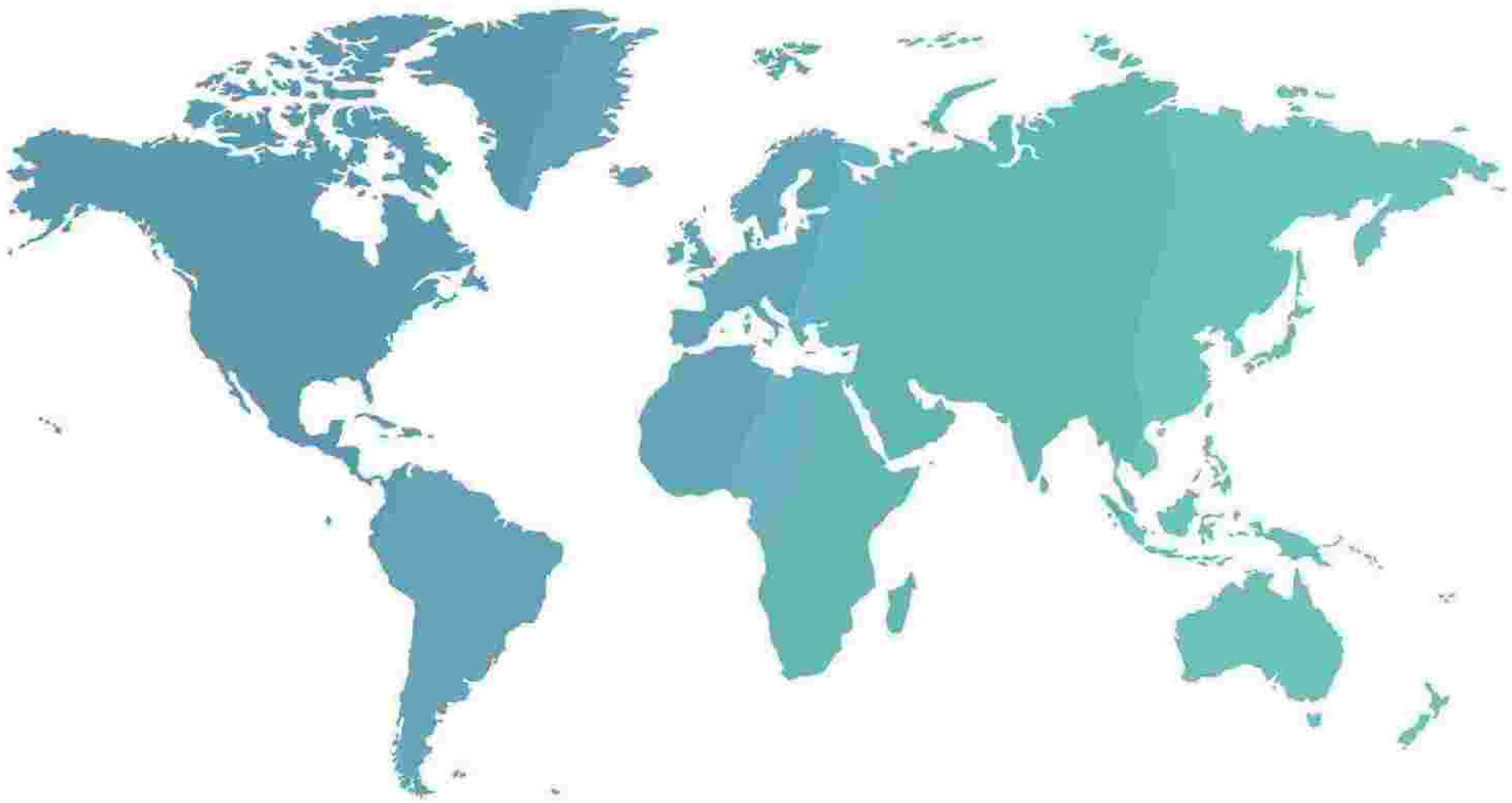


New Energy · New Life · New Future

Your Trusted Power Of Choice
Advanced Solar Energy System Solutions

Solar Product
Manufacturer

-Since 2010

PRODUCT CATALOGUE

Production Capacity and Facilities

Spanning an area of 20,000 square meters,our factory is a hub of advanced manufacturing.Equipped with 10+ automated production lines.From the procurement of raw materials to the final assembly of products, every step in the production process adheres to strict quality control standards.This ensures that each inverter leaving our factory meets the highest quality requirements.

R&D and Innovation

Innovation is at the core of our development.We have a dedicated R&D team consisting of top engineers and experts in the power electronics field.They are constantly exploring new technologies and materials to improve the performance and efficiency of our inverters.Through continuous innovation,we have successfully launched a series of new products with advanced features, such as higher conversion efficiency,better grid compatibility,and enhanced intelligent monitoring functions.

Quality Assurance

Quality is our top priority.We have established a complete quality management system that complies with international standards such as ISO 9001,All our products undergo rigorous testing at every stage of production, including component testing,prototype testing,and final product inspection.In addition,we use high-quality raw materials and components from reliable suppliers to ensure the long-term stability and durability.

