

Overview

NPower series is a low-frequency pure sine wave inverter which can convert 12/24/48VDC to 110/120V AC (or 220V/230V AC) and power the AC loads.

Based on full digital intelligent design, it adopts technologies such as SPWM, voltage and current double closed-loop control, and fully isolated inversion. It features small input surge current, fast dynamic response, outstanding resistance to load impact, and reliable operation. Npower is also compatible with lithium battery power supply systems. Suitable for a wide range of AC loads including household appliances, power tools, industrial equipment, electronic audio and video devices, as well as solar photovoltaic power generation systems. It is also applicable in automotive inverter systems, solar-powered RVs, residential solar systems, solar-powered yachts, solar power plants, etc.

Features

- Pure sine wave output
- Input to output electrical isolation
- Full digital voltage and current double closed-loop control
- Input anti-surge design, suitable for lithium iron phosphate battery power supply systems
- Output power factor up to 1, capable of full load operation
- RS485 communication interface, optional 4G, WIFI modules, enabling remote monitoring
- External switch design, matched with EPEVER products, to expand inverter control function
- Input Protection: Low-voltage, Over-voltage, Reverse polarity protection
- Output Protection: Overload, Short circuit, Overheating
- EN/IEC62109-1/2, EN61000-6-2/4, and FCC approved
- Certified by international standards such as EMC and safety regulations

产品认证



Technical Specifications

Item	NP260-11	NP260-21	NP600-11	NP600-21	NP1000-11	NP1000-21	NP1000-41
Continuous output power	260W@25°C, 200W@45°C		600W@45°C		1000W@25°C, 850W@45°C	1000W@45°C	
Surge power(5S)	400W		1200W	1000W	2000W		
Output voltage	110/120VAC (±5%)				110/120VAC (±5%)		
Output frequency	50/60Hz±0.2%				50/60Hz±0.2%		
Output wave	Pure Sine Wave				Pure Sine Wave		
Output distortion THD	THD≤5%(Resistive load)				THD≤5%(Resistive load)		
Load power factor	0.2-1(Load power ≤ Continuous output power)				0.2-1(Load power ≤ Continuous output power)		
Rated input voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	48VDC
Input voltage range	10.8-16.0VDC	21.6-32.0VDC	10.8-16.0VDC	21.6-32.0VDC	10.8-16.0VDC	21.6-32.0VDC	43.2-64.0VDC
Output efficiency of 80% rated power ^①	82.90%	87.40%	82.50%	87.50%	83.40%	88%	90.60%
Max. rated efficiency ^②	82.30%	86.00%	80.20%	85.60%	80.60%	85.70%	89.20%
Max. output efficiency ^③	89.6%(67W)	90.2%(104W)	90.7%(150W)	91.9%(160W)	92.2%(200W)	93.4%(250W)	94.3%(300W)
Surge current when power on	20A@25°C, V _{IN} =12V	20A@25°C, V _{IN} =24V	20A@25°C, V _{IN} =12V	20A@25°C, V _{IN} =24V	30A@25°C, V _{IN} =12V	30A@25°C, V _{IN} =24V	30A@25°C, V _{IN} =48V
No-load current	< 0.3A	< 0.15A	< 0.67A	< 0.22A	< 0.59A	< 0.33A	< 0.19A
Static Loss	< 0.3W@12V	< 0.4W@24V	< 0.3W@12V	< 0.4W@24V	< 0.3W@12V	< 0.4W@24V	< 0.7W@48V
RS485 com. port	5VDC/250mA(Non-isolated)				5VDC/300mA (Non-isolated)	5VDC/250mA (Non-isolated)	5VDC/300mA (Isolated)
Mechanical parameters							
Input terminal	M6		M8		M6		M8
Dimension (L×W×H)	365×212×97mm		428×243×121mm		511×268×139mm		452×268×139
Mounting size	220×193mm		260×220mm		300×245mm		270×245
Mounting hole size	Φ7mm		Φ9mm		Φ9mm		
Net Weight	6.5kg	6.4kg	10.8kg	10.2kg	16.1kg	16.0kg	14.0kg
Environment temperature	-20°C~+45°C(All loads can work together at this environment temperature range)						
Storage temperature	-35°C~ +70°C						
Humidity	< 95%(N.C.)						
Enclosure	IP20						
Altitude	<5000m (Derating to operate according to IEC62040 at a height exceeding 1000m)						

① It means the output efficiency when the load power is 80% of the continuous output power under the rated DC input voltage. (25°C)

② It is measured in the condition of continuous output power and rated input voltage. (25°C)

③ It means the max. efficiency when the inverter is connected with different loads under the rated DC input voltage.

