


# High Frequency Off Grid Solar Inverter

## PV1800 VHM Series (2KW-5.5KW/145V)



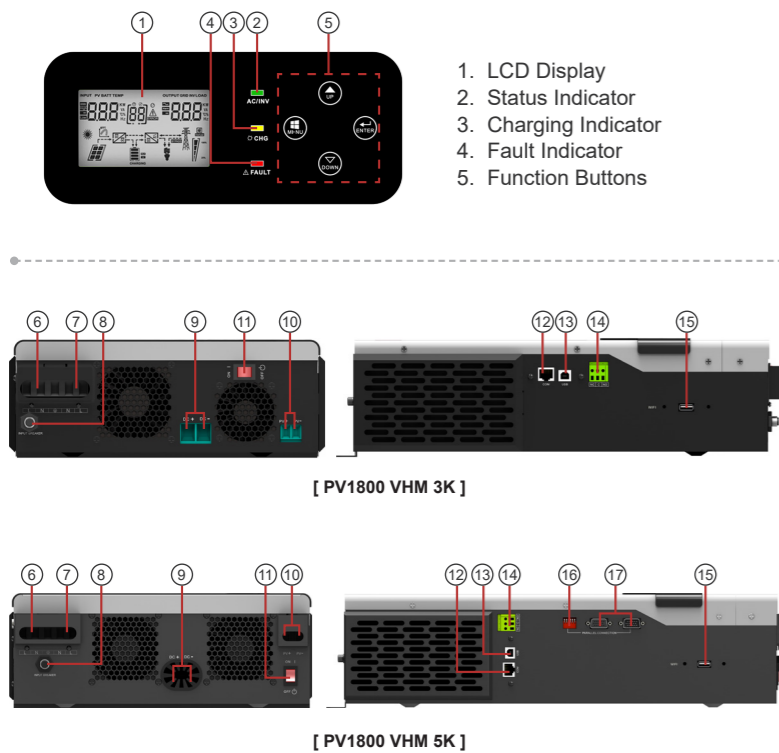
### Features

- Rated power : 2KW -5.5KW
- Pure sine wave solar inverter
- Output power factor 1
- Built-in 80A MPPT solar charger
- Built-in anti-dust kit for harsh environment
- Support parallel operation up to 3 units (available for 3KW-5.5KW 48V)
- WIFI remote monitoring (optional)
- Compatible to generator

### Introduction

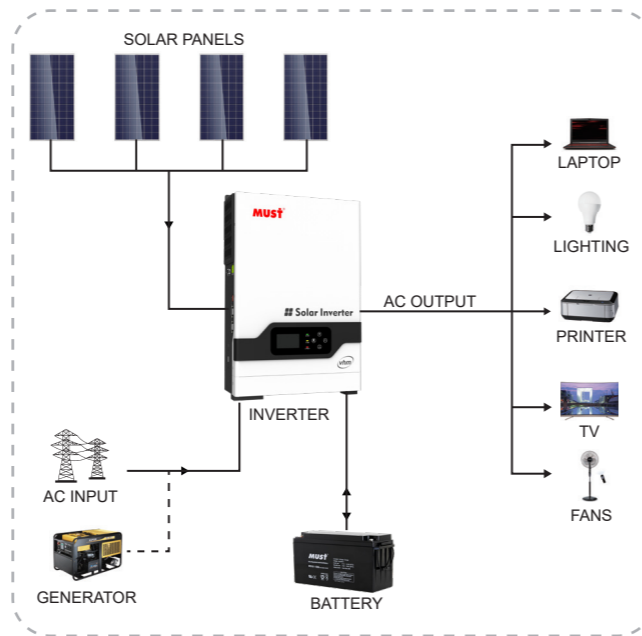
PV1800 VHM is a multi-functional inverter/charger, combining functions of inverter, solar charger and battery charger to offer uninterruptible power support in portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

### Back panel printing description



- |                         |   |
|-------------------------|---|
| 6. AC input             | 12. RS-485 Communication port                             |
| 7. AC output            | 13. USB   |
| 8. Circuit breaker      | 14. Dry contact   |
| 9. Battery input        | 15. USB wifi  |
| 10. PV input            | 16. Parallel switch (only for parallel model)             |
| 11. Power on/off switch | 17. Parallel communication port (only for parallel model) |

### Solar system connection



### Specification

| MODEL                          |                                       | PV18-2024 VHM  | PV18-3024 VHM | PV18-3048 VHM | PV18-4048 VHM | PV18-5048 VHM | PV18-5548 VHM |
|--------------------------------|---------------------------------------|--|---------------|---------------|---------------|---------------|---------------|
| Nominal Battery System Voltage |                                       | 24VDC  |               |               | 48VDC         |               |               |
| INVERTER OUTPUT                | Rated Power                           | 2000W  | 3000W         | 3000W         | 4000W         | 5000W         | 5500W         |
|                                | Surge Power                           | 4000W  | 6000W         | 6000W         | 8000W         | 10000W        | 11000W        |
|                                | Waveform                              | Pure Sine Wave   |               |               |               |               |               |
|                                | AC Voltage Regulation (Batt.Mode)     | (220VAC~240VAC)±5%                                     |               |               |               |               |               |
|                                | Inverter Efficiency(Peak)             | 93%  |               |               |               |               |               |
|                                | Transfer Time                         | 10ms (UPS / VDE4105) 20ms (APL)                        |               |               |               |               |               |
| AC INPUT                       | Voltage                               | 230VAC   |               |               |               |               |               |
|                                | Selectable Voltage Range              | 170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE4105) |               |               |               |               |               |
|                                | Frequency Range                       | 50Hz / 60Hz(Auto sensing)                              |               |               |               |               |               |
| BATTERY                        | Normal Voltage                        | 24VDC  |               |               | 48VDC         |               |               |
|                                | Floating Charge Voltage               | 27.4VDC  |               |               | 54.8VDC       |               |               |
|                                | Overcharge Protection                 | 30VDC  |               |               | 60VDC         |               |               |
| SOLAR CHARGER & AC CHARGER     | Maximum PV Array Open Circuit Voltage | 145VDC   |               |               |               |               |               |
|                                | PV Array MPPT Voltage Range           | 30~130VDC  |               |               | 60~130VDC     |               |               |
|                                | Standby Power Consumption             | 2W   |               |               |               |               |               |
|                                | PV Input Power                        | 2000W  |               |               | 4000W         |               |               |
|                                | Maximum Solar Charge Current          | 80A  |               |               |               |               |               |
|                                | Maximum Efficiency                    | 98%  |               |               |               |               |               |
|                                | Maximum AC Charge Current             | 20A/30A  |               |               | 60A           |               |               |
| Maximum Charge Current         | 80A                                   |  |               | 140A          |               |               |               |
| MECHANICAL SPECIFICATIONS      | Machine Dimension (W*H*D)             | 300*414*116mm  |               |               | 329*485*134mm |               |               |
|                                | Package Dimension (W*H*D)             | /  |               |               | /             |               |               |
|                                | G.W (kg)                              | /  |               |               | /             |               |               |
|                                | N.W (kg)                              | /  |               |               | /             |               |               |
| OTHER                          | Humidity                              | 5% to 95% Relatly Humidity (Non-condensing)            |               |               |               |               |               |
|                                | Operating Temperature                 | 0°C~50°C   |               |               |               |               |               |
|                                | Storage Temperature                   | -15°C ~60°C  |               |               |               |               |               |