20000m²
Workshop Space

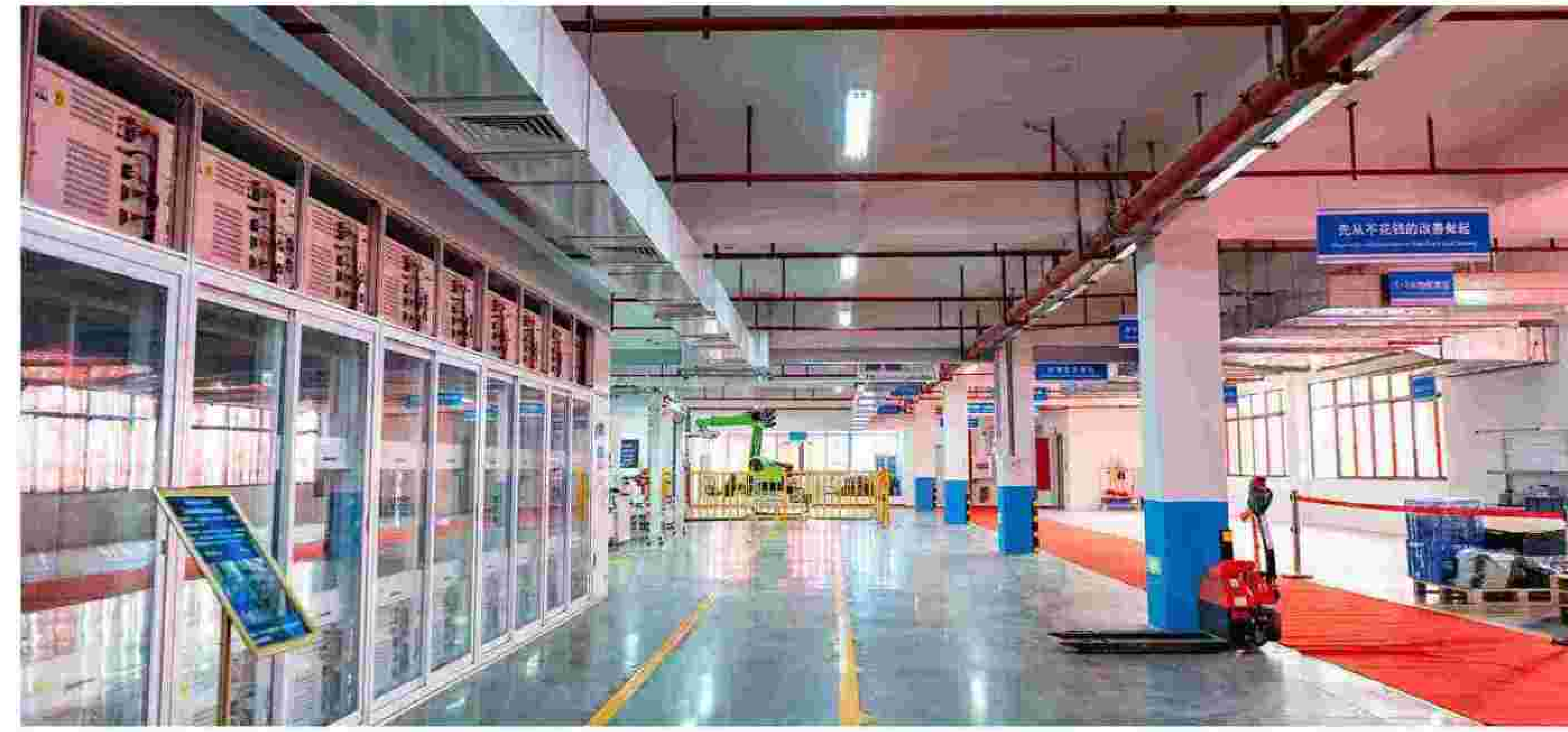
300+
Employees

10+
Automatic Production Lines

26+
Milion USD Investment

Product
Certificate

Product
Line



Shipping
Diagram

CONTENTS

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MS Series Portable Energy Storage Power Supply

300W/500W/1000W

MAIN FEATURES

- Wide input range for communication, pure sine wave output
- High charging/discharging energy efficiency and long cycle life of lithium batteries
- Intelligent air-cooled energy-saving design
- The panel display is simple and easy to operate
- Complete protection functions for overcurrent, overvoltage, overtemperature, short circuit, etc
- High energy density, small size/light weight

Product Specifications

Model		MS-30132-HV	MS-50132-HV	MS-10264-HV	MS-50132-LV	MS-10264-LV
AC Input	Rated Voltage	230VAC			120VAC	
	Voltage Range	90-280VAC			60-145VAC	
	Frequency Range	45-65Hz				
	Power Factor	>0.95				
AC Output	Rated Power	300W	500W	1000W	500W	1000W
	Voltage Range	230VAC±5V			120VAC±5V	
	Frequency Range	50Hz±0.5%			60Hz±0.5%	
	Power Factor	≥99%				
	Overload Capacity	CP300W,<170VAC shutdown	CP500W,<170VAC shutdown	CP1000W,<170VAC shutdown	CP500W,<85VAC shutdown	CP1000W,<85VAC shutdown
	Voltage Waveform	pure sine wave				
	Harmonic Distortion (THD)	<3% @ linear load <5% non-linear load				
	Convert Time	≤20ms				
	USB Output	5V/1A				
PV Input	Voltage Range	11-55VDC				
	Rated Power	300W(Max)		550W(Max)	300W(Max)	550W(Max)
	Maximum Current	10A(Max)		15A(Max)	10A(Max)	15A(Max)
	Maximum Charging Current	80A(Max)		100A(Max)	80A(Max)	100A(Max)
Battery Characteristics	Battery Type/Rated Voltage	Lithium iron battery/3.2V-206AH	Lithium iron battery/3.2V-314AH	Lithium iron battery/6.4V-314AH	Lithium iron battery/3.2V-314AH	Lithium iron battery/6.4V-314AH
	Battery capacity	659WH	1004WH	2009WH	1004WH	2009WH
	Voltage Range	3.0-3.65VDC		6.0-7.3VDC	3.0-3.65VDC	6.0-7.3VDC
	Maximum Charging Power	300W	500W	1000W	400W	1000W
	AC+PV Maximum Charging Current	1-100A(configurable)	1-140A(configurable)	1-160A(configurable)	1-140A(configurable)	1-160A(configurable)
Other	Communication And Monitoring	USB (serial interface)				
	Working Temperature Range	-10-40℃				
	Storage Temperature Range	-15-60℃				
	Humidity Range	5-95% (no condensation)				
	Noise	≤50dB				
	Working Altitude	Applicable for ≤ 3000m 10% reduction for every 1000m increase (over 3000m)				
Product Dimensions(length*width*height)mm		255*135*315	255*155*315	285*230*315	255*155*315	285*230*315
Packaging Dimensions(length*width*height)mm		325*200*350	315*220*345	355*305*350	315*220*345	355*305*350
Net Weight (KG)		7.9	10.7	19	10.7	19
Gross Weight(KG)		8.5	11.5	20	11.5	20

NKF Bidirectional Inverter Controller

3KW/5KW/6.4KW/8KW/10KW

MAIN FEATURES

- Dual MCU intelligent control technology, excellent performance
- Input single-phase/split phase options, flexible to cope with various power environments
- The output voltage and frequency can be set, which is convenient and practical
- The unmanned function can be set, and the application scenarios are diversified
- Intelligent air-cooled heat dissipation, efficient and energy-saving
- Comprehensive protection and alarm functions, safe and reliable

Product Specifications

Model		NKF-302024	NKF-302048	NKF-502048	NKF-642048	NKF-802048	NKF-103048
Inverter	Rated Power	3KW		5KW	6.4KW	8KW	10KW
	Peak Power	9KW		15KW	19.2KW	24KW	30KW
	Rated Battery Voltage	24V	48V				
Controller MPPT	Charging Current	60A		120A			
	Photovoltaic Input Interface	60A*1 route		60A*2 route(120A)			
	Maximum Photovoltaic Input Power	1440W	2880W	2880W*2			
	Photovoltaic Input Voltage Range	30V-180V(24V system); 60V-180V(48V system)					
	Conversion Efficiency	≈98%					
	Unattended Mode	In shutdown state: MPPT rechargeable when there is sunlight, achieving unmanned photovoltaic operation					
AC Input	Municipal Power Input	(L1-N)110VAC:80~130VAC					
	Voltage Range	(L1-N-L2)220VAC:160~260VAC/130~280VAC					
	Input Frequency Of Mains Power	45Hz~65Hz(intelligentautomatic detection)					
	Municipal Power Charging Current	Adjustable					
AC Output	Inverted Output Waveform	pure sine wave					
	Inverter Output Efficiency	≈90%					
	Inverter Output Voltage	(L1-N,L2-N):110VAC (L1-L2):220VAC					
	Inverter Output Frequency	50Hz/60Hz Adjustable					
	Energy Saving Mode Loss	5W					
Working Mode	Inverter Working Mode	City power priority mode, battery priority mode, energy-saving mode, unmanned operation, generator mode					
Battery Parameters	Support Battery Types	Lead acid battery/colloidal battery/lithium iron phosphate/ternary lithium battery/battery customization					
	Custom Parameters For Batteries	Constant voltage charging, float charging, battery recovery, mains power recovery, low voltage alarm, low voltage protection					
	Battery Charging Method	Lead acid: three-stage charging, constant current, constant voltage, float charging Lithium battery: constant current, constant voltage					
	The number of lithium battery strings is optional	Lithium iron phosphate: 3.2V monomer, ternary lithium battery: 3.7V monomer					
Protect	Low Battery Voltage	Battery undervoltage/overvoltage/overloadprotection/high temperature protection/charging method protection, etc					
Display	LED Display	Mains power status, inverter status, charging status, alarm					
	Screen Display	Working status, input/output voltage, photovoltaic information display, inverter parameter settings, etc					
	Display Language	Chinese/English					
Convert time		<10ms					
Cooling Method		Intelligent temperature control					
Communication		WIFI(RS485)/BMS(RS485)dry contact					
Operating Temperature		-10°C~40°C					
Altitude		≤3000m					
Machine size(mm)		525*420*167		625*485*180		675*520*195	
Dimensions(mm)		555*515*238		655*580*250		710*620*271	
Net Weight (KG)		25.5		35	38.7	47.5	52.5
Gross Weight (KG)		26.5		37	41.5	57.5	62

