PV3000 MPK series (1KW-6KW)

Low Frequency Off Grid Solar Inverter

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Low Frequency Off Grid Solar Inverter

(1KW-3KW)

(4KW-6KW)

INTRODUCTION

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 , optimazing battery performance & start generator automatically
- Power saver Switch , Enable to minimize standby consumption

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.

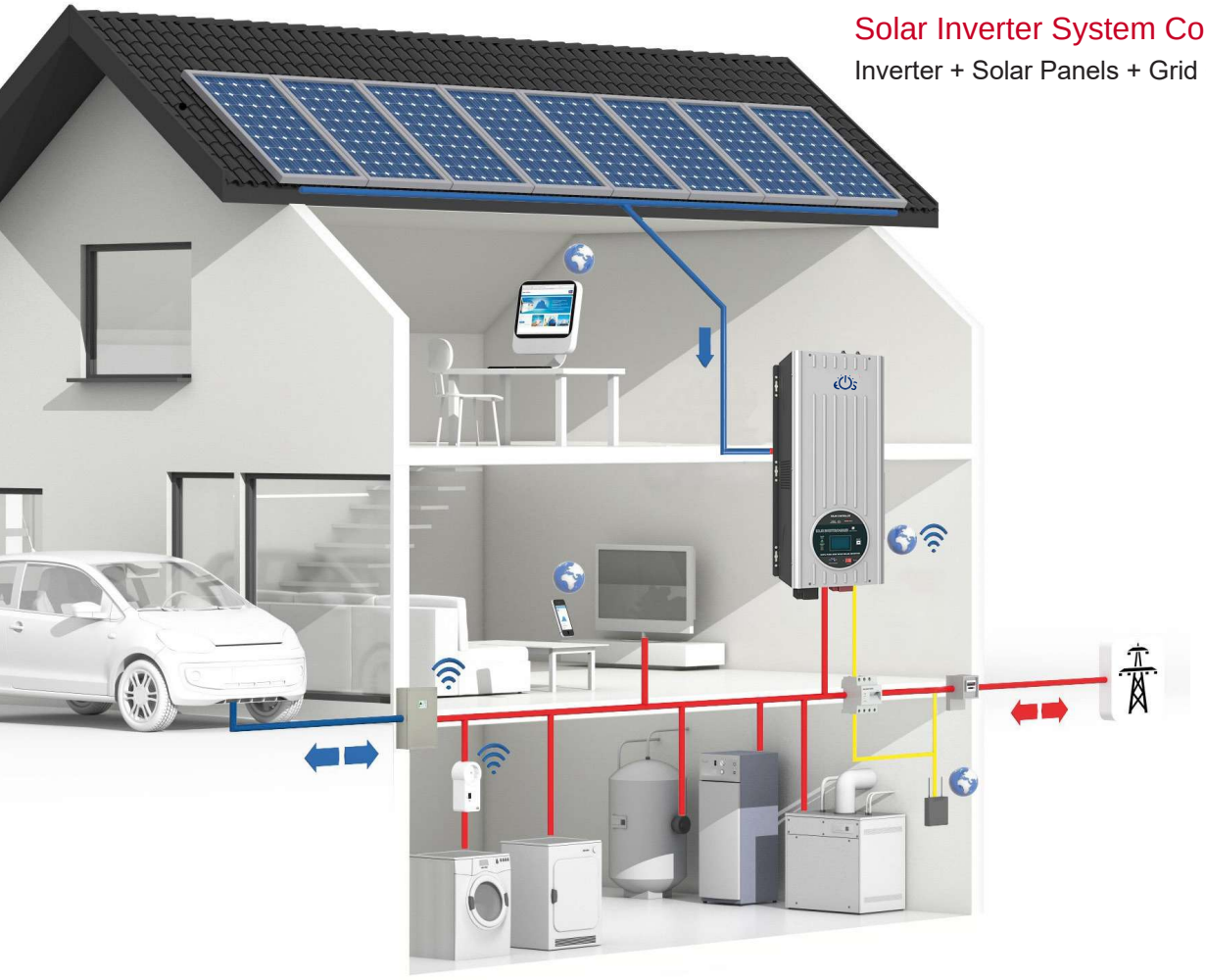
* Please note that remote control panel is optional, not included in inverter package.

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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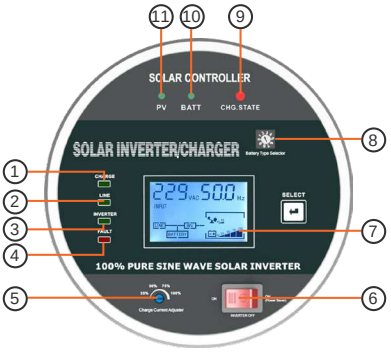