Item	NP2000-11	NP2000-21	NP2000-41	NP2500-11	NP2500-21	NP2500-41
Continuous output power	2000W@45°C			2500W@45°C		
Surge power(5S)	4000W			5000W		
Output voltage	110/120VAC (±5%)			110/120VAC (±5%)		
Output frequency	50/60Hz±0.2%			50/60Hz±0.2%		
Output wave	Pure Sine Wave			Pure Sine Wave		
Output distortion THD	THD=5%(Resistive load)			THD=6%(Resistive load)		
Load power factor	0.2~1(Load power = Continuous output power)			0.2~1(Load power = Continuous output power)		
Rated input voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
Input voltage range	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC
Output efficiency of 80% rated power ^①	84%	89%	89.40%	84.40%	89.10%	91.10%
Max. rated efficiency ^②	82.50%	87.50%	87.70%	81.30%	86.80%	89.70%
Max. output efficiency ^③	90.8%(500W)	93.9%(500W)	93.9%(500W)	90.9%(500W)	94%(500W)	94%(800W)
Surge current when power on	20A@25°C,V _{IN} =12V	20A@25°C,V _{IN} =24V	20A@25°C,V _{IN} =48V	20A@25°C,V _{IN} =12V	20A@25°C,V _{IN} =24V	20A@25°C,V _{IN} =48V
No-load current	<1.9A	<0.5A	<0.3A	<2.1A	<0.6A	<0.5A
Static Loss	<0.6W@12V	<0.6W@24V	<1.8W@48V	<0.6W@12V	<0.6W@24V	<1.8W@48V
RS485 com. port	5VDC/300mA(Non-isolated)	5VDC/300mA(Non-isolated)	5VDC/200mA(Isolated)	5VDC/300mA(Non-isolated)	5VDC/300mA(Non-isolated)	5VDC/200mA(Isolated)
Mechanical parameters						
Input terminal	M10			M10		
Dimension (L×W×H)	554×393×175mm		486×313×145mm	584×393×175mm	604×393×175mm	549×328×175mm
Mounting size	350×372mm		350×292mm	350×372mm	350×372mm	350×307mm
Mounting hole size	F9mm			F9mm		
Net Weight	30.3kg	28.1kg	21.2kg	32.5kg	32.7kg	26.5kg
Environment temperature	-20°C~+45°C(All loads can work together at this environment temperature range)					
Storage temperature	-35°C~ +70°C					
Humidity	< 95%(N.C.)					
Enclosure	IP20					
Altitude	<5000m (Derating to operate according to IEC62040 at a height exceeding 1000m)					

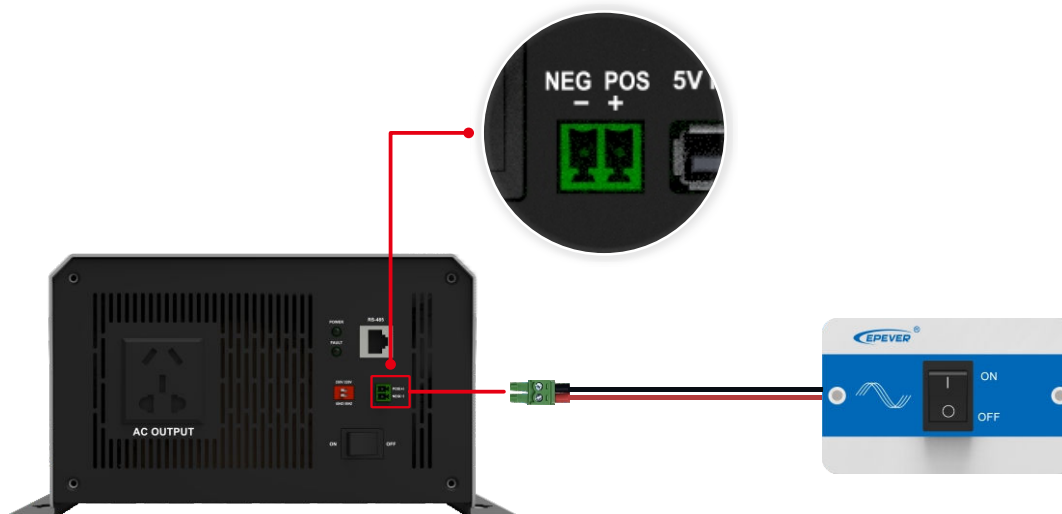
① It means the output efficiency when the load power is 80% of the continuous output power under the rated DC input voltage. (25°C)

② It is measured in the condition of continuous output power and rated input voltage. (25°C)

③ It means the max. efficiency when the inverter is connected with different loads under the rated DC input voltage.

Remote switch (optional accessory)

This remote switch enables you to remotely power the inverter on/off. It comes with a standard 6-meter switch cable and is compatible with NPower series products.



Connect the 3.81-2P green socket on the remote switch cable to the 3.81-2P green base on the product's side. Turn off the local toggle switch, and the remote switch will control the inverter's on/off.