AL-S Solar Energy Storage System

600W/1200W/2200W/3500W/5000W/10000W

MAIN FEATURES

- Pure sine wave output
- LifePO4 battery with 10 years service life
- The mains input automatically turns on and activate the LifePO4 battery
- MPPT Controller greatly improving the charging efficiency more than 20%
- Overcharge protection and over discharge protection for a longer battery life
- Safe and reliable with intelligent exhaust fan control

Product Specifications

Model		AL-S600	AL-S1200	AL-S2200	AL-S3500	AL-S5000	AL-S10K
Inverter	Battery Voltage	12.8V	25.6V		51.2V		
	In-built Battery Specification	50AH/12.8V	50AH/25.6V	100AH/25.6V	100AH/51.2V	100AH/51.2V	200AH/51.2V
	Rated Power	600W	1200W	2200W	3500W	5000W	10000W
	Output Voltage	110/120/220/230/240VAC					220/230/240VAC
	Output Frequency	50/60Hz					
	Output Waveform	Pure Sine Wave					
	Input Voltage Range	72~138/145~275VAC		85~138/170~275VAC			170~275VAC
	Input Frequency	45~65Hz					
MPPT Charge	Maximum Photovoltaic Voltage	100V			≤150V		
	PV Input Range Voltage	18~100V	34~100V		65~150V		
	Rated Charge Current	30A				60A	
	Maximum Power	420Wp	840Wp		1650Wp	3400Wp	
	Voltage Of Floating Charge	14.2V	28.4V		56.8V		
	MPPT Efficiency	≥97%					
DC Output	Voltage Of High Voltage Protection	17V	34V		68V		
	Voltage Of High Voltage Recovery	15V	30V		60V		
	Voltage Of Low Voltage Recovery	13V	26V		52V		
	Voltage Of Low Voltage Protection	11.2V	22.4V		44.8V		
	5VDC USB Output Port	2 Units/MAX 2A					
	12VDC Output Port	2 Units/MAX 2A					
Other	Heat Dissipation/Cooling	Temperature Control By Intelligent Exhaust Fan					
	Ambient Temperature For Operation	0~40°C					-20~50°C
	Ambient Temperature For Storage	-25~55°C					
	Operation/Storage Conditions	0~90%(no condensation)					
	External Dimensions:D*W*H(mm)	460*182*397	485*202*406	540*229*464	577*350*644	627*405*664	780*447*724
	Packing Dimensions:D*W*H(mm)	527*267*470	552*277*477	570*310*535	665*450*825	715*505*845	875*545*922
	Net Weight (KG)	13	26	41.5	77	112	153
	Gross Weight (KG)	15	27.5	43	97	137	182

AL Solar Energy Storage System

300W/500W/1000W/1500W

MAIN FEATURES

- Pure sine wave output
- Built in Gel battery
- PV input 18~100VDC/34~100VDC
- MPPT Controller greatly improving the charging efficiency more than 20%
- Overcharge protection and over discharge protection for a longer battery life
- Safe and reliable with intelligent exhaust fan control

Product Specifications

Model		AL-300	AL-500	AL-1000-12	AL-1000-24	AL-1500
Inverter	Battery Voltage	12V			24V	
	In-built Battery Specification	1*55AH/12V		1*100AH/12V	2*55AH/12V	2*100AH/12V
	Rated Power	300W	500W	1000W	1000W	1500W
	Output Voltage	110/120/220/230/240VAC				220/230VAC
	Output Frequency	50/60Hz				
	Output Waveform	Pure Sine Wave				
	Input Voltage	73~138/145~275VAC			95~125VAC	170~250VAC
	Charge Current	15A(MAX)				
Solar Input	Voltage Range	18~100V			34~100V	
	Rated Charge Current	30A				
	Maximum Power	420Wp			840Wp	
	Voltage Of Overcharge Protection	14.2V			28.4V	
	Voltage Of Overcharge Recovery	14V			28V	
	Voltage Of Floating Charge	13.7V			27.4V	
DC Output	Voltage Of High Voltage Protection	17V			34V	
	Voltage Of High Voltage Recovery	14.5V			29V	
	Voltage Of Low Voltage Recovery	12.5V			25V	
	Voltage Of Low Voltage Protection	11V			22V	
	5VDC USB Output Port	2 Units/MAX 2A				
	12VDC Output Port	2 DC ports + backboard 12V terminal block(MAX 8A)				
Starting Temperature Of The Exhaust Fan		>45°C				
Ambient Temperature For Operation		0~40°C				
Ambient Temperature For Storage		-25~55°C				
Operation/Storage Conditions		0~90%(no condensation)				
External Dimensions:D*W*H (mm)		343*225*443	423*260*453			513*310*493
Packing Dimensions:D*W*H(mm)		420*290*490	520*370*520			610*420*550
Net Weight (KG)		25	26.7	43	46	84
Gross Weight (KG)		25.6	26.8	45	47.6	88

HDB Stacked Solar Energy Storage System

12KW(16KWH-32KWH)

