

# ON/OFF Grid High Frequency Hybrid Solar Inverter

## PH1100 PRO Series (5KW)



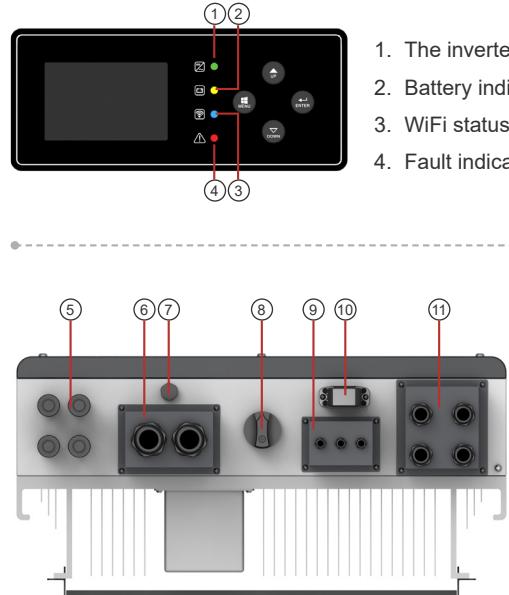
### Features

- Wide range of MPPT voltage:120-500V
- Multiple operation modes: Grid-tie, off grid with storage backup
- 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

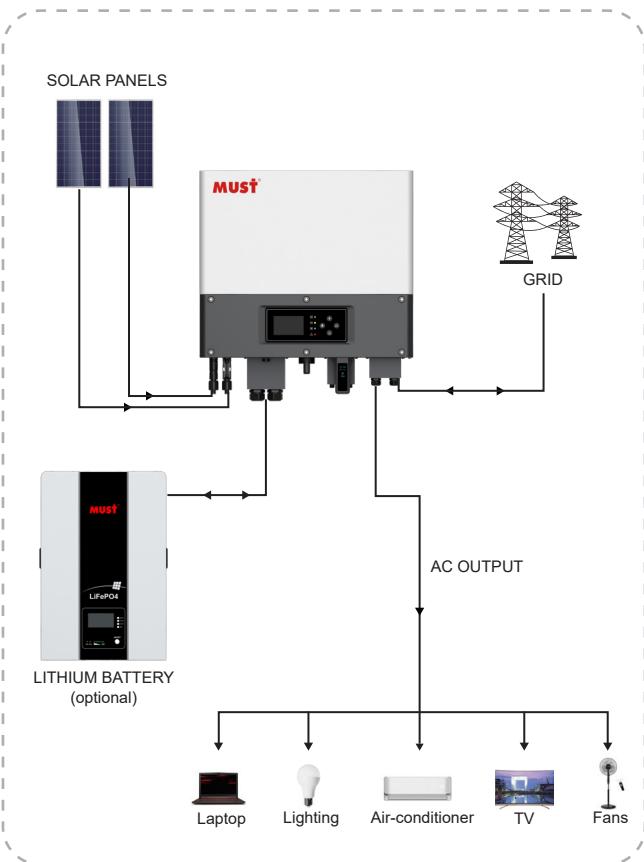
This is a flexible and intelligent energy storage solar inverter with a wide range of MPPT Voltage. Combining functions of off grid and on grid. This hybrid solar inverter can power all kinds of appliances in home or office, and can also be used in power stations.

### 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. Breather valve
8. PV input switch
9. BTS terminals, BMS terminals, load monitor terminals, dry contact terminals, CAN communication terminals, USB terminal and cover
10. WiFi module
11. AC output terminals and cover

### Solar system connection



## Specification

| MODEL                                     |   | PH11-4048 PRO                        | PH11-5048PRO | PH11-6048 PRO |
|---|---|--------------------------------------|--------------|---------------|
| RATED POWER(W)                            |   | 4000                                 | 5000         | 6000          |
| Nominal Battery System Voltage            |   | 48                                   |              |               |
| PV INPUT(DC)                              | Maximum recommended DC power(W)                       | 5000                                 | 6000         | 7000          |
|   | Nominal DC operating voltage(V)                       | 360                                  |              |               |
|   | Maximum DC voltage(V)                                 | 500                                  |              |               |
|   | MPPT voltage range(V)                                 | 168~500                              | 200~500      | 235~500       |
|   | Maximum input current(A)                              | 15 / 15                              |              |               |
|   | No.of MPP tracker                                     | 2                                    |              |               |
| Strings per MPP tracker                   |   | 1                                    |              |               |
| INVERTER OUTPUT(AC)                       | Nominal AC output power(W)                            | 4000                                 | 5000         | 6000          |
|   | 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)                             | 17.5                                 | 21.7         | 26            |
|   | Maximum output current(A)                             | 18.1                                 | 22.7         | 27.2          |
|   | Inrush current (spike/duration)                       | 57.5A/5.2us                          |              |               |
|   | Total harmonic distortion i(THDi)                     | <3%                                  |              |               |
|   | Power factor at rated power                           | 1                                    |              |               |
|   | Displacement power factor                             | 0.8leading ~ 0.8lagging              |              |               |
| Grid type                                 |   | Single phase                         |              |               |
| BATTERY MODE OUTPUT(AC)                   | Output Rated Power                                    | 4000                                 | 5000         | 6000          |
|   | Nominal output voltage(V);accuracy range              | 230±1%                               |              |               |
|   | Output ferequency(Hz);accuracy range                  | 50/60(optional)±0.2%                 |              |               |
|   | Output rated current(A)                               | 17.5                                 | 21.7         | 26            |
|   | Output waveform                                       | Pure sine wave                       |              |               |
|   | Peak power(A)   | 6000,10s                             | 7500,10s     | 9000,10s      |
| 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 power(W)                             | 4000                                 | 5000         | 6000          |
|   | Maximum charging currenrt(A)                          | 85                                   | 100          | 125           |
| EFFICIENCY                                | Maximum efficiency                                    | 97.1%                                |              |               |
|   | Euro-efficiency                                       | 96.5%                                |              |               |
|   | MPPT efficiency                                       | 99.8%                                |              |               |
| 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 codensing)               |              |               |
|   | 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