



PH1800 Plus Series On/Off Grid Hybrid Solar Inverter

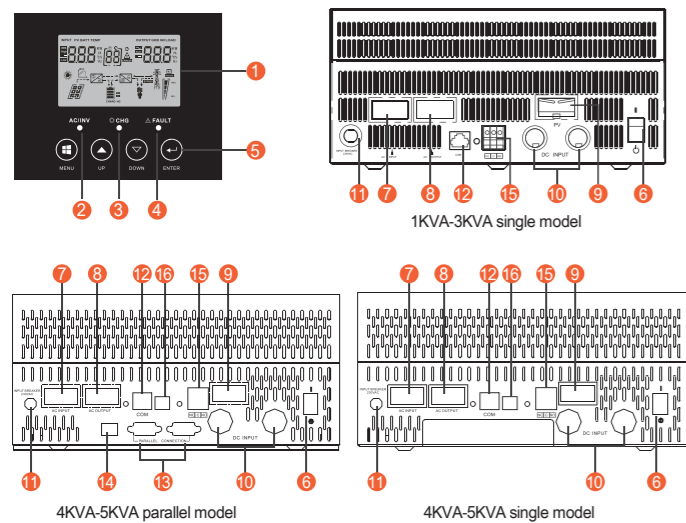
Feature:

- Rated power 2kva to 5kva
- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc.)
- Built-in MPPT 60A/80A solar charge controller
- New SUB working mode(Solar-Utility-Battery working mode) for 4K-5K series
- MPPT Efficiency max 98%
- Combining solar system, AC utility, and battery power source to supply continuous power
- Multiple operations: basic Grid-tie, Off-Grid, Grid-Interactive
- Parallel operation with up to 3 units (Available for 4KVA/5KVA only)
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support USB, RS485 monitoring function with free CD
- WIFI/ GPRS remote monitoring (optional)
- Compatible to generator

Introduction:

This is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

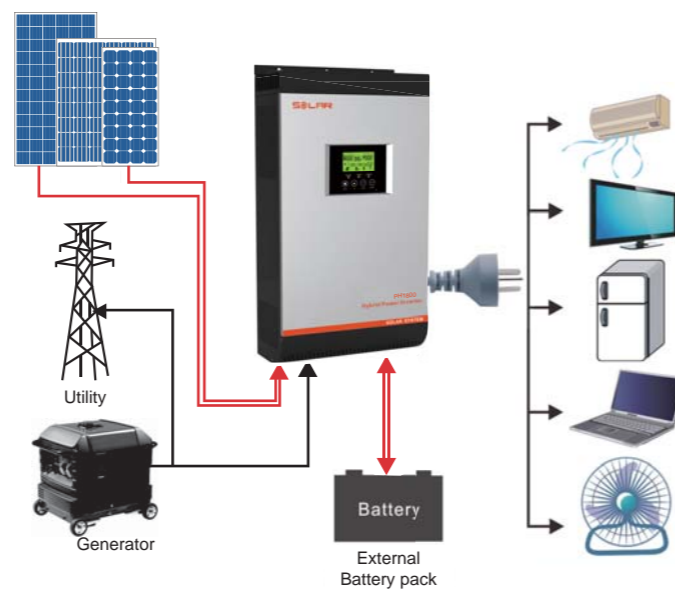
LCD Display Information



- LCD display
- Status indicator
- Charging indicator
- Fault indicator
- Function buttons
- Power on/off switch
- AC input
- AC output
- PV input
- Battery input
- Circuit breaker
- RS485 communication port
- Parallel communication cable (only for parallel model)
- Parallel switch
- Dry contact
- USB

NOTE: For parallel model installation and operation, please check separate parallel installation guide for the details.

Solar System Connection



Back Panel



Specification

MODEL	PH18-2K Plus	PH18-3K Plus	PH18-4K Plus	PH18-5K Plus		
Nominal Battery System Voltage		12VDC		48VDC		
INVERTER OUTPUT	Rated Power	2000VA	3000VA	4000VA	5000VA	
	Surge Power	1600W	2400W	3200W	4000W	
	Waveform	4000VA	6000VA	8000VA	10000VA	
	AC Voltage Regulation (Batt.Mode)	Pure sine wave				
	Electric Current	220VAC~240VAC				
	Output Frequency	7.0A	10.5A	13A		
	THD (Linear loads)	50HZ				
		Off grid ≤2%				
		Grid discharge ≤3%				
	Inverter Efficiency (Peak)	93%				
Transfer Time	10mS (FST, APL), 20mS(SLO)					
AC INPUT	Voltage	230VAC				
	Selectable Voltage Range	170~280VAC(FST), 90~280VAC(SLO), 184~253VAC(APL)				
	Frequency Range	50HZ, 60HZ(Auto sensing)				
BATTERY	Normal Voltage	24VDC		48VDC		
	Floating Charge Voltage	27VDC		54VDC		
	Overcharge Protection	31VDC		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				
	Rated Power	2000W	3000W	4000W	3000W	4000W
	Maximum Solar Charge Current	80A	60A	80A	60A	80A
	Maximum Efficiency	98%				
	Maximum AC Charge Current	20A or 30A		60A		
	Maximum Charge Current	100A	120A	140A	120A	140A
	MECHANICAL SPECIFICATIONS	Machine Dimensions (W*H*D)(mm)	272*355*100		297.5*468*125	
		Net Weight (Kg)	7.4		14	
Package Dimensions(W*H*D)(mm)		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				

* Product specifications are subject to change without further notice.

Approximate Back-up Time Table

Model	Load (VA)	Backup Time@24V 100Ah(min)	Backup Time@24V 200Ah(min)	Model	Load (VA)	Backup Time@48V 100Ah(min)	Backup Time@48V 200Ah(min)	
2KVA	200	766	1610	2KVA	200	1581	3161	
	1000	112	269		3KVA	1000	268	615
	2000	50	112			2000	106	257
3KVA	300	449	1100	3KVA	300	1054	2107	
	1500	68	164		4KVA	1500	159	402
	3000	28	67			3000	63	155
4KVA	400	766	1610	4KVA	400	766	1610	
	2000	112	269		5KVA	2000	112	269
	4000	50	112			4000	50	112
	5000	28	67		5000	28	67	