MAIN FEATURES

- Pure sine wave output
- Built-in 2 MPPT
- Compatible work with LiFePO4 battery via RS485
- LifePO4 battery with 10 years service life
- Wifi remote monitoring optional
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		HDB-ES12KW-16D	HDB-ES12KW-32D
Mains Mode	Nominal Input Voltage	230VAC	
	Input Voltage Range	(170~280VAC)±2%(UPS mode);(90~280VAC)±2%(APL mode)	
	Frequency	50/60Hz(Auto detect)	
	Frequency Range	47±0.3~55±0.3HZ(50Hz);57±0.3~65±0.3Hz(60Hz)	
	Max. Efficiency	>95%	
	Conversion Time (bypass and inverter)	10ms(typical)	
	Max. Bypass Overload Current	60A	
Inverter Mode	Output Voltage Waveform	Pure Sine Wave	
	Nominal Output Power	12000VA/12000W	
	Power Factor	1	
	Nominal Output Voltage	230VAC	
	Output Frequency Range	50±0.3Hz/60±0.3Hz	
	Max. Efficiency	≥93%	
	Overload Protection	(102%<load<125%) ±10%:report error and turn off the output after 5 minutes (125%<load<150%) ± 10%:report error and turn off the output after 10 seconds Load>150%±10%:report error and turn off the output after 5 seconds	
	Peak Power	24000VA	
	Load Motor Capability	8HP	
	Nominal Batteryinput Voltage	48V(Min. start voltage 44V)	
	Battery Voltage Range	40.0~60VDC±0.6VDC(Undervoltage alarm/shutdown voltage/overvoltage alarm/overvoltage recovery...LCD screen can be set)	
	Save Power Mode	Load≤50W Enter save power mode	
Mains Charge	Battery Type	Lead-acid or lithium batteries	
	Max. Charge Current (configurable)	150A	
	Charge Voltage Range	40~60VDC	
Battery And AC Charging	Specification	314AH/51.2V	
	Battery Capacity	16076.8WH	
	Stacking Quantity	1	2
	Maximum Charging Current	160A	
Solar Charge	Max. PV Open Circuit Voltage	500VDC	
	PV Operate Voltage Range	120~500VDC	
	MPPT Voltage Range	90~450VDC	
	Battery Voltage Range	40~60VDC	
	Max.PV Input Power/Current	9000W*2/27A*2	
	Charge Current Range (configurable)	0~150A	
Max. Hybrid Charge Current (PV+AC)	Max. Hybrid Charge Current (configurable)	0~150A	
Certification	Safety Cerification	CE(IEC62109-1,2)	
	EMC Certification Level	EN61000,C2	
	Operate Temperature Range	-15~55°C	
	Storage Temperature Range	-25~60°C	
	Humidity Range	5~95%(Three anti-paint protection)	
	Noise	≤60dB	
	Cooling	Forced air cooling,adjustable wind speed	
	Communicate	USB/RS485 (/WIFI/GPRS)/Dry node control	

NLB Solar Energy Storage System

1.2KW(2.12KWH)/3.6KW(4.25KWH)/6KW(8.5KWH)

MAIN FEATURES

- Pure sine wave output
- Built-in 1 or 2 MPPT
- Compatible work with LiFePO4 battery via RS485
- LifePO4 battery with 10 years service life
- Wifi remote monitoring optional
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model			NLB-1.2KW	NLB-3.6KW	NLB-6KW
Rated Power			1200W	3600W	6000W
Lifepo4 Battery	Specification		12.8V-166AH	25.6V-166AH	51.2V-166AH
	Battery Capacity		2124WH	4249.6WH	8499WH
	Stacking Quantity		built-in		
MPPT Input	Max PV Input		1000W	5000W	9000W
	PV Input Voltage		20~100VDC	40~430VDC	60~450VDC
	Max Open Circuit Voltage		125VDC	450VDC	500VDC
	Charging Current(can be set)		60A	100A	120A
AC Input	Voltage Ramge	UPS	170~280VDC		170~264VDC
		INV	90~280VDC		90~280V
	Frequency		45~65Hz		
	Charging Current(can be set)		40A	100A	120A
Inverter Output	Voltage Range(can be set)		208/220/230/240VAC±5%		
	Frequency		50/60Hz		
	Output Wave		Pure Sine Wave		
	Conversation Time		10ms		
	Efficiency		>90%	>93%	>94%
	Overload		102~110%/60s;110%~130%/10s;130%~150%/3s;>150%/0.2s		
Ambient Temperature For Operation			-10~50°C		
Ambient Temperature For Storage			-15~60°C		
Operating/Storage Environment			5~95%Relative humidity(non-condensing)		
Product Size:L*W*H(mm)			370*165*510	370*200*712	420*275*815
Package Size:L*W*H(mm)			575*445*240	785*465*270	880*555*355

The company reserves the right to change without notice.

NKH Off-grid Hybrid Solar Inverter

1.2KW/3.6KW/5KW/6KW/8.5KW/11KW

MAIN FEATURES

- Built-in 1 or 2 MPPT
- Pure sine wave output
- Compatible work with LiFePO4 battery via RS485
- Capable to work without battery
- Wifi remote monitoring optional
- Support multiple output priority: UTL,SOL,SBU,SUB

Product Specifications

Model			NKH-1200	NKH-3600	NKH-5000	NKH-6000	NKH-8500	NKH-11K
Rated Power			1200W	3600W	5000W	6000W	8500W	11000W
Parallel Mode (function reserved)	Allow Quantity		0		1~6			
Input	Voltage		230/240VAC					
	Selectable Voltage Range	UPS	170~264VAC	170~280VAC		170~280VAC		
		INV	90~280VAC	120~280VAC		90~280VAC		
	Frequency Range		50/60Hz(Auto sensing)					
Output	AC Voltage Regulation (Batt .Mode)		208/220/230/240VAC				220/230VAC	
	Surge Power		2.4KW	7.2KW	10KW	12KW	17KW	22KW
	Efficiency(Peak)PV to INV		95%					
	Efficiency(Peak)Battery to INV		94%					
	Transfer Time		10ms					
	Overlord Capacity		1min@102%~110% Load,10s@110%~130% Load, 3s@130%~150% Load 2s@150% Load					
Battery & AC Charge	Battery Voltage		12VDC	24VDC	48VDC			
	Floating Charge Voltage		13.5VDC	27VDC	54VDC			
	Overcharge Protection		15.75VDC	32VDC	64VDC			
	Maximum Charge Current		60A	100A	80A	120A		
PV Charge	Maximum PV Array Power		1000W	5000W	5500W	9000W	5000W*2	5500W*2
	MPPT Range Operating Voltage		20~100VDC	40~430VDC	120~430VDC	60~450VDC	60~500VDC	
	Maximum PV Array Open Circuit Voltage		125VDC	450VDC	500VDC			
	Maximum Charge Current		60A	100A	80A	120A	140A	160A
	Maximum Efficiency		99%					
AC+PV Charge	Maximum Charge Current		120A	100A	80A	120A	140A	160A
Opera Ting Environment	Humidity		5~95% Relative Humidity(Non-condensing)					
	Operating Temperature		0~55°C					
	Storage Temperature		-15~60°C					
Physical	Communication Interface		USB/RS232/RS485					
	Dimension(L*W*H)mm		260*103*342	320*128*439		343*122*427	403*122*540	
	Package Size(L*W*H)mm		355*198*435	415*215*535		425*195*495	495*214*637	
	Net Weight(KG)		4.1	9	9.2		14.5	15.5

Note: Our company has the right of changing this user manual without any information

ES On/Off Grid Solar Inverter

6.2KW/12KW

MAIN FEATURES

- Built-in 1 or 2 MPPT
- Can parallel 1-6 units
- Can operate independently off the grid or in parallel with the grid
- Capable to work without battery
- Detachable dust cover for harsh environment
- Wifi remote monitoring optional

