


# ON/OFF Grid High frequency Hybrid Solar Inverter

## PH1000 PRO Series (5KW)



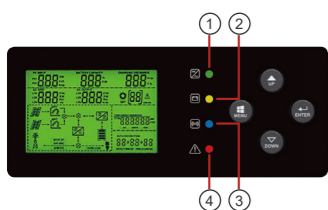
**Features**

- Wide range of MPPT voltage:120-550V
- Multiple operation modes: Grid-tie,off grid and grid-tie with back up
- Support LCD display&Smart LCD setting
- Available Export control CT sensor function
- Multiple communications:USB,RS485,GPRS and wifi etc
- Monitoring inverters freely via computers or mobile phones
- Full protection function:Over-voltage,over-frequency, over-current, over-temperature,and AC short-circuit automatic protection
- Intelligent BMS battery management function
- Fanless low-noise design
- IP65 Dust-proof and water-proof

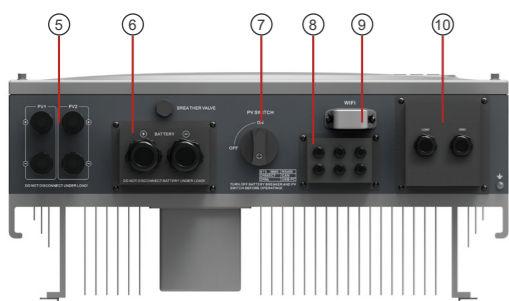
### Introduction

This is a flexible and intelligent energy storage solar inverter with a wide range of MPPT Voltage. Combining functions of off grid and on grid. This hybrid solar inverter can power all kinds of appliances in home or office, and can also be used in power stations.

### Back panel printing description

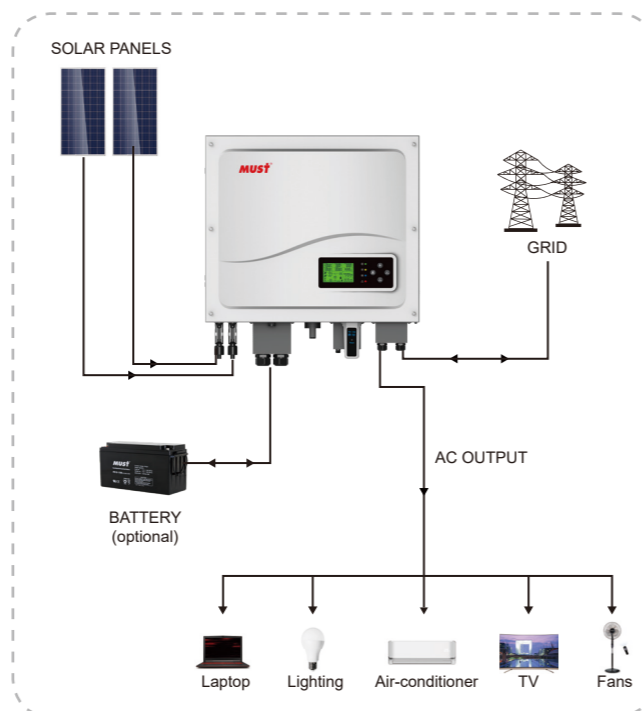


1. The inverter operation status indicator
2. Battery indicator
3. WiFi status indicator
4. Fault indicator



5. PV input terminals
6. Battery input terminals and cover
7. PV input switch
8. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
9. Wi-Fi comodule
- 10.AC output terminals and cover

### Solar system connection



### Specification

MODEL	PH10-5048PRO	
RATED POWER(W)		
	5000	
Nominal Battery System Voltage		
	48	
PV INPUT(DC)	Maximum recommended DC power(W)	7000
	Nominal DC operating voltage(V)	360
	Maximum DC voltage(V)	550
	MPPT voltage range(V)	120~550
	Maximum input current(A)	13 / 13
	Maximum short circuit current(A)	15 / 15
	No.of MPP tracker	2
	Strings per MPP tracker	1
INVERTER OUTPUT(AC)	Nominal AC output power(W)	5000
	Nominal output voltage(V);range(V)	220/230/240;180-280
	AC grid frequency(Hz);range(Hz)	50/60;45~55/55-65
	Nominal output current(A)	21.8
	Maximum output current(A)	22.8
	Total harmonic distortion i(THDi)	<3%
	Power factor at rated power	1
	Displacement power factor	0.8leading ~ 0.8lagging
BATTERY MODE OUTPUT(AC)	Output Rated Power	3680
	Nominal output voltage(V);accuracy range	230±1%
	Output ferequency(Hz);accuracy range	50/60(optional)±0.2%
	Output rated current(A)	15
	Output waveform	Pure sine wave
	Total harmonic distortion v (linear load)	<3%
BATTERY & CHARGER	Battery type	Lead-acid battery / Lithium battery
	Battery voltage(V)	48
	Battery voltage range(V)	40~60
	Charging curve	3-stage adaptive with maintenance
	Over-current protection / Over-temperature protection	Yes / Yes
	Maximum charging/discharging power(W)	4000
Maximum charging/discharging current(A)	80 / 80	
EFFICIENCY	Maximum efficiency	97.3%
	Euro-efficiency	96.8%
	MPPT efficiency	99.9%
PROTECTION DEVICES	DC switch rating for each MPPT	Yes
	Grid monitoring	Yes
	Output over current protection	Yes
	Output overvoltage protection-varistor	Yes
	Ground fault monitoring	Yes
	Integrated all-pole sensitive leakage current	Yes
GENERAL	Dimension(W/H/D)(mm)	480*420*215
	Net weight (kg)	27
	DC connection	H4 / MC4
	AC connection	Terminal Block
	Display	LED+LCD
	Communication interfaces	Wi-Fi / USB / GPRS / RS485
	Ingress protection rating	IP65
	Humidity	0~95% RH(No condensing)
	Operating temperature range	-20°C +60°C With derating above 45°C
	Cooling concept	Natural
Altitude	<3000m	

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