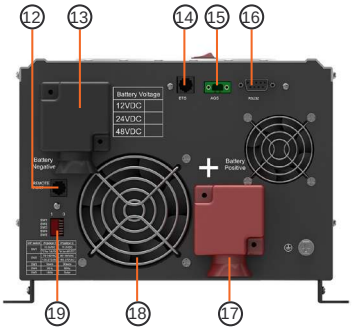

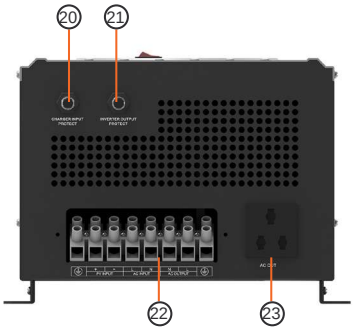

1. AC Charge
2. AC power on
3. Inverter mode
4. Fault
5. Charge Current
6. Switch ON/OFF
7. LCD display
8. Battery Type
9. Charging
10. Battery voltage normal
11. PV voltage normal
12. Remote port
13. BAT-
14. BTS
15. AGS
16. RS232 communication port
17. BAT+
18. FAN
19. Function Switch
20. Charger input breaker
21. AC output breaker
22. AC I/O connection
23. AC Output 10A(MAX)

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	24/48 VDC	24/48 VDC	24/48 VDC
INVERTER OUTPUT	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
	Waveform	Pure sine wave / same as input (bypass mode)						
	Nominal Output Voltage RMS	100V / 110V / 120V / 220V / 230V / 240VAC (±10% RMS)				100V/110V/120V 220V/230V/240V	220V / 230V /240VAC	
	Output Frequency	50Hz/60Hz ±0.3Hz						
	Inverter Efficiency (Peak)	>88%						
	Line Mode Efficiency	>95%						
	Power Factor	1.0						
	Typical Transfer Time	10(max)						
AC INPUT	Voltage	230VAC						
	Selectable Voltage Range	96~132VAC / 155~280VAC (For personal computer)						
	Frequency Range	50Hz/60Hz (Auto sensing) 40-80Hz						
BATTERY	Minimum Start Voltage	10.0VDC/10.5VDC for 12VDC mode (*2 for 24VDC)				20.0VDC~21.0VDC / 40.0VDC~42.0VDC		
	Low Battery Alarm	10.5VDC±0.3V for 12VDC mode (*2 for 24VDC)				21.0 VDC±0.6V / 42.0VDC±1.2V		
	Low Battery Cutoff	10.0VDC/±0.3V for 12VDC mode (*2 for 24VDC)				20.0 VDC±0.6V / 40.0VDC±1.2V		
	High Voltage Alarm	16.0VDC/±0.3V for 12VDC mode (*2 for 24VDC)				32.0 VDC±0.6V / 64.0VDC±1.2V		
	High Battery Voltage Recover	15.5VDC/±0.3V for 12VDC mode (*2 for 24VDC)				31.0 VDC±0.6V / 62.0VDC±1.2V		
	Idie Consumption Search Mode	<25W when power saver on				<50W when power saver on		
AC CHARGER	Output Voltage	Depends on battery type						
	Charger AC Input Breaker Rating	10A	30A	30A	30A	40A		
	Overcharge Protection S.D.	15.7VDC for 12VDC mode (*2 for 24VDC)				31.4VDC/62.8VDC		
	Maximum Charge Current	35A 20A	45A 25A	65A 35A	75A 45A	65A 35A	70A 40A	75A 50A
BYPASS & PROTECTION	Input Voltage Waveform	Sine wave (grid or generator)						
	Nominal Input Frequency	50Hz or 60Hz						
	Overload Protection (SMPS Load)	Circuit breaker						
	Output Short Circuit Protection	Circuit breaker						
	Bypass Breaker Rating	10A	15A	30A	30A	40A		
	Max Bypass Current	30Amp				40Amp		
SOLAR CHARGER	Maximum PV Array Power	600W 1200W	600W 1200W	600W 1200W	600W 1200W 1600W	3200W	1600W 3200W	1600W 3200W
	Maximum PV Charge Current	40A				60A		
	DC Voltage	12V/24V auto work				24V/48auto work		
	MPPT Range @ Operating Voltage	16~100VDC @ 12V/32~145VDC @ 24V				32~145VDC @ 24V/64~145VDC @ 48V		
	Maximum PV Array Open Circuit Voltage	100VDC/145VDC				145VDC		
	Maximum Efficiency	>90%				>98%		
	Standby Power Consumption	<2W				<2W		
MECHANICAL SPECIFICATIONS	Mounting	Wall mount				Wall mount		
	Dimensions (W*H*D)	423*247*197				597*247*197		
	Net Weight (Solar CHG) (kg)	18.5 18.4	19.5 19.4	23.5 32.2	28.7 27	41.3 39.4	50.4 48.8	51.8 53.1
	Shipping Dimensions (W*H*D)	570*355*300mm				597*247*197mm		
	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 Temoerature Range	0 ℃ to 40 ℃						
	Storage Temperature Range	-15 ℃ to 60 ℃						
	Audible Noise	60dB MAX						
	Display	LED+LCD						
	Loading (20GP/40GP/40HQ)	460pcs / 920pcs / 1060pcs				320pcs / 640pcs /750pcs		