Product Specifications

Model		ES622048-M100-A	ES622048-M100-B	ES123048-M150-A	ES123048-M150-B
Parallel Mode (function reserved)	Allow Quantity	-A None/-B 1~6			
Mains Mode	Nominal Input Voltage	220/230VAC		230VAC	
	Input Voltage Range	(170~280VAC)±2%(UPS mode);(90~280VAC)±2%(APL mode)			
	Frequency	50/60Hz(Auto detect)			
	Frequency Range	47±0.3~55±0.3HZ(50Hz);57±0.3~65±0.3Hz(60Hz)			
	Max. Efficiency	>95%			
	Conversion Time (bypass and inverter)	10ms(typical)			
	Max. Bypass Overload Current	40A		60A	
Inverter Mode	Output Voltage Waveform	Pure Sine Wave			
	Nominal Output Power	6200VA/6200W		12000VA/12000W	
	Power Factor	1			
	Nominal Output Voltage	230VAC			
	Output Frequency Range	50±0.3Hz/60±0.3Hz			
	Max. Efficiency	>92%		≥93%	
	Overload Protection	(102%<load<125%) ±10%:report error and turn off the output after 5 minutes (125%<load<150%) ± 10%:report error and turn off the output after 10 seconds Load>150%±10%:report error and turn off the output after 5 seconds			
	Peak Power	12000VA		24000VA	
	Load Motor Capability	4HP		8HP	
	Nominal Batteryinput Voltage	48V(Min. start voltage 44V)			
	Battery Voltage Range	40.0~60VDC±0.6VDC(Undervoltage alarm/shutdown voltage/overvoltage alarm/overvoltage recovery...LCD screen can be set)			
	Save Power Mode	Load≤25W Enter save power mode		Load≤50W Enter save power mode	
Mains Charge	Battery Type	Lead-acid or lithium batteries			
	Max. Charge Current (configurable)	80A		150A	
	Charge Voltage Range	40~60VDC			
Solar Charge	Max. PV Open Circuit Voltage	500VDC			
	PV Operate Voltage Range	120~500VDC			
	MPPT Voltage Range	90~450VDC			
	Battery Voltage Range	40~60VDC			
	Max.PV Input Power/Current	6000W/22A		9000W*2/27A*2	
	Charge Current Range (configurable)	0~100A		0~150A	
Max. Hybrid Charge Current (PV+AC)	Max. Hybrid Charge Current (configurable)	0~100A		0~150A	
Certification	Safety Certifcation	CE(IEC62109-1,2)			
	EMC Certifcation Level	EN61000,C2			
	Operate Temperature Range	-15~55°C			
	Storage Temperature Range	-25~60°C			
	Humidity Range	5~95%(Three anti-paint protection)			
	Noise	≤60dB			
	Cooling	Forced air cooling,adjustable wind speed			
	Communicate	USB/RS485 (/WiFi/GPRS)/Dry node control			
Dimensions(L*W*H)mm		280*100*415		350*120*540	
Package Dimensions(L*W*H)mm		385*200*505		460*230*645	
Weight(KG)		7.8		18.5	

AS On/Off Grid Solar Inverter

3.6KW/6.5KW

MAIN FEATURES

- Built-in 1 or 2 MPPT
- Can parallel 1-6 units
- Can operate independently off the grid or in parallel with the grid
- Capable to work without battery
- Detachable dust cover for harsh environment
- Wifi remote monitoring optional

Model		AS362048-M80-A	AS362048-M80-B	AS652048-M150-A	AS652048-M150-B
Parallel Mode (function reserved)	Allow Quantity	-A None/-B 1~6			
Mains Mode	Nominal Input Voltage	120VAC±5%			
	Input Voltage Range	(90~140VAC)±2%			
	Frequency	50/60Hz(Auto detect)			
	Frequency Range	47±0.3Hz~55±0.3Hz(50Hz); 57±0.3Hz~65±0.3Hz(60Hz)			
	Max.Efficiency	>95%			
	Conversion Time (bypass and inverter)	10ms(Typical value)			
	Max.Bypass Overload Current	40A		60A	
Inverter Mode	Output Voltage Waveform	Pure Sine Wave			
	Nominal Output Power	3600VA/3600W		6500VA/6500W	
	Power Factor	1			
	Nominal Output Voltage	120VAC			
	Output Frequency Range	50±0.3Hz/60±0.3Hz			
	Max.Efficiency	>91%			
	Overload Protection	(102%<load<125%)±10%: report error, turn off the output after 5 minutes (125%<load<150%)±10%: report error, turn off the output after 10 seconds load>150%±10%: report error,turn off the output after 5 seconds			
	Peak Power	7200VA		12000VA	
	Load Motor Capability	2HP		5HP	
	Nominal Battery Input Voltage	48V(Min. starting voltage 44V)			
	Battery Voltage Range	40.0~60VDC±0.6VDC(Undervoltage alarm/shutdown voltage/overvoltage/alarm/overvoltage recovery...LCD screen(can be set)			
	Save Power Mode	Loads 25W			
Mains Charge	Battery Type	Lead-acid or lithium batteries			
	Max.Charge Current (configurable)	40A		120A	
	Charge Voltage Range	40~60VDC			
Solar Charge	Max.PV Open Circuit Voltage	300VDC			
	PV Operate Voltage Range	60~300VDC			
	MPPT Voltage Range	90~280VDC			
	Battery Voltage Range	40~60VDC			
	Max.PV Input Power/Current	4500W/27A		4500W*2/22A*2	
	Charge Current Range (configurable)	0~80A		0~150A	
Max.Hybrid Charge Current (PV+AC)	Max.Hybrid Charge Current (configurable)	0~80A		0~150A	
Certification	Safety Certification	CE(IEC62109-1,2)			
	EMC Certification Level	EN61000,C2			
	Operate Temperature Range	-15~55°C			
	Storage Temperature Range	-25~60°C			
	Humidity Range	5~95%(Three anti-paint protection)			
	Noise	≤60dB			
	Cooling	Forced air cooling, adjustable wind speed			
	Communicate	USB/RS485(WiFi/GPRS)/Dry node control			
Dimensions(L*W*H)mm		280*100*415		350*120*540	
Package Dimensions(L*W*H)mm		385*200*505		460*230*645	
Weight(KG)		7.8		18.5	

AS Split-phase On/Off Grid Solar Inverter

7KW/12KW

MAIN FEATURES

- Built-in 2 MPPT
- Can parallel 1-6 units
- Can operate independently off the grid or in parallel with the grid
- Capable to work without battery
- Detachable dust cover for harsh environment
- Wifi remote monitoring optional

