

Low Frequency On/Off Grid Hybrid Solar Inverter

PH3000 Series (3KW-4KW)



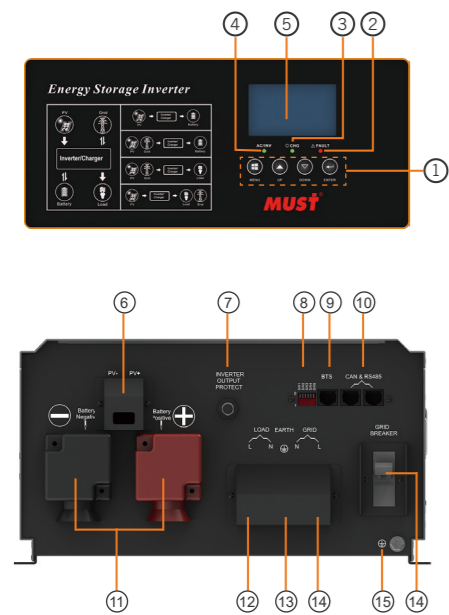
**Features**

- Rated power 3KW to 4KW
- Smart LCD setting(Working modes, Charge Current, Charge Voltage, etc.)
- 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

**Introduction**

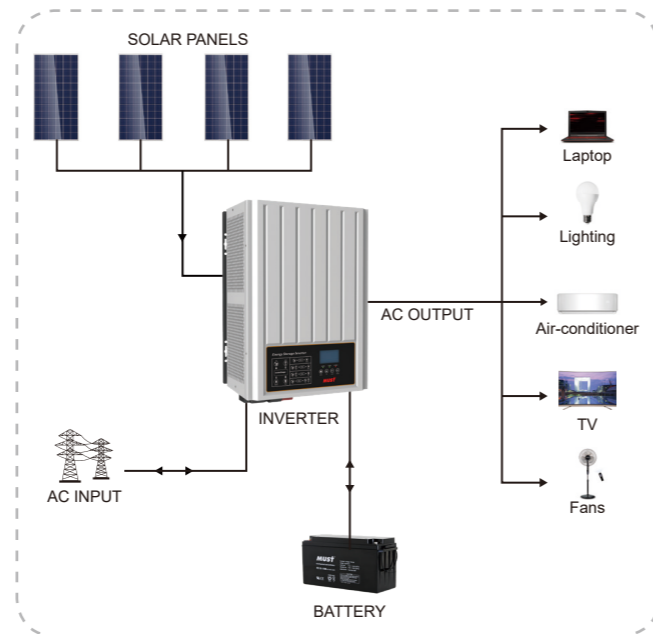
PH3000 series Energy Storage Inverter has capacity of 3KW and 4KW, it is multi-functional, combining functions of inverter, On-Grid, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

**Back panel printing description**



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

**Solar system connection**



**Specification**

MODEL	PH30-3048	PH30-4048	
Nominal Battery System Voltage	48VDC		
INVERTER OUTPUT	Rated capacity	3750VA	5000VA
	Rated output power	3000W	4000W
	Rated output voltage and frequency	230Vac / 50Hz or 60Hz	
	Rated output current	13A	17.4A
	Output voltage precision	230Vac ± 1%	
	Output frequency precision	50Hz ± 0.1%	
	THD (Linvar loads)	Off grid ≤ 2%	
		Grid discharge ≤ 3%	
		Grid charge ≤ 3%	
	Dynamic response speed	20ms	
	Power factor	Grid discharge 99.9% & Grid charge 99.9%	
	Overload capability	30 minutes @ 100%<load≤110%	
		1 minutes @ 100%<load≤125%	
		30 seconds @ 125%<load≤150%	
10 seconds @ 150%<load≤200%			
5 seconds @ load>200%			
Grid / Off grid change time	5 seconds @ short circuit		
Output wave	Sine wave		
AC INPUT	Inverting efficiency 80% resistive loads	≥93%	≥93%
	AC input maximum current	26A	34.8A
	Acceptable input voltage range	Defaults 186Vac ~253Vac; Narrow 174Vac ~272Vac; Wide 95Vac ~272Vac	
BATTERY	AC Input frequency	47.5Hz ~ 51.5Hz	
	Rated input voltage	48VDC	
	Allowed input DC voltage range	40VDC~62VDC	
SOLAR CHARGER & AC CHARGER	Low voltage alarm	42VDC	
	High voltage alarm	60VDC	
	PV Open Circuit Voltage	145VDC	
DISPLAY & PROTECTION FUNCTION	Max Solar Charging Current	60A	60A
	Max AC Charging Current	60A	80A
	LED indication	Systematic operation, indication of charge and discharge, indication of fault	
MECHANICAL SPECIFICATIONS	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	
OTHER	Output short circuit Protection		
	Mounting	Wall mounted	
	Machine Dimensions (W*H*D)(mm)	337*462*183mm	370*462*183
	Package Dimensions (W*H*D)(mm)	476*602*325mm	476*602*325mm
	Net Weight (kg)	29.5	35
Communication terminal	Gross Weight (kg)	33	38.5
	RS485 / CAN bus		
	Operation Temperature Range		
OTHER	0°C~ +50°C		
	Environmental Protection Rating		
	Indoor(IP20)		
Ambient humidity	0~90% relative humidity (non-condensing)		
Altitude	≤3000m		

The technical specifications of this document are subject to change without any notice