



# PH1000 SERIES (3.6-5KW)

ON/OFF grid high frequency hybrid solar inverter

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**MUST<sup>®</sup>**

# MUST®

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### INTRODUCTION

This is a flexibly and intelligent energy storage solar inverter with 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, also can use in power station.

### 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



Hybrid Mode



Smart LCD setting



Programmable



IP65 Dust-Proof&water Proof



MPPT Voltage



APP



Quiet



Lithium battery optional



## WIFI COMMUNICATION

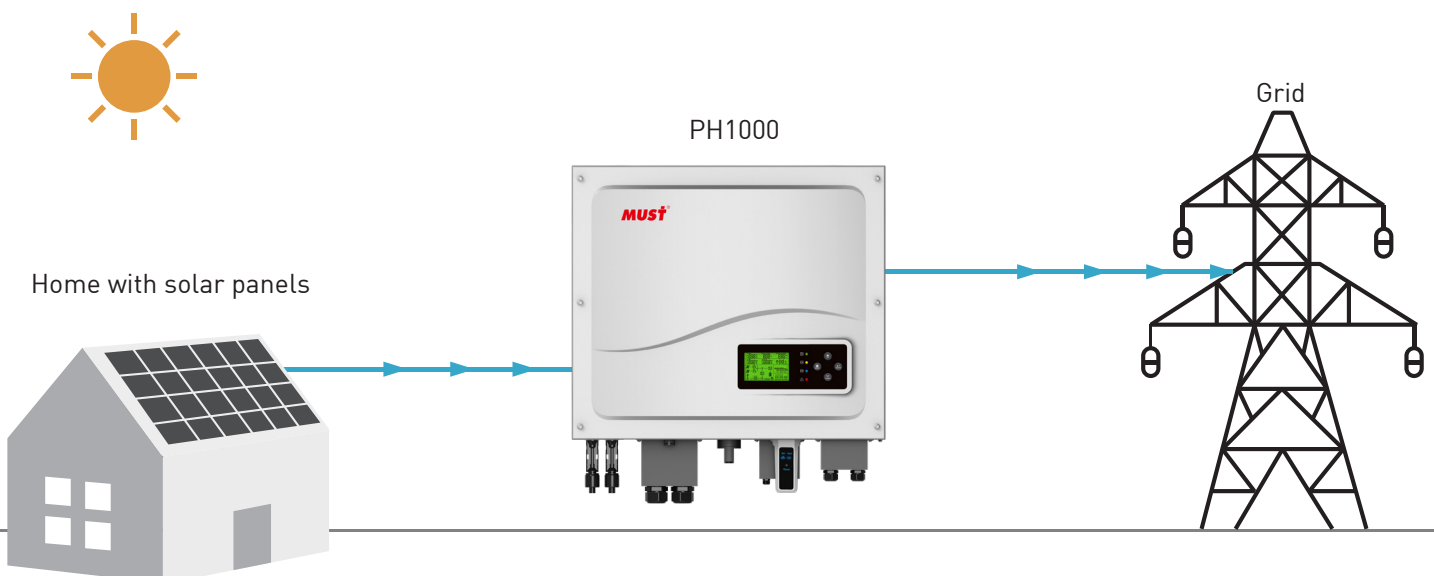
You can download this app on your cellphone and monitor the whole system, you will know how much electricity the system generate and sell to utility.

## SAVE ELECTRICITY BILL

It is hybrid energy storage inverter, can feed power into grid, to use free solar power help you save electricity bill. Besides, this inverter has the Export control CT sensor function, which makes more easier for inverter to limit the power to sell when in on grid mode.

## Solar Inverter System Connection:

Inverter + Battery + Solar Panels + Grid + Application Loads



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MODEL		PH10-3648A	PH10-4248A	PH10-4648A	PH10-5048A
RATED POWER(W)		3600	4200	4600	5000
Nominal Battery System Voltage		48	48	48	48
PV INPUT(DC)	Maximum recommended DC power(W)	4100	4800	5300	5750
	Nominal DC operating voltage(V)	360			
	Maximum DC voltage(V)	580			
	MPPT voltage range(V)	120~550			
	Maximum input current(A)	11/11			
	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)	3600	4200	4600	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)	15.7	18.3	20.0	21.8
	Maximum output current(A)	16.4	19.1	21.0	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	2300			
	Nominal output voltage(V);accuracy range	230±1%			
	Output ferequency(Hz);accuracy range	50/60(optional)±0.2%			
	Output rated current(A)	10			
	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)	2500 / 2500			
	Maximum charging/diacharging currenrnt(A)	50 / 50			
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)	25	25	27	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	<2000m			