Product Specifications

Model		AS722048-M150-A	AS722048-M150-B	AS123048-M200-A	AS123048-M200-B
Parallel Mode (function reserved)	Allow Quantity	-A None/-B 1~6			
Mains Mode	Nominal Input Voltage	120VAC(L1/N, L2/N)/240VAC(L1/L2)			
	Input Voltage Range	(85~140VAC)±2%			
	Frequency	50/60Hz(Auto detect)			
	Frequency Range	47±0.3Hz~56±0.3Hz(50Hz); 57±0.3Hz~65±0.3Hz(60Hz)			
	Max.Efficiency	>95%			
	Conversion Time (bypass and inverter)	10ms(Typical Value)			
	Max.Bypass Overload Current	2pole, 50A/50A(L1/L2)		2P,63A/63A(L1/L2)	
Inverter Mode	Output Voltage Waveform	Pure Sine Wave			
	Nominal Output Power	Split phase:7200VA Single phase: 6000VA		Split phase:12000VA/12000W Single phase: 7200VA/7200W(limited by the wiring terminals)	
	Power Factor	1			
	Nominal Output Voltage	120VAC(L1/N,L2/N)/240VAC(L1/L2)			
	Output Frequency Range	50±0.3Hz/60±0.3Hz			
	Max.Efficiency	>91%			
	Overload Protection	(105% < load <110%) ±5%: report error and turn off the output after 5 minutes; (110% < load < 125%) ± 5%: report error and turn off the output after 10 seconds; Load >125% ±5%: report error and turn off the output after 5 seconds;		(102%<load<110%) ±5%: report error and turn off the output after 5 minutes (110%<load<125%) ± 5%: report error and turn off the output after 10 seconds load>125% ±5%: report error and turn off the output after 5 seconds	
	Peak Power	Split phase: 10800VA Single phase: 10800VA		Split phase:18000VA Single phase:18000VA	
	Load Motor Capability	4HP		6HP	
	Nominal Battery Input Voltage	51.2V (Minimum starting voltage 44V)			
	Battery Voltage Range	40.0Vdc~58.6Vdc±0.6Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)			
	Save Power Mode	Loads 25W			
Mains Charge	Battery Type	Lead-acid or lithium batteries			
	Max.Charge Current (configurable)	120A		160A	
	Charge Voltage Range	40~58.6VDC			
Solar Charge	Max.PV Open Circuit Voltage	500VDC			
	PV Operate Voltage Range	90VDC~485VDC			
	MPPT Voltage Range	90VDC~450VDC			
	Battery Voltage Range	40~58.6VDC			
	Max.PV Input Power/Current	4500W*2		9000W*2/27A*2	
	Charge Current Range (configurable)	150A		300A	
Max.Hybrid Charge Current (PV+AC)	Max.Hybrid Charge Current (configurable)	0~150A		0~220A	
Certification	Safety Certification	UL 1741			
	EMC Certification Level	FCC part15, CLASS B			
	Operate Temperature Range	-10~55°C(>45°C derating)			
	Storage Temperature Range	-25~60°C			
	Humidity Range	5~95%(Three anti-paint protection)			
	Noise	≤60dB			
	Cooling	Forced air cooling, adjustable wind speed			
	Communicate	USB/RS485(WiFi/GPRS)/Dry node control			
Dimensions(L*W*H)mm		580*127*359		450*132*620	
Package Dimensions(L*W*H)mm		700*252*470		545*230*715	
Weight(KG)		18.9		23.8	

ES-IP54 On/Off Grid Solar Inverter(EURO)

6.2KW/12KW

MAIN FEATURES

- Intelligent remote monitoring and management
- Can run 6 single-phase or three-phase parallel machines
- Flexible and adjustable input voltage range and charging current
- Dustproof and waterproof design, suitable for complex usage environments
- Wide range of communication input, with anti backflow and grid connection function
- Support battery free working conditions and have segmented intelligent charging and discharging functions

Product Specifications

<table>
<tr><th colspan="2">Model</th><th>ES-622048-54A</th><th>ES-622048-54B</th><th>ES-123048-54A</th><th>ES-123048-54B</th></tr>
<tr><td>Parallel Mode (function reserved)</td><td>Allow Quantity</td><td>Stand-Alone</td><td>Maximum parallel operation of 6 units</td><td>Stand-Alone</td><td>Maximum parallel operation of 6 units</td></tr>
<tr><td rowspan="7">Mains Mode</td><td>Nominal Input Voltage</td><td colspan="2">220/230VAC</td><td colspan="2">230VAC</td></tr>
<tr><td>Input Voltage Range</td><td colspan="4">(170~280VAC)±2%(UPS mode);(90~280VAC)±2%(APL mode)</td></tr>
<tr><td>Frequency</td><td colspan="4">50/60Hz(Auto detect)</td></tr>
<tr><td>Frequency Range</td><td colspan="4">47±0.3~55±0.3HZ(50Hz),57±0.3~65±0.3Hz(60Hz)</td></tr>
<tr><td>Max. Efficiency</td><td colspan="4">>95%</td></tr>
<tr><td>Conversion Time (bypass and inverter)</td><td colspan="4">10ms(typical)</td></tr>
<tr><td>Max. Bypass Overload Current</td><td colspan="2">40A</td><td colspan="2">80A</td></tr>
<tr><td rowspan="13">Inverter Mode</td><td>Output Voltage Waveform</td><td colspan="4">Pure Sine Wave</td></tr>
<tr><td>Nominal Output Power</td><td colspan="2">6200VA/6200W</td><td colspan="2">12000VA/12000W</td></tr>
<tr><td>Power Factor</td><td colspan="4">1</td></tr>
<tr><td>Nominal Output Voltage</td><td colspan="4">230VAC</td></tr>
<tr><td>Output Frequency Range</td><td colspan="4">50±0.3Hz/60±0.3Hz</td></tr>
<tr><td>Max. Efficiency</td><td colspan="2">>92%</td><td colspan="2">>93%</td></tr>
<tr><td>Overload Protection</td><td colspan="4">(102%<load<125%)±10%:report error and turn off the output after 5 minutes
(125%<load<150%)±10%:report error and turn off the output after 10 seconds
Load>150%±10%:report error and turn off the output after 5 seconds</td></tr>
<tr><td>Peak Power</td><td colspan="2">12000VA</td><td colspan="2">24000VA</td></tr>
<tr><td>Load Motor Capability</td><td colspan="2">4HP</td><td colspan="2">8HP</td></tr>
<tr><td>Nominal Batteryinput Voltage</td><td colspan="4">48V(Min. start voltage 44V)</td></tr>
<tr><td>Battery Voltage Range</td><td colspan="4">40.0~60VDC±0.6VDC(Undervoltage alarm/shutdown voltage/overvoltage alarm/overvoltage recovery...LCD screen can be set)</td></tr>
<tr><td>Save Power Mode</td><td colspan="2">Load≤25W Enter save power mode</td><td colspan="2">Load≤50W Enter save power mode</td></tr>
<tr><td>Battery Type</td><td colspan="4">Lead-acid or lithium batteries</td></tr>
<tr><td rowspan="2">Mains Charge</td><td>Max. Charge Current (configurable)</td><td colspan="2">80A</td><td colspan="2">150A</td></tr>
<tr><td>Charge Voltage Range</td><td colspan="4">40~60VDC</td></tr>
<tr><td rowspan="6">Solar Charge</td><td>Max. PV Open Circuit Voltage</td><td colspan="4">500VDC</td></tr>
<tr><td>PV Operate Voltage Range</td><td colspan="4">120~500VDC</td></tr>
<tr><td>MPPT Voltage Range</td><td colspan="4">90~450VDC</td></tr>
<tr><td>Battery Voltage Range</td><td colspan="4">40~60VDC</td></tr>
<tr><td>Max.PV Input Power/Current</td><td colspan="2">6000W/22A</td><td colspan="2">9000W*2/27A*2</td></tr>
<tr><td>Charge Current Range (configurable)</td><td colspan="2">0~100A</td><td colspan="2">0~150A</td></tr>
<tr><td>Max. Hybrid Charge Current (PV+AC)</td><td>Max. Hybrid Charge Current (configurable)</td><td colspan="2">0~100A</td><td colspan="2">0~150A</td></tr>
<tr><td rowspan="8">Certification</td><td>Safety Certifcation</td><td colspan="4">CE(IEC62109-1.2)</td></tr>
<tr><td>EMC Certifcation Level</td><td colspan="4">EN61000,C2</td></tr>
<tr><td>Operate Temperature Range</td><td colspan="4">-15~55°C</td></tr>
<tr><td>Storage Temperature Range</td><td colspan="4">-25~60°C</td></tr>
<tr><td>Humidity Range</td><td colspan="4">5~95%(Three anti-paint protection)</td></tr>
<tr><td>Noise</td><td colspan="4">≤60dB</td></tr>
<tr><td>Cooling</td><td colspan="4">Forced air cooling,adjustable wind speed</td></tr>
<tr><td>Communicate</td><td colspan="4">USB/RS485(/WiFi/GPRS)/Drynode control</td></tr>
<tr><td rowspan="2">Other</td><td>External Dimensions:L*W*H(mm)</td><td colspan="2">320*110*455</td><td colspan="2">433*135*592</td></tr>
<tr><td>Packing Dimensions:L*W*H(mm)</td><td colspan="2">415*210*525</td><td colspan="2">510*230*685</td></tr>
</table>

