PV3000 MPK series (1KW-6KW)

Low Frequency Off Grid Solar Inverter

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PV3000 MPK series is a multi-function inverter, combining functions of inverter and mppt solar charger controller, solar charger and battery charger to offer uninterruptible power support with portable size. The comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and selectable input voltage based on different applications.

**FEATURES**

- LCD display, easy to read how inverter operates on LCD screen
- Compatible to generator
- 5 -levels DIP switch, offering customized performance
- 9 - levels battery selector, Enable to charge Gel, lead-acid battery
- DC(Solar)/AC prority optional
- 4 levels charge current adjustable
- With RS232 communication port
- With BTS & GTS, optimizing battery performance & start generator automatically
- Power saver Switch, Enable to minimize standby consumption

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**Specifications**

**Rated power**

- 1KW-6KW

**Battery Voltage**

- 12V, 24V, 48V

**Wide AC input range**

- 155-272Vac / 96-132Vac

**Wide frequency**

- 40Hz-80Hz

**3 times surge power**

- Based on capacity 1KW-6KW

**Pure copper UI transformer**

**Battery smart charge design**

**Multi protection**
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REMOTE CONTROL
Control with a wired remote control panel
The remote control is particularly suitable when the power-source manager is installed behind a casing or in a place that prevents you from accessing the device. The remote control allows you to switch the power saving mode on/off easily.
* Please note that remote control panel is optional, not included in inverter package.

PV3000 MPK SERIES INTELLIGENT WORKING MODE
Off grid tie with backup system is intelligent to run your house, it generates electricity when the sun is shining, and supplies power to your house applications to reduce your electric bill. However, the PV energy system continues to operate during grid tie outage. The batteries provide quiet, uninterrupted back-up power for loads such as refrigerators, lights, pumps, and computers, while your PV array continues to produce power and charge the batteries during the day. When the grid is restored, the inverter/chargers help recharge the batteries to their full state of charge while the grid powers all AC loads. Once the batteries are recharged, the system returns to normal operation.

Solar Inverter System Connection:
Inverter + Solar Panels + Grid + Application Loads
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1. AC Charge  7. LCD display  12. Remote port  18. FAN
2. AC power on  8. Battery Type  13. BAT-  19. Function Switch
5. Charge Current  11. PV voltage normal  16. RS232 communication port  22. AC I/O connection
6. Switch ON/OFF  17. BAT+

INVERTER OUTPUT
Rated Power: 1KW, 1.5KW, 2KW, 3KW, 4KW, 5KW, 6KW
Surge Rating (20ms): 3KW, 4.5KW, 6KW, 9KW, 12KW, 15KW, 18KW

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MODEL
PV30-1KW MPK  PV30-1.5KW MPK  PV30-2KW MPK  PV30-3KW MPK  PV30-4KW MPK  PV30-5KW MPK  PV30-6KW MPK
Nominal Battery System Voltage 12VDC/24VDC 12VDC/24VDC 12VDC/24VDC 12VDC/24VDC 12VDC/24VDC 12VDC/24VDC 12VDC/24VDC
Rated Power 1KW 1.5KW 2KW 3KW 4KW 5KW 6KW
Surge Rating (20ms) 3KW 4.5KW 6KW 9KW 12KW 15KW 18KW
Capable Of Staring Electric Motor 1HP 1HP 1HP 2HP 2HP 3HP 3HP
Line Mode Efficiency >95%
Power Factor 1.0
Typical Transfer Time 10ms

AC INPUT
Voltage 230VAC
Frequency Range 50Hz/60Hz (Auto sensing) 40-80Hz

INVERTER OUTPUT
Rated Power 1KW, 1.5KW, 2KW, 3KW, 4KW, 5KW, 6KW
Surge Rating (20ms): 3KW, 4.5KW, 6KW, 9KW, 12KW, 15KW, 18KW

INVERTER OUTPUT
Nominal Output Voltage RMS 100V / 110V / 120V / 220V / 230V / 240VAC (±10% RMS)
Output Frequency 50Hz/60Hz ±0.3Hz
Inverter Efficiency (Peak) >88%
Line Mode Efficiency >95%
Power Factor 1.0
Typical Transfer Time 10ms

AC CHARGER
Output Voltage Depends on battery type
Charger AC Input Breaker Rating 10A, 30A, 30A, 30A, 30A, 40A
Overcharge Protection S.D. 15.7VDC for 12VDC mode (*2 for 24VDC)
(Maximum PV Array Power 1600W, 3200W)
Maximum PV Charge Current 40A
DC Voltage 12V/24V auto work
MPPT Range @ Operating Voltage 16-100VDC @ 12V/32-145VDC @ 24V
Maximum PV Array Open Circuit Voltage 100VDC/145VDC
Maximum Efficiency >98%
Standby Power Consumption <2W

MECHANICAL SPECIFICATIONS
Mounting Wall mount
Dimensions (W*H*D) 423*247*197mm
Net Weight (Solar CHG) (kg) 18.5 18.4 19.5 23.5 32.2 28.7 27 41.3 39.4 50.4 48.8 51.8 53.1
Shipping Dimensions (W*H*D) 507*355*300mm
Shipping Weight (Solar CHG) (kg) 21.5 21.4 22.4 22.5 25.8 25.6 31.2 29.6 44.7 42.8 54 52.4 55.7 53.1

OTHER
Operation Temperature Range 0°C to 40°C
Storage Temperature Range -15°C to 60°C
Audible Noise 60dB MAX
Display LED+LCD
Loading (20GP/40GP/40HQ) 460pcs / 920pcs / 1060pcs 320pcs / 640pcs / 750pcs