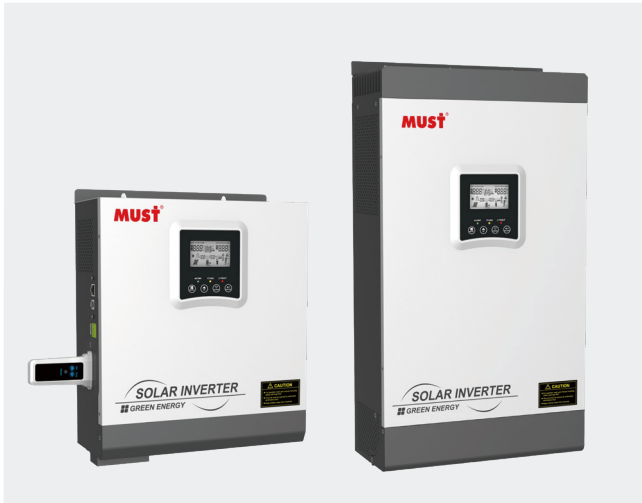


High frequency solar inverter with MPPT inside

PV1800 VPM Series (1-5KW)



Features

- Rated power: 1-5KW
- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built in MPPT 60A\80A solar charge controller
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support USB, RS485 monitoring function with free CD
- WIFI remote monitoring (optional)
- Compatible to generator
- Support parallel operation up to 3 units (available for 3KW-5KW 48V)

Introduction

This is a multi-function inverter/charger, combining functions of inverter, MPPT 60A/80A solar charger and battery charger to offer uninterruptible power support with 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



1. LCD Display

2. Status Indicator

3. Charging Indicator

4. Fault Indicator

5. Funtion Buttons

6. AC Input

7. AC Output

8. RS-485 Communication port

9. USB

10. Dry Contact

11. PV Input

12. Power On/Off Switch

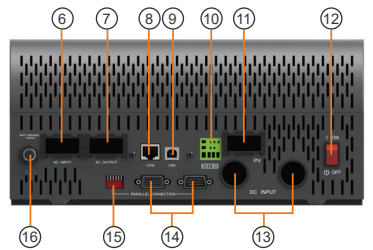
13. Battery Input

14. Parallel communication port (only for parallel model)

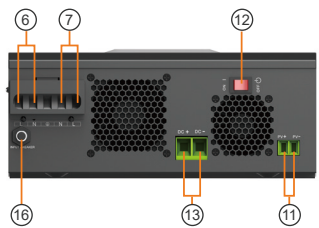
15. Parallel switch

16. Circuit breaker

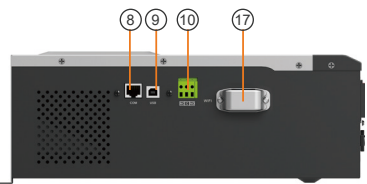
17. USB WiFi



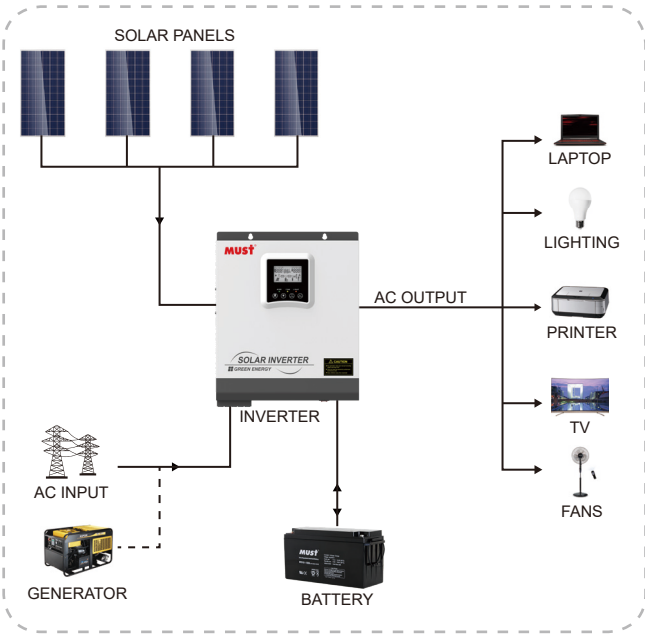
(4-5KW)