AS-IP54 On/Off Grid Solar Inverter(USA)

3.6KW/6.5KW

MAIN FEATURES

- Built-in 1 or 2 MPPT
- Can parallel 1-6 units
- Can operate independently off the grid or in parallel with the grid
- Capable to work without battery
- Detachable dust cover for harsh environment
- Wifi remote monitoring optional

Product Specifications

<table>
<tr><th colspan="2">Model</th><th>AS-362048-54A</th><th>AS-362048-54B</th><th>AS-652048-54A</th><th>AS-652048-54B</th></tr>
<tr><td>Parallel Mode (function reserved)</td><td>Allow Quantity</td><td colspan="4">-A None/-B 1~6</td></tr>
<tr><td rowspan="7">Mains Mode</td><td>Nominal Input Voltage</td><td colspan="4">120VAC±5%</td></tr>
<tr><td>Input Voltage Range</td><td colspan="4">(90~140VAC)±2%</td></tr>
<tr><td>Frequency</td><td colspan="4">50/60Hz(Auto detect)</td></tr>
<tr><td>Frequency Range</td><td colspan="4">47±0.3Hz~55±0.3Hz(50Hz); 57±0.3Hz~65±0.3Hz(60Hz)</td></tr>
<tr><td>Max.Efficiency</td><td colspan="4">>95%</td></tr>
<tr><td>Conversion Time (bypass and inverter)</td><td colspan="4">10ms(Typical value)</td></tr>
<tr><td>Max.Bypass Overload Current</td><td colspan="2">40A</td><td colspan="2">60A</td></tr>
<tr><td rowspan="13">Inverter Mode</td><td>Output Voltage Waveform</td><td colspan="4">Pure Sine Wave</td></tr>
<tr><td>Nominal Output Power</td><td colspan="2">3600VA/3600W</td><td colspan="2">6500VA/6500W</td></tr>
<tr><td>Power Factor</td><td colspan="4">1</td></tr>
<tr><td>Nominal Output Voltage</td><td colspan="4">120VAC</td></tr>
<tr><td>Output Frequency Range</td><td colspan="4">50±0.3Hz/60±0.3Hz</td></tr>
<tr><td>Max.Efficiency</td><td colspan="4">>91%</td></tr>
<tr><td>Overload Protection</td><td colspan="4">(102%<load<125%)±10%: report error, turn off the output after 5 minutes
(125%<load<150%)±10%: report error, turn off the output after 10 seconds
load>150%±10%: report error,turn off the output after 5 seconds</td></tr>
<tr><td>Peak Power</td><td colspan="2">7200VA</td><td colspan="2">12000VA</td></tr>
<tr><td>Load Motor Capability</td><td colspan="2">2HP</td><td colspan="2">5HP</td></tr>
<tr><td>Nominal Battery Input Voltage</td><td colspan="4">48V(Min. starting voltage 44V)</td></tr>
<tr><td>Battery Voltage Range</td><td colspan="4">40.0~60VDC±0.6VDC(Undervoltage alarm/shutdown voltage/overvoltage/alarm/overvoltage recovery...LCD screen(can be set)</td></tr>
<tr><td>Save Power Mode</td><td colspan="4">Loads 25W</td></tr>
<tr><td>Battery Type</td><td colspan="4">Lead-acid or lithium batteries</td></tr>
<tr><td rowspan="2">Mains Charge</td><td>Max.Charge Current (configurable)</td><td colspan="2">40A</td><td colspan="2">120A</td></tr>
<tr><td>Charge Voltage Range</td><td colspan="4">40~60VDC</td></tr>
<tr><td rowspan="6">Solar Charge</td><td>Max.PV Open Circuit Voltage</td><td colspan="4">300VDC</td></tr>
<tr><td>PV Operate Voltage Range</td><td colspan="4">80~300VDC</td></tr>
<tr><td>MPPT Voltage Range</td><td colspan="4">90~260VDC</td></tr>
<tr><td>Battery Voltage Range</td><td colspan="4">40~60VDC</td></tr>
<tr><td>Max.PV Input Power/Current</td><td colspan="2">4000W/22A</td><td colspan="2">4500W*2/22A*2</td></tr>
<tr><td>Charge Current Range (configurable)</td><td colspan="2">0~80A</td><td colspan="2">0~150A</td></tr>
<tr><td>Max.Hybrid Charge Current (PV+AC)</td><td>Max.Hybrid Charge Current (configurable)</td><td colspan="2">0~80A</td><td colspan="2">0~150A</td></tr>
<tr><td rowspan="8">Certification</td><td>Safety Certification</td><td colspan="4">CE(IEC62109-1.2)</td></tr>
<tr><td>EMC Certification Level</td><td colspan="4">EN61000,C2</td></tr>
<tr><td>Operate Temperature Range</td><td colspan="4">-15~55°C</td></tr>
<tr><td>Storage Temperature Range</td><td colspan="4">-25~60°C</td></tr>
<tr><td>Humidity Range</td><td colspan="4">5~95%(Three anti-paint protection)</td></tr>
<tr><td>Noise</td><td colspan="4">≤60dB</td></tr>
<tr><td>Cooling</td><td colspan="4">Forced air cooling, adjustable wind speed</td></tr>
<tr><td>Communicate</td><td colspan="4">USB/RS485(/WiFi/GPRS)/Dry node control</td></tr>
<tr><td rowspan="2">Other</td><td>External Dimensions:L*W*H(mm)</td><td colspan="2">320*110*465</td><td colspan="2">433*135*592</td></tr>
<tr><td>Packing Dimensions:L*W*H(mm)</td><td colspan="2">425*210*535</td><td colspan="2">510*230*665</td></tr>
</table>

