

SOLAR POWER SYSTEM - NPS - 500 W

Technical data:		NPS-500W
Item No.	NPS-500W	
Capacity	500W	
System voltage	12VDC	
Best output power everyday	2000WH	
Inverter	Output wave	sine wave
	Output voltage	AC120V/220V
	Output frequency	50HZ/60HZ
	Output current	2.27A(220V)
	Precision of output voltage	±3%
	Precision of output frequency	±0.1%
	False output wave of AC	<3%
	Overload ability	120%,30 seconds
	Invert efficiency	>97%
Solar panel	Pmax	80W*4pcs
	Vmp	17.5V/35V
	Imp	18.28A/ 9.14A
Charger	Charger voltage & current	500W12V/24V UPS10A

Load reference:					
NPS-500W solar home system					
loads name	specification	load's watt	qty	working hrs	Daily consumption
lighting	energy saving light	11W	6	4	264Wh
Computer	LCD displays	100W	1	5	500Wh
Fan	small fan	30W	2	4	240Wh
satellite TV receiver /VCD		25W	1	6	150Wh
Color TV	21inch	100W	1	4	400Wh
total		351W			1554Wh



Main Components & Package Data

Parts	Spec	Qty	Size (L*W*H mm)	Weight (Kg)
Solar Panel	12V80W	4	810 x 541 x 60	40
Controller & Inverter (Power Box)	12V500W	1	620 x 440 X 390	28
Batteries	12V100AH	1	445 x 168 x 247	40
Accessories	Cable			

Features:

- ◆ High tech
- ◆ High efficiency
- ◆ Good quality
- ◆ High reliable
- ◆ Super long life span

Application:

Nomads, families, island, none or short of electricity area, Satellite Ground Stations, weather stations, forest fire stations, etc.

Warranties:

Solar panel: 25 years
Power box: 5 years

Solar Panel-80W



Features:

High-transmissivity, low-iron tempered glass; 18% module efficiency

Warranties:

25 years product warranty
10-years warranty on 90%
25-years warranty on 80%

Certification:

CE, ISO, TUV, IEC, UL

Spec	80W
Power (W)	80
Dimension of cell (mm)	125*125
Dimension of panel (mm)	810*541*35
Arrangement way (pcs)	4*9
Weight (KG)	6.5
System voltage (V)	12
Pmax (W)	80
Vmp (V)	17.5
Imp (A)	4.57
Voc (V)	21.3
Isc (A)	4.98

Hybrid of Inverter & Controller 12V500W



Features:

- ◆ High tech
- ◆ High efficiency
- ◆ Good quality
- ◆ High reliable
- ◆ Super long life span

Warranties:

2 years

Certification:

CE(EMC, LVD) ISO, TUV, IEC

Inverter

DC input	Rated capacity (W)	500
	Input rated voltage (VDC)	12
	Input voltage recommended range (VDC)	10.8-17.5
AC output	Rated voltage (VAC)	220/110
	Rated frequency (Hz)	50/60
	Over load ability	120% 1 minute
	voltage steady precision (VAC)	±3%
	Total harmonic distortion (THD)	≤5%
	Dynamic response (0~100%)	0.05
Environment	Inversion efficiency (80% load)	0.85
	Insulation intension (VAC)	1500, 1 minute
	Noise (dB, 1M)	≤40
	Operating temperature (°C)	-20~+60
	Storage temperature (°C)	-40~+70
	Altitude (m)	≤5000

Controller

	Rated power (W)	500
	Rated voltage (VDC)	12
	Recommended controller charge MAX. current (A)	11.43
	Recommended solar MAX. open voltage (V)	25
Over-charge (V)	protection	14.4
	recover	13.2
Voltage descent (V)	Between solar cell and battery	≤0.4
	Between battery and load	≤0.03