

## **Overview**

NPower series is a low-frequency pure sine wave inverter which can convert 12/24/48VDC to 220/230V AC (or 110V/120V AC) and power the AC loads. It has stronger ability to work with impact load. Ranging from 260W to 5000W, Npower is compatible with lithium-ion battery perfectly, and suits for the system which requires high reliability.

## **Features**

- Adoption of advanced SPWM technology, pure sine wave output
- · Adopt voltage and current double closed-loop control to enhance the load capacity
- · The input and output adopt completely isolated inverter technology with high reliability
- The input adopts an anti-surge design to meet the special requirements of surge limitation of the lithium battery
- The output adopts excellent EMC design to prevent interference of connected equipment
- Output voltage 220/230VAC (or 110/120VAC )and frequency 50/60Hz optional
- Extensive protections: input reverse polarity, input overvoltage, input low voltage, output overload and short circuit, overheating
- RS485 port can connect the communication module, realize remote start/stop inverter and monitor the running status via the APP or PC software
- Set the inverter's ID via the APP or PC software to monitor several inverters
- · The case is designed with the galvanized board, with high strength and strong corrosion resistance





















Item	NP260-12	NP260-22	NP400-12	NP400-22	NP600-12	NP600-22	NP800-12	NP1000-22	
Continuous output power	260W@25℃ 260W@45℃	260W@25℃ 260W@45℃	400W@25℃ 350W@45℃	400W@25℃ 350W@45℃	600W@25°C 500W@45°C	600W@25°C 500W@45°C	800W@25°C 800W@45°C	1000W@25℃ 800W@45℃	
Surge power	400W	400W	700W	700W	1000W	1000W	1600W	2000W	
Output voltage	220/230VAC (-8%~+3%)	220/230VAC (±3%)	220/230VAC (-8%~+3%)	220/230VAC (±3%)	220/230VAC (-8%~+3%)	220/230VAC (±3%)	220/230VAC (-8%~+3%)	220/230VAC (±3%)	
Output frequency	50/60Hz±0.2%								
Output wave	Pure sine wave								
Output distortion THD	THD≤3%(Resistive load)								
Load power factor	0.2-1(Load VA ≤ Continuous output power)								
Rated input voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	
Input voltage range	10.8~16VDC	21.6~32VDC	10.8~16VDC	21.6~32VDC	10.8~16VDC	21.6~32VDC	10.8~16VDC	21.6~32VDC	
Output efficiency of 80% rated power	81%	84%	81%	85%	81%	85%	83%	85%	
Max. rated efficiency	79%	82%	79%	84%	80%	83%	81%	82%	
Max. output efficiency	89%(80W)	90%(100W)	90%(100W)	91%(100W)	89%(200W)	92%(160W)	92%(100W)	92%(200W)	
No-load current	<0.4A	<0.3A	<0.5A	<0.3A	<0.6A	<0.4A	<0.6A	<0.4A	
Static Loss	<0.3W@12V	< 0.4W@24V	<0.3W@12V	< 0.4W@24V	<0.3W@12V	< 0.4W@24V	<0.3W@12V	< 0.4W@24V	
RS485 com. port	5VDC/300mA(Non-isolated)								
Dimension(LxWxH)	365×212×97 mm	365×212×97 mm	386×215×99 mm	386×215×99 mm	428×243×121 mm	428×243×121 mm	475×268×139 mm	475×268×139 mm	
Mounting dimension	220×193mm	220×193mm	230×196mm	230×196mm	260×220mm	260×220mm	270×245mm	270×245mm	
Net Weight	6.4kg	6.3kg	8.1kg	7.9kg	10.4kg	10.1kg	13.3kg	12.7kg	
Operating temperature range	-20°C~+45°C(Full load)								
Relative humidity	< 95%(N.C.)								
Enclosure	IP20								



