

# Low Frequency Off Grid Solar Inverter

## PV3000 MPK Series (1KW-6KW)



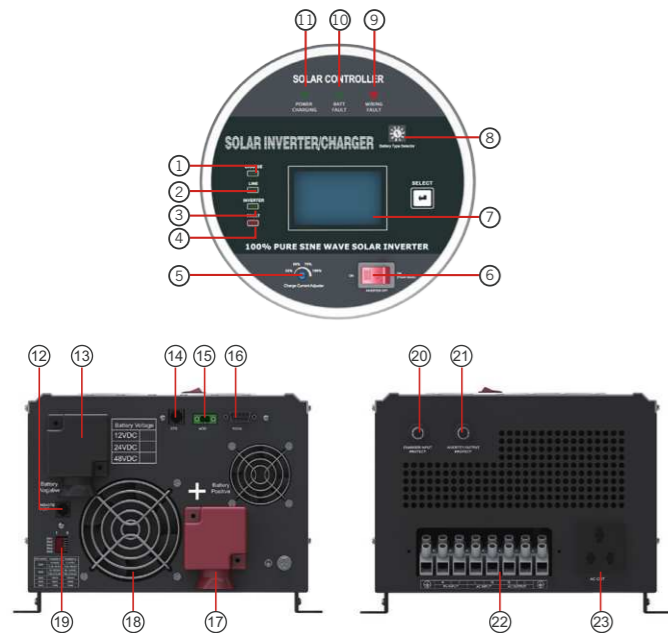
### Features

- Pure Sine Wave Output
- Built-in MPPT solar charge controller 80A
- Support Remote Control Box(optional)
- LCD display ,easy to read how inverter operates on LCD screen
- 5-levels DIP switch ,offering customized performance
- 9-levels battery selector ,Enable to charge Gel ,lead-acid battery
- DC(Solar)/AC prorty optional
- 4 levels charge current adjustable
- With BTS & AGS , optimizing battery performance & start generator automatically
- Power saver Switch , Enable to minimize standby consumption

### Introduction

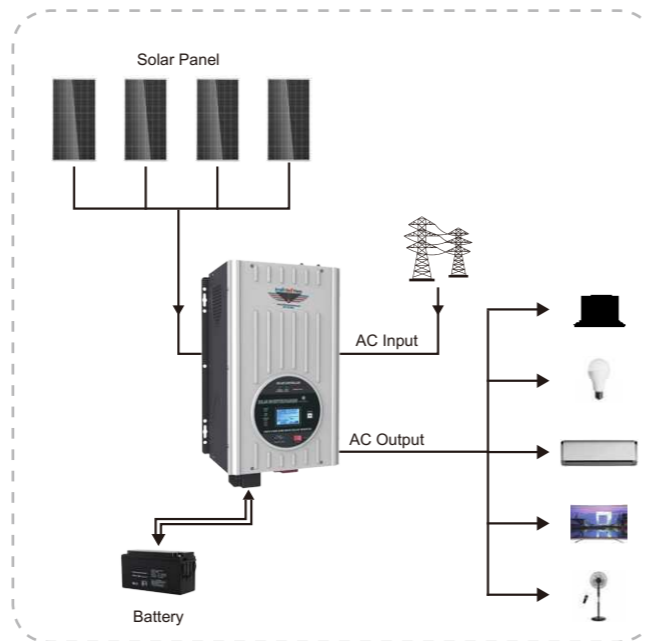
PV3000 MPK series is a multi-function inverter ,combining functions of inverter and mppt solar charger controller, solar charger and battery charger to offer uninterruptible power support with portable size. The comprehensive LCD display offers user-configurable and easy-accessible button operation such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

### Back panel printing description



- |                   |                             |
|-------------------|-----------------------------|
| 1. AC Charge      | 12.Remote port              |
| 2. AC power on    | 13.BAT-                     |
| 3. Inverter mode  | 14.BTS                      |
| 4. Fault          | 15.AGS                      |
| 5. Charge Current | 16.RS232 communication port |
| 6. Switch ON/OFF  | 17.BAT+                     |
| 7. LCD display    | 18.FAN                      |
| 8. Battery Type   | 19.Function Switch          |
| 9. Wiring fault   | 20.Charger input breaker    |
| 10.Batt fault     | 21.AC output breaker        |
| 11.Power charging | 22.PVAC IN/OUT              |
|                   | 23.AC Output 10A(MAX)       |

### Solar system connection



### Specification

MODEL	PV30-1KW MPK		PV30-1.5KW MPK		PV30-2KW MPK		PV30-3KW MPK		PV30-4KW MPK		PV30-5KW MPK		PV30-6KW MPK			
	12 VDC	24 VDC	12 VDC	24 VDC	12 VDC	24 VDC	12 VDC	24 VDC	48 VDC	24 VDC	48 VDC	24 VDC	48 VDC	24 VDC	48 VDC	
Nominal Battery System Voltage																
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	110V \ 120V \ 220V \ 230V \ 240VAC (±10% RMS)								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	10.5VDC \ 11VDC for 12VDC mode (*2 for 24VDC)								40.0VDC~42.0VDC						
	Low Battery Alarm	11VDC±0.3V for 12VDC mode (*2 for 24VDC)								±0.6V \ 42.0VDC±1.2V						
	Low Battery Cutoff	10.5VDC \ ±0.3V for 12VDC mode (*2 for 24VDC)								±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						
	Idle 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	35A	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	1250W	2500W	1250W	2500W	1250W	2500W	1250W	2500W	5000W	2500W	5000W	2500W	5000W	2500W	5000W
	Maximum PV Charge Current	80A								80A						
	DC Voltage	12V/24V auto work								24V/48V auto work						
	MPPT Range @ Operating Voltage	16~100VDC @ 12V/32~145VDC @ 24V														
	Maximum PV Array Open Circuit Voltage	145VDC														
	Maximum Efficiency	>90%								>98%						
	Standby Power Consumption	<2W														
MECHANICAL SPECIFICATIONS	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														
	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 °C to 40 °C														
	Storage Temperature Range	-15°C to 60°C														
	Audible Noise	60dB MAX														
	Loading (20GP/40GP/40HQ)	460pcs \ 920pcs \ 1060pcs								320pcs \ 640pcs \ 750pcs						