(2-3KW)



Solar system connection



Specification

| MODEL                                |                                       | PV18-1012<br>VPM                                   | PV18-2024<br>VPM | PV18-3024<br>VPM | PV18-3048<br>VPM | PV18-4048<br>VPM | PV18-5048<br>VPM |
|--------------------------------------|---------------------------------------|----------------------------------------------------|------------------|------------------|------------------|------------------|------------------|
| Default Battery System Voltage       |                                       | 12VDC                                              | 24VDC            |                  | 48VDC            |                  |                  |
| INVERTER<br>OUTPUT                   | Rated Power                           | 1000VA \ 1000W                                     | 2000VA \ 2000W   | 3000VA \ 3000W   | 3000VA \ 3000W   | 4000VA \ 4000W   | 5000VA \ 5000W   |
|                                      | Surge Power                           | 2000VA                                             | 4000VA           | 6000VA           | 6000VA           | 8000VA           | 10000VA          |
|                                      | Waveform                              | Pure sine wave                                     |                  |                  |                  |                  |                  |
|                                      | AC Voltage Regulation (Batt.Mode)     | 220VAC~240VAC(Setting)                             |                  |                  |                  |                  |                  |
|                                      | Inverter Efficiency(Peak)             | 90%~93%                                            |                  |                  |                  |                  |                  |
|                                      | Transfer Time                         | 10ms(UPS \ VDE4105) \ 20ms(APL)                    |                  |                  |                  |                  |                  |
| AC INPUT                             | Voltage                               | 230VAC                                             |                  |                  |                  |                  |                  |
|                                      | Selectable Voltage Range              | 170~280VAC(UPS) \ 90~280VAC(APL) \ 184~253VAC(VDE) |                  |                  |                  |                  |                  |
|                                      | Frequency Range                       | 50Hz \ 60Hz (Auto sensing)                         |                  |                  |                  |                  |                  |
| BATTERY                              | Normal voltage                        | 12VDC                                              | 24VDC            |                  | 48VDC            |                  |                  |
|                                      | Floating Charge Voltage               | 13.7VDC                                            | 27.4VDC          |                  | 54.8VDC          |                  |                  |
|                                      | Overcharge Protection                 | 15VDC                                              | 30VDC            |                  | 60VDC            |                  |                  |
| SOLAR<br>CHARGER<br>& AC<br>CHARGER" | Maximum PV Array Open Circuit Voltage | 60VDC                                              | 145VDC           |                  | 145VDC           |                  |                  |
|                                      | PV Array MPPT Voltage Range           | 15~60VDC                                           | 30~120VDC        |                  | 60~130VDC        |                  |                  |
|                                      | Standby Power Consumption             | 2W                                                 |                  |                  |                  |                  |                  |
|                                      | Maximum PV Array Power                | 625W                                               | 1500W            |                  | 4000W            |                  |                  |
|                                      | Maximum Solar Charge Current          | 60A                                                |                  |                  | 80A              |                  |                  |
|                                      | Maximum Efficiency                    | 98%                                                |                  |                  |                  |                  |                  |
|                                      | Maximum AC Charge Current             | 10A or 20A                                         | 20A or 30A       |                  | 60A              |                  |                  |
|                                      | Maximum Charge Current                | 70A                                                | 80A              |                  | 140A             |                  |                  |
| MECHANICAL<br>SPECIFICATIONS         | Machine Dimensions (W*H*D)(mm)        | 225*355*92                                         | 272*355*100      |                  | 297.5*468*125    |                  |                  |
|                                      | Package Dimensions (W*H*D)(mm)        | 410*300*78                                         | 485*393*251      |                  | 638*395*241      |                  |                  |
|                                      | Net Weight(kg)                        | 5                                                  | 7.4              |                  | 14               |                  |                  |
|                                      | Gross Weight(kg)                      | 5.5                                                | 9.5              |                  | 16.4             |                  |                  |
| OTHER                                | Humidity                              | 5% to 95% Relativ Humidity (Non-condensing)        |                  |                  |                  |                  |                  |
|                                      | Operating Temperature                 | 0°C~55°C                                           |                  |                  |                  |                  |                  |
|                                      | Storage Temperature                   | -15°C -60°C                                        |                  |                  |                  |                  |                  |