Item	NP1000-42	NP1200-12	NP1200-22	NP1500-12	NP1500-22	NP2000-12	NP2000-22	NP2000-42	
Continuous output power	1000W@25℃ 1000W@45℃	1200W@25°C, 1000W@45°C	1200W@25℃ 1000W@45℃	1500W@25°C 1300W@45°C	1500W@25℃ 1500W@45℃	2000W@25°C 2000W@45°C	2000W@25°C 2000W@45°C	2000W@25℃ 2000W@45℃	
Surge power	2000W	2000W	2000W	3000W	3000W	4000W	4000W	4000W	
Output voltage	220/230VAC (±3%)	220/230VAC (-8%~+3%)	220/230VAC (±3%)	220/230VAC (-5%~+3%)	220/230VAC (±3%)	220/230VAC (-5%~+3%)	220/230VAC (±3%)	220/230VAC (±3%)	
Output frequency	50/60Hz±0.2%								
Output wave	Pure sine wave								
Output distortion THD	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤5% (Resistive load)	THD≤3% (Resistive load)	THD≤5% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	
Load power factor	0.2-1(Load VA ≤ Continuous output power)								
Rated input voltage	48VDC	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	48VDC	
Input voltage range	43.2~64.0VDC	10.8~16VDC	21.6~32VDC	10.8 ~ 16VDC	21.6 ~ 32VDC	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC	
Output efficiency of 80% rated power	90.80%	81%	85%	84%	88.50%	84.50%	88%	89%	
Max. rated efficiency	89.40%	78%	84%	82%	87%	82%	86%	87%	
Max. output efficiency	94.5%(300W)	92%(200W)	93%(300W)	90%(400W)	92%(500W)	90%(600W)	93%(500W)	93%(500W)	
No-load current	< 0.19A	<0.6A	<0.4A	< 2.0A	< 0.5A	< 2.5A	< 0.6A	< 0.3A	
Static Loss	< 0.7W@48V	< 0.3W@12V	< 0.4W@24V	< 0.6W@12V	< 0.6W@24V	< 0.6W@12V	< 0.6W@24V	< 1.8W@48V	
RS485 com. port	5VDC/200mA (Isolation)	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/300mA( Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/200mA (Isolation)	
Dimension(LxWxH)	452x268x139 mm	511×268×139 mm	511×268×139 mm	566×313×145 mm	566×313×145 mm	554×393×175 mm	554×393×175 mm	486×313×145 mm	
Mounting dimension	270x245mm	300×245mm	300×245mm	350×292mm	350×292mm	350×372mm	350×372mm	350×292mm	
Net Weight	13.91kg	15.7kg	15.3kg	20.3kg	20.2kg	29.8kg	27.6kg	20.7kg	
Operating temperature range	-20°C~+45°C(Full load)								
Relative humidity	< 95%(N.C.)								
Enclosure	IP20								





Item	NP2500-12	NP2500-22	NP2500-42	NP3000-22	NP3000-42	NP3500-42	NP4000-22	NP4000-42	NP5000-42
Continuous output power	2500W@25°C2 500W@45°C	2500W@25°C 2500W@45°C	2500W@25°C 2500W@45°C	3000W@25°C 3000W@45°C	3000W@25°C 3000W@45°C	3500W@25°C 3500W@45°C	4000W@25°C 4000W@45°C	4000W@25°C 4000W@45°C	5000W@25°C 5000W@45°C
Surge power	5000W	5000W	5000W	6000W	6000W	7000W	8000W	8000W	10000W
Output voltage	220/230VAC (-8%~+3%)	220/230VAC (-6%~+3%)	220/230VAC (±3%)	220/230VAC (-5%~+3%)	220/230VAC (±3%)	220/230VAC (±3%)	220/230VAC (±3%)	220/230VAC (±3%)	220/230VAC (±3%)
Output frequency	50/60Hz±0.2%								
Output wave	Pure sine wave								
Output distortion THD	THD≤5% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)
Load power factor	0.2-1(Load VA ≤ Continuous output power)								
Rated input voltage	12VDC	24VDC	48VDC	24VDC	48VDC	48VDC	24VDC	48VDC	48VDC
Input voltage range	10.8~16VDC	21.6~32VDC	43.2~64VDC	21.6~32VDC	43.2~64VDC	43.2~64VDC	21.6~32VDC	43.2~64VDC	43.2~64VDC
Output efficiency of 80% rated power	87%	89%	91.50%	88%	90%	90%	89%	91.50%	91.50%
Max. rated efficiency	85%	87%	90%	86%	89%	89%	86%	90%	90%
Max. output efficiency	90%(700W)	93%(500W)	94%(800W)	94%(500W)	94%(900W)	93%(900W)	93%(1400W)	94%(1000W)	94%(1400W)
No-load current	<3.0A	< 0.8A	< 0.5A	< 0.8A	< 0.5A	< 0.5A	< 2.5A	< 0.5A	< 0.5A
Static Loss	< 0.6W@12V	< 0.6W@24V	< 1.8W@48V	< 0.6W@24V	< 1.8W@48V	< 1.8W@48V	< 0.6W@24V	< 1.8W@48V	< 1.8W@48V
RS485 com. port	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/300mA (Non-isolated)	5VDC/200mA (Isolation)	5VDC/200mA (Isolation)	5VDC/300mA (Non-isolated)	5VDC/200mA (Isolation)	5VDC/200mA (Isolation)
Dimension(LxWxH)	584×393×175 mm	604×393×175 mm	549×328×175 mm	639×393×175.5 mm	584×328×170 mm	564×353×175 mm	660×435×210 mm	604×393×175 mm	640×435×210 mm
Mounting dimension	350×372mm	350×372mm	350×307mm	350×372mm	350×307mm	350×332mm	625×300mm	350×340mm	605×300mm
Net Weight	32kg	32.2kg	25.5kg	34.0kg	28.4kg	32.2kg	43.2kg	37kg	50kg
Operating temperature range	-20°C~+45°C(Full load)								
Relative humidity	< 95%(N.C.)								
Enclosure	IP20								

