

PH3000 Series Single-phase Low Frequency On/Off grid Hybrid Solar Inverter

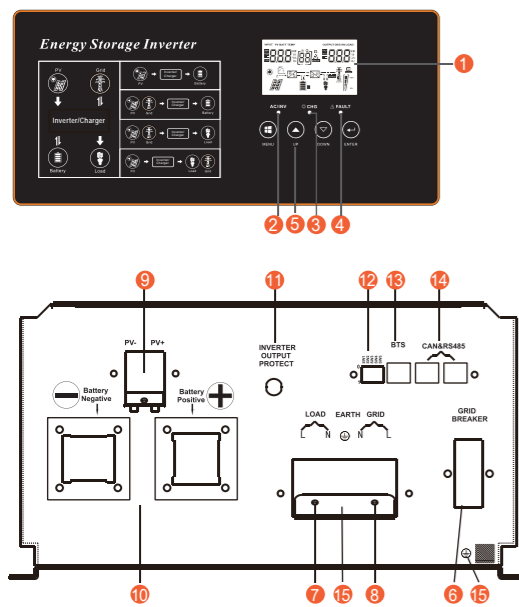
Feature:

- Rated power 2KW to 4KW
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc.)
- Built-in MPPT 60A solar charge controller
- 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
- Support CAN, RS485 monitoring function with free CD
- WIFI/ GPRS remote monitoring (optional)
- Compatible to generator

Introduction:

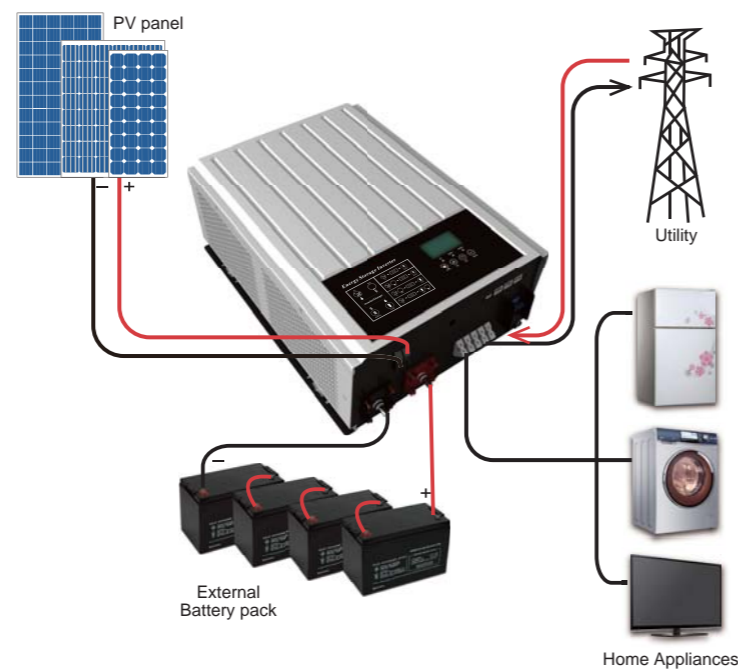
In comparison with pure on-grid solar inverter, PH3000 model can not only feed-in power to grid, but also store PV power to battery, and power loads directly. Combining the function of inverter, on-grid, MPPT solar charger, and battery charger to offer uninterruptible power support. Its comprehensive LCD display offers user configurable and easy accessible button operation, such as battery charging current, AC/solar charging priority, and acceptable input voltage based on different applications.

LCD Display Information



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|-----------------------|----------------------------------|
| 1. LCD display | 9. PV input |
| 2. Status indicator | 10. Battery input |
| 3. Charging indicator | 11. Inverter output protect |
| 4. Fault indicator | 12. Switch |
| 5. Function buttons | 13. BTS |
| 6. Grid breaker | 14. CAN&RS485 communication port |
| 7. Load | 15. Earth |
| 8. Grid | |

Solar System Connection



Back Panel



Specification

MODEL		PH30-2048	PH30-3048	PH30-4048
Nominal Battery System Voltage		48VDC		
INVERTER OUTPUT	Rated output power	2000W	3000W	4000W
	Rated output voltage and frequency	230Vac / 50Hz		
	Rated output current	8.7A	13A	17.4A
	Output voltage precision	230Vac±1%		
	Output frequency precision	50Hz±0.1%		
	THD (Linear loads)	Off grid≤2%		
		Grid discharge ≤3%		
	Dynamic response speed (0→100%)	Grid charge ≤3%		
		20ms		
	Power factor	Grid discharge 99.9% & Grid charge 99.9%		
Overload capability	100% < load≤110%, 30 minutes; 110% < load≤125%, 1 minutes; 125% < load≤150%, 30 seconds; load > 150%, 10 seconds; Short circuit, 5 seconds			
Grid / Off grid change time	< 10ms			
Output wave	sine wave			
Inverting efficiency 80% resistive loads	≥92%	≥93%		
AC input maximum current	17.4A	26A	34.8A	
AC INPUT	Acceptable input voltage range	Defaults 186Vac ~253Vac; Narrow 174Vac ~272Vac; Wide 95Vac ~272Vac		
	Nominal frequency	50Hz / 60Hz		
BATTERY	Rated input voltage	48VDC		
	Allowed input DC voltage range	40VDC ~ 62VDC		
	Low voltage alarm	42VDC		
	High voltage alarm	60VDC		
SOLAR CHARGER & AC CHARGER	PV Open Circuit Voltage	145VDC		
	Max Solar Charging Current	60A	60A	
	Max AC Charging Current	40A	60A	80A
DISPLAY & PROTECTION FUNCTION	LED indication	Systematic operation, indication of charge and discharge, indication of fault		
	LCD display	output voltage, output current, grid voltage, grid current, voltage of storage battery, load power, chart of capacity		
	Protection Function	Input LV protection		
		Input OV protection		
		Output overload protection		
Output Short Circuit Protection				
MECHANICAL SPECIFICATIONS	Mounting	Wall mounted		
	Machine Dimensions (W*H*D)(mm)	337*462*183mm	337*462*183mm	370*462*183mm
	Package Dimensions (W*H*D)(mm)	476*602*325mm	476*602*325mm	476*602*325mm
	Net Weight (kg)	25	29.5	35
	Gross Weight (kg)	30.3	33	38.5
	Communication terminal	RS485 / CAN bus		
OTHER	Operation Temperature Range	-25°C ~ +50°C		
	Environmental Protection Rating	Indoor(IP20)		
	Ambient humidity	0 ~ 90% relative humidity(non-condensing)		
	Altitude	≤3000m		

* Product specifications are subject to change without further notice.

Approximate Back-up Time Table

Model	Load (W)	Backup Time@48V 100Ah(min)	Backup Time@48V 200Ah(min)
2KW	200	1270	2541
	1000	208	488
	2000	82	203
3KW	300	847	1694
	1500	123	315
	3000	50	123
4KW	400	614	1281
	2000	89	205
	4000	38	89