

HIGH FREQUENCY SOLAR INVERTER

PV1800 ECO Series

2~6.2KW | Dual output

PV1800 ECO is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PV1800 ECO Series can run without battery. The Maximum PV input voltage can reach 400V/450V/500V, which can help customers make full use of solar energy.



- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in MPPT solar charge controller
- Wide PV input voltage range
- Can provide the power to the load without battery
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support RS485,CAN monitoring function
- Dual outputs for smart load management
- Can communicate with lithium batteries (CAN port)

Back panel description

2KW

1

2

3

4

5

6

7

8

9

10

1

2

3

4

5

6

7

8

9

10

3.6-6KW

1

2

3

4

5

6

7

8

9

10

1

2

3

4

5

6

7

8

9

10

1. Ground

2. AC Input

3. Main Load

4. Second Load

5. Battery Input

6. Power ON/OFF switch

7. PV input

8. RS-485/CAN Communication port

9. WiFi port

10. Dry Contact

Solar system connection

The diagram illustrates the connection of a MUST PV1800 ECO inverter to various power sources and loads. On the left, three input sources are shown: a Solar Panel (PV input), a Utility grid (AC Input), and a Generator (BAT input). The inverter is a central unit with a digital display and control buttons. It has two main output sections: 'Main Load' and 'Second Load'. The 'Main Load' section is connected to a Fridge, Lighting, and Fans. The 'Second Load' section is connected to a TV, Air conditioner, and Washing machine. A Battery is shown connected to the inverter via a 'BAT input' line.

MODEL	PV18-2012 ECO	PV18-3624 ECO	PV18-4024 ECO	PV18-6048 ECO	PV18-6248 ECO
Nominal Battery System Voltage	12VDC	24VDC	24VDC	48VDC	48VDC
INVERTER OUTPUT					
Rated Power (Main+Second Load)	2000VA/2000W	3600VA/3600W	4000VA/4000W	6000VA/6000W	6200VA/6200W
Battery Mode (Main+Second Load)	2000VA/1600W	3000VA/3000W	3500VA/3500W	5500VA/5500W	6200VA/6200W
Surge Power	3200W	6000W	7000W	11000W	12400W
Waveform	Pure sine wave				
AC Voltage Regulation (Batt.Mode)	230VAC±5%(Setting)				
Inverter Efficiency(Peak)	90~93%				
Transfer Time	10ms (UPS / VDE4105) / 20ms (APL)				
AC INPUT					
Voltage	230VAC±5%				
Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VED4105)				
Frequency Range	50Hz / 60Hz(Auto sensing)				
BATTERY					
Normal voltage	12VDC	24VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	13.7VDC	27.4VDC	27.4VDC	54.8VDC	54.8VDC
Overcharge Protection	15VDC	30VDC	30VDC	60VDC	60VDC
SOLAR CHARGER & AC CHARGER					
Maximum PV Array Open Circuit Voltage	400VDC	400VDC	450VDC	450VDC	500VDC
Maximum PV Input Current	16A	18A	18A	28A	28A
Charging Algorithm	3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li)				
Maximum PV Array Power	2000W	4000W	4000W	6000W	6200W
PV Array MPPT Voltage Range(Typ.)	30~320VDC		60~360VDC		120~450VDC
Maximum Solar Charge Current	80A	100A	100A	100A	120A
Maximum AC Charge Current	80A	60A	60A	100A	100A
Maximum Charge Current	80A	100A	100A	100A	120A
MECHANICAL SPECIFICATIONS					
Machine Dimension (W*H*D)(mm)	290*367*111	318*454*122.5			
Package Dimension (W*H*D)(mm)	446*394*187	544.5*410*200			
N.W (kg)	6	7.8	8.0	9.0	10
G.W (kg)	7.2	9.3	9.5	10.2	11.6
OTHER					
Humidity	5% to 95% Relative humidity (Non-condensing)				
Operating Temperature	-10°C~50°C				
Storage Temperature	-15°C~60°C				
Communication Interface	USB/WIFI/RS-485/CAN				
Warranty	2 year				
Anti-dust Kit	none	yes	yes	yes	yes
CERTIFICATION & STANDARDS					
CE					

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