MUST
Solar Power System

ON/OFF GRID HYBRID SOLAR INVERTER

PH3000 Series

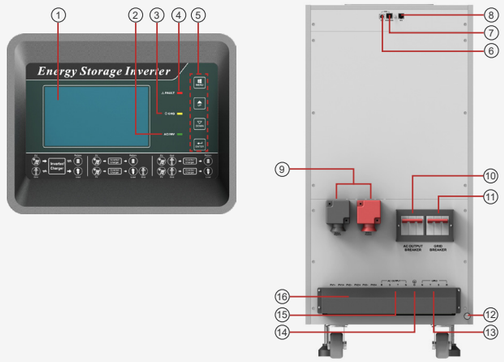
10~12KW | Three-phase | 380VAC | Low Frequency



This model PH3000 Three-phase is a flexible and intelligent energy storage inverter which utilizes solar power, utility power, and battery power source to supply continuous power. This is a multi-functional hybrid inverter which can power all kinds of appliances in home or office environment, including motor-type appliances such as tube light, fan, refrigerator and air conditioner.
The system generates electricity when it has sufficient sunshine, supplying power to your home and feeding any surplus power back to the Grid.

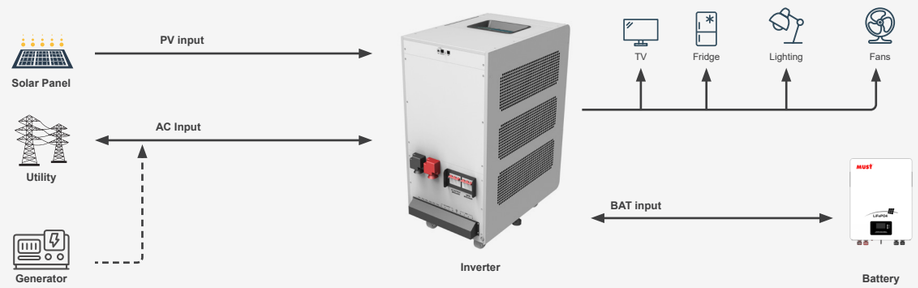
- Rated power 10KW to 12KW
- Smart LCD setting(Working modes, Charge Current, Charge Voltage, etc.)
- Built-in MPPT 180A solar charge controller
- MPPT Efficiency max 98%
- Combining solar system, AC utility, and battery power source to supply continuous power
- Multiple operations: basic Grid-tie, Off-Grid, Grid-Interactive
- Support CAN, RS485 monitoring function

Back panel description



1. LCD Display
2. Status Indicator
3. Charging Indicator
4. Fault Indicator
5. Function Buttons
6. USB commnuication port
7. CAN/RS485 communication
8. BTS
9. Battery input
10. AC output breaker
11. Grid breaker
12. Grounding
13. Grid
14. Grounding
15. AC output
16. PV input

Solar system connection



MODEL	PH30-10048-T	PH30-12048-T
Nominal Battery System Voltage	48VDC	
INVERTER OUTPUT		
Rated output power	10000W	12000W
Output wave	Pure sine wave	
Nominal output voltage	230 VAC (P-N) / 400 VAC (P-P)	
Nominal output current	14.3A per phase	17.4A per phase
Nominal output frequency	50 Hz / 60 Hz	
Rate of wave distortion(THD)(Linearity loads)	Off grid≤2%; Grid discharge ≤3%; Grid charge ≤3%	
Peak efficiency	≥93%	
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	
AC INPUT		
AC input maximum current	26.0A per phase	34.8A per phase
Nominal frequency	50Hz / 60Hz	
Acceptable input voltage range	Defaults 186Vac ~253Vac per phase;Narrow 174Vac ~272Vac per phase; Wide 95Vac ~272Vac per phase	
BATTERY		
Type of Battery	Lithium battery or lead-acid battery	
Nominal Voltage	48VDC	
Low Voltage Protection Point	Charger 34.0VDC; Inverter 40.0VDC	
Absorption Voltage	50.0VDC	
Refloat Voltage	54.8VDC	
Float Voltage	57.2VDC	
SOLAR CHARGER & AC CHARGER		
PV Open Circuit Voltage	145VDC	
Max Solar Charging Current	60A per channel	
Max AC Charging Current	60A per phase	80A per phase
Max Charging Current	120A per phase	140A per phase
MECHANICAL SPECIFICATIONS		
Mounting	Vertical	
Machine Dimension (W*H*D)(mm)	392*828*629	
Package Dimension (W*H*D)(mm)	513*1031*700	
N.W(kg)	128	140
G.W(kg)	133	160
OTHER		
Communication terminal	RS485 / CAN bus	
Operation Temperature Range	0°C ~ +50°C	
Environmental Protection Rating	IP20	
Ambient humidity	0 -- 90% relative humidity (non-condensing)	
Altitude	≤2000m	
CERTIFICATION & STANDARDS		

EN IEC62368-1
CE-LVD (EN IEC62109-1, EN IEC62109-2)
Rohs-(2011/65/EUand2015/863/EU)
CE-LVD (BS IEC62109-1:2010, BS EN IEC62109-2:2011)
UKCA

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