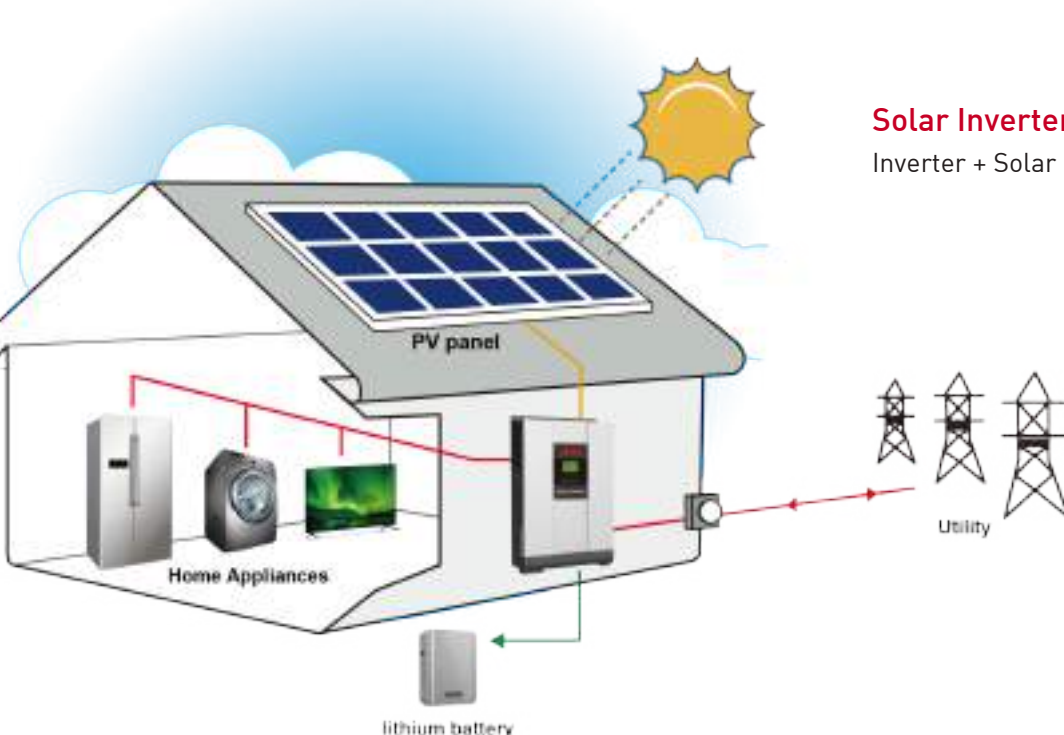
Android



iOS

### PH1800 SERIES INTELLIGENT WORKING MODE

Grid-Tie with Battery Back-Up Grid tie with backup system is intelligent to run your house, it generates electricity when the sun is shining, and supplies power to your house while selling any excess power back to the utility to reduce your electric bill. However, the PV energy system continues to operate during a grid outage. The batteries provide quiet, uninterrupted back-up power for loads such as refrigerators, lights, pumps, and computers, while your PV array continues to produce power and charge the batteries during the day. When the grid is restored, the inverter/chargers help recharge the batteries to their full state of charge while the grid powers all AC loads. Once the batteries are recharged, the system returns to normal operation.



### Solar Inverter System Connection:

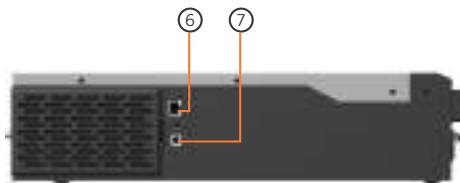
Inverter + Solar Panels + Grid + Application Loads

## PH1800 PLUS SERIES (2KW-5KW)

High Frequency on/off hybrid solar inverter

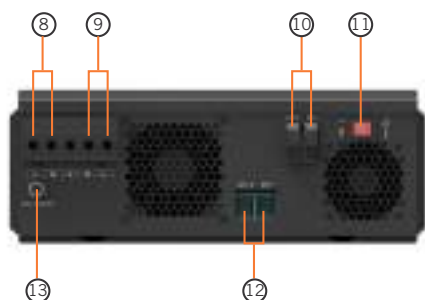


- ①
- ②
- ③
- ④
- ⑤



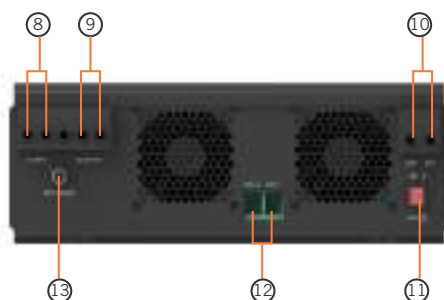
- ⑥
- ⑦

1. LCD Display
2. Status Indicator
3. Charging Indicator
4. Fault Indicator
5. Funtion Buttons
6. RS-485 Communication port
7. USB
8. AC Input
9. AC Output
10. PV Input
11. Power On/Off Switch
12. Battery Input
13. Circuit breaker



- ⑧
- ⑨
- ⑩
- ⑪
- ⑬
- ⑫

(2KW-3KW)



- ⑧
- ⑨
- ⑩
- ⑬
- ⑫
- ⑪

(3KW-5.5KW)

MODEL		PH18-2024 Plus	PH18-3024 Plus	PH18-3048 Plus	PH18-4048 Plus	PH18-5048 Plus	PH18-5548 Plus
Nominal Battery System Voltage		24VDC			48VDC		
INVERTER OUTPUT	Rated Power	2000W	3000W	3000W	4000W	5000W	5500W
	Surge Power	4000W	6000W	6000W	8000W	10000W	11000W
	Waveform	Pure Sine Wave					
	AC Voltage Regulation (Batt.Mode)	220VAC~240VAC(setting)					
	Electric Current	8.7A	13A		17.4A	21.7A	23.9A
	Inverter Efficiency(Peak)	93%					
	Transfer Time	10ms(For For Personal Computers) 20ms( For Other Home Appliance)					
AC INPUT	Voltage	230VAC					
	Selectable Voltage Range	170~280VAC(For Personal Computers), 90~280VAC(For Home Appliances), 184~253VAC(VDE4105)					
	Frequency Range	50Hz/60Hz (Auto Sensing)					
BATTERY	Normal Voltage	24VDC		48VDC			
	Floating Charge Voltage	27.4VDC		54.8VDC			
	Overcharge Protection	30VDC		60VDC			
SOLAR CHARGER & AC CHARGER	Maximum PV Array Open Circuit Voltage	145VDC					
	PV Array MPPT Voltage Range	30~130VDC		64~130VDC			
	Standby Power Consumption	2W					
	Maximum PV Array Power	2000W		4000W			
	Maximum Solar Charge Current	80A					
	Maximum Efficiency	98%					
	Maximum AC Charge Current	60A					
Maximum Charge Current	140A						
MECHANICAL SPECIFICATIONS	Machine Dimensions (W*H*D)	272*355*100 mm			297.5*468*125 mm		
	Net Weight(KG)	7.4			14		
	Package Dimensions(W*H*D)	485*393*251			638*395*241		
	Gross Weight(KG)	9.5			16.4		
OTHER	Humidity	5% to 95% Relative Humidity (Non-condensing)					
	Operating Temperature	0°C ~55°C					
	Storage Temperature	-15°C ~60°C					