


Low Frequency Off Grid Solar Inverter

PV2000 PK Series (1KVA-2KVA)



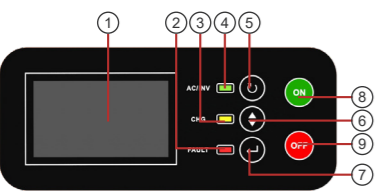
Features

- Pure sine wave output
- Built-in 50A PWM solar charge controller
- Smart LCD setting (frequency , charge voltage, charge current, etc).
- Overload and short-circuit protection
- Deep discharge protection
- Cold start function
- Support USB/RS232 monitoring function

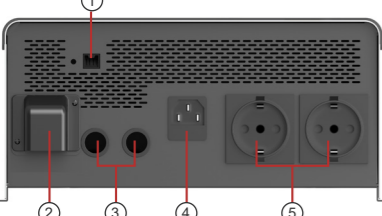
Introduction

PV2000 PK built-in high efficiency solar controller. AC input voltage range for 140VAC-280VAC with regulated output (AVR) features, PV, AC function, A tracking feature such as power frequency. The output frequency can be set using the keys, AC /PV charging voltage, charge current, AC or PV priority mode, Battery under voltage shut-down point, and so many other functions.

Back panel printing description

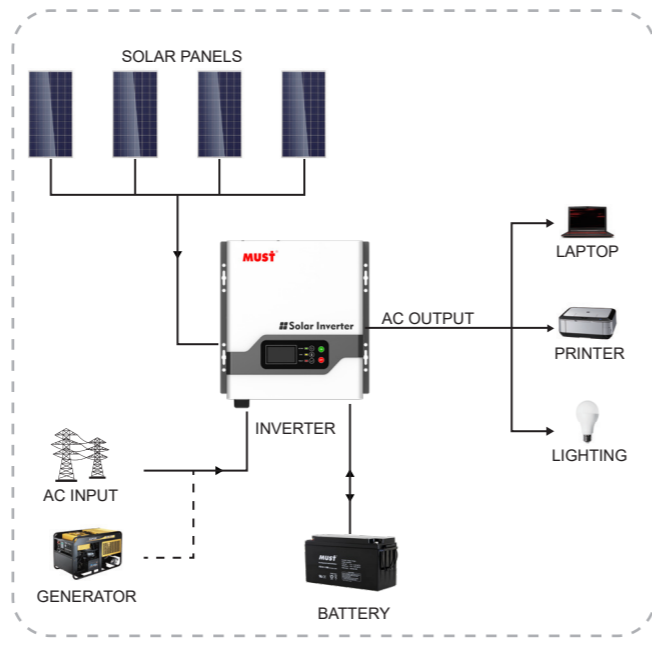


1. LCD display
2. Fault LED
3. Charge LED
4. AC/Inverter LED
5. ESC
6. SEL
7. ENTER
8. POWER ON
9. POWER OFF



1. USB
2. PV Input
3. Battery Input
4. AC Input
5. AC Output

Solar system connection



Specification

| MODEL | PV20-1012 PK | PV20-1512 PK | PV20-2024 PK | |
|------------------------------|---------------------------------------|---|---|----------------------|
| Battery Input Voltage Rating | 12VDC | | 24VDC | |
| INVERTER OUTPUT | Rated Power | 1000VA 700W | 1500VA 900W | 2000VA 1200W |
| | Instantaneous Power Drawn | 2100VA | 2700VA | 3600VA |
| | Output Waveform | Pure sine wave | | |
| | Output Voltage | Inverter mode: 230VAC(±5% RMS), AVR mode: 200VAC-240VAC 220VAC(±5% RMS) | | |
| | Output Power Factor | 0.7 | 0.6 | |
| | Output Frequency | 50Hz/60Hz ±0.2 Hz | | |
| | Inverting Efficiency (peak) | >85% | | |
| | Mains Mode Efficiency | > 95% | | |
| | Transfer Time | Typical 2~6ms 10ms(max) | | |
| | AC INPUT | Input Voltage | 220/230VAC | |
| Input Voltage Range | | 140~280VAC±5% | | |
| Low Pressure Shutdown | | 140VAC±5% | | |
| High Pressure Shutdown | | 280VAC±5% | | |
| Low Frequency Shutdown | | 45±0.2Hz(50Hz) | | |
| | | 55±0.2Hz(60Hz) | | |
| High Frequency Shutdown | | 55±0.2Hz(50Hz) | | |
| | | 65±0.2Hz(60Hz) | | |
| Frequency Range | 50Hz/60Hz ±0.2HZ | | | |
| BATTERY | Minimum Start Voltage | Battery under voltage shut-down point +0.5V | Battery under voltage shut-down point +1.0V | |
| | Low Battery Alarm | Battery under voltage shut-down point +0.5V | Battery under voltage shut-down point +1.0V | |
| | Low Battery Shutdown | (0.1V / 10-12.0VDC mode) User set | (0.2V / 20.0-24.0VDC mode) User set | |
| | Battery High Voltage Alarm | Average Charge Voltage+1V | Average Charge Voltage +2V | |
| AC CHARGER | Float Voltage | 13.5 / 13.6 / 13.7VDC to set | 27.0 27.2 27.4VDC to set | |
| | Average Charge Voltage | (0.1V each click , 13.8~14.5V mode) User set | (0.2V each click , 27.6~29V mode) User set | |
| | Maximum Charge Current | 20A±2A | 25A±2A | 15A±2A |
| BYPASS & PROTECTION | Input Frequency | 50Hz / 60Hz | | |
| | Low Frequency Switching | 45±1Hz | | |
| | High Frequency Switching | 65±1Hz | | |
| | Overload Protection | 110%~125%R load fault after 60s 125% ~150%R load fault after 3s >150%R load fault after 500ms | | |
| | Output Short Circuit Protection | Yes | | |
| | Bypass Circuit Breaker Insurance | 10A | | |
| | Maximum Current Bypass | 10A | 10A | |
| SOLAR CHARGER | Maximum PV Charge Current | 50A±5A | | |
| | Battery Voltage | 12VDC | 24VDC | |
| | Maximum PV Array Power | 150W*5 solar panels | | 150W*10 solar panels |
| | Maximum PV Array Open Circuit Voltage | 55Vdc | | 70Vdc |
| | Maximum Efficiency | > 95% | | |
| | Standby Consumption | <2W | | |
| MECHANICAL SPECIFICATIONS | Assembly | Wall mount | | |
| | Dimension (W*H*D) (mm) | 300.5*319*132.2 | | |
| | Package Dimensions (W*H*D) | / | | |
| OTHER | Working Environment | 0°C~40°C 0~90% Relative humidity (non-condensing) | | |
| | Noise | Less than 60db | | |
| | Display | LED + LCD | | |

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