NKW/NKM Solar Inverter

1KW

MAIN FEATURES

- Wall-mounted with battery cable
- Built-in MPPT 40A PV Input 100VDC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKW-1000E		NKM-1000E	
Power Rating		1000W		1000W	
Storage Battery	Rated Voltage	12VDC	24VDC	12VDC	24VDC
	Battery Type	Can be set			
AC Input	Charge Current	0~30A		0~25A	0~15A
	Voltage Range	73~138/145~275VAC			
	Frequency	45~65Hz			
AC Output	Voltage Range	100/110/120(VAC) 200/210/220/230/240(VAC)			
	Frequency	50/60Hz±1%(inversion mode)			
	Output Waveform	Pure Sine Wave			
	Change-over	<10ms(typical load)			
	Productiveness	>85%(80% resistive load)			
	Overload	110~120%/30s;>160%/300ms			
	Protection Function	Battery over voltage and low voltage protection,overload protection, short circuit protection,overtemperature protection,etc			
MPPT Solar Energy Controller	MPPT Voltage Range	/		18~100VDC	34~100VDC
	Maximum Solar Panel Input Power			570Wp	1130Wp
	Floating Charging Voltage			13.75VDC	27.5VDC
	Balanced Charging Voltage			14.2VDC	28.4VDC
	Machine Efficiency			≥99%	
	Rated Charging			40A(Max)	
The PWM Solar Energy Controller	Maximum PV Voltage	25VDC	50VDC	/	
	Charging Voltage Range	10~25VDC	20~50VDC		
	Rated Charging Current	30A			
	Overcharge Protection Voltage	14.2VDC	28.4VDC		
	Overcharge Recovery Voltage	14VDC	28VDC		
	Floating Charging Voltage	13.7VDC	27.4VDC		
Operating Ambient		-15~50°C			
Storage Environment		-20~50°C			
Operating/Storage		And 0~90% without condensation			
Appearance Dimensions:L*W*H(mm)		308*130*332			
Package Dimensions:L*W*H(mm)		350*200*390			
Weight(KG)		9.5/10.5		9.7/10.7	

NKM Low Frequency Solar Inverter

1KW/2KW/3KW/4KW/5KW/6KW

MAIN FEATURES

- Pure sine wave both 110V~240V
- Built-in MPPT 40A/60A/100A PV Input 150VDC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKM-1000	NKM-2000	NKM-3000	NKM-4000	NKM-5000	NKM-6000
Power Rating		1000W	2000W	3000W	4000W	5000W	6000W
Battery	Rated Voltage	12/24VDC	24VDC	24/48VDC	48VDC		
	AC Charge Current	12V:0~25A 24V:0~15A	0~30A	24V:0~35A 48V:0~25A	0~20A	0~30A	0~35A
	Battery Type	Can be set					
Input	Voltage Range	73~138/145~275VAC	85~138/170~275VAC				
	Frequency	45~65Hz					
Output	Voltage Range	110V(can be set):100/110/120VAC 220V(can be set):200/210/220/230/240VAC					
	Frequency	50/60Hz±1%(Inverter mode)					
	Output Wave	Pure Sine Wave					
	Conversion Time	<10ms(Typical load)					
	Efficiency	>85%(80% Resistive load)					
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms					
	Protection	Battery overvoltage/low voltage,overload,short circuit protection,overtemperature protection,etc.					
Solar Controller	MPPT Voltage Range	12VDC:18~150VDC;24VDC:34~150VDC;48VDC:65~150VDC					
	Max.PV Input Power	12VDC/40A:570W 24VDC/40A:1130W	12VDC/60A:900W;24VDC/60A:1700W 48VDC/60A:3400W;48VDC/100A:5400W				
	Rated Charge Current	40A(Max)	60A(Max)			100A(Max)	
	MPPT Efficiency	≥99%					
	Average Charging Voltage(lead acid battery)	12V:14.2VDC;24V:28.4VDC;48V:56.8VDC					
	Floating Charge Voltage	12V:13.75VDC;24V:27.5VDC;48V:55VDC					
Operating Ambient Temperature		0~40°C					
Storage Ambient Temperature		-15~50°C					
Operating/Storage Environment		0~90°C No Condensation					
Dimensions:L*W*H(mm)		321*125*420	461*170*545				
Packing Size: L*W*H(mm)		380*205*515	555*260*645				
Note: Our company has the right of changing this user manual without any information							

NKM Low Frequency Solar Inverter

8KW/10KW

MAIN FEATURES

- Pure sine wave 200/210/220/230/240VAC
- Built-in MPPT 100A PV Input 150VDC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in square transformer)
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKM-8000	NKM-10K
Power Rating		8000W	10000W
Battery	Rated Voltage	48/72/96VDC	
	AC Charge Current	0~40A	
	Battery Type	Can be set	
Input	Voltage Range	85~138/170~275VAC	
	Frequency	45~65Hz	
Output	Voltage Range	220V(can be set):200/210/220/230/240VAC	
	Frequency	50/60Hz±1%(Inverter mode)	
	Output Wave	Pure Sine Wave	
	Switching Time	<10ms(Typical load)	
	Efficiency	>85%(80% Resistive load)	
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms	
	Protection	Battery overvoltage/low voltage,overload,short circuit protection,overtemperature protection,etc.	
Solar Controller	MPPT Voltage Range	48VDC:65~150VDC	
	Max.PV Input Power	48VDC/100A:5300W	
	Rated Charge Current	100A(Max)	
	MPPT Efficiency	≥99%	
	Average Charging Voltage(lead acid battery)	48V:56.8VDC	
	Floating Charge Voltage	48V:55VDC	
Operating Ambient Temperature		0~40°C	
Storage Ambient Temperature		-15~50°C	
Operating/Storage Environment		0~90°C No Condensation	
Dimensions:L*W*H(mm)		452*252*582	
Packing Size: L*W*H(mm)		525*315*650	

Note: Our company has the right of changing this user manual without any information

NKT Low Frequency Hybrid Solar Inverter

8KW/10KW

MAIN FEATURES

- Pure sine wave 220VAC/230VAC
- Built-in MPPT 60A 100A PV Input 150VDC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in strip transformer)
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKT-10KVA	NKT-12.5KVA
Power Rating		8000W	10000W
Battery	Rated Voltage	48VDC	
	AC Charge Current	0~30A MAX	
	Battery Type	Can be set	
Input	Voltage Range	170~275VAC	
	Frequency	45~65Hz	
Output	Voltage Range	220VAC±5%(Inverter mode)	
	Frequency	50/60Hz±1%(Inverter mode)	
	Output Wave	Pure Sine Wave	
	Conversion Time	<10ms(Typical load)	
	Efficiency	>85% (80% Resistive load)	
	Overcharge	110~120%/60s;120~130%/10s;130~150%/2s;>150%/500ms	
	Protection Function	Battery over-voltage and low-voltage protection, overload protection, short circuit protection, over-temperature protection	
Solar Controller	MPPT Voltage Range	65~150VDC	
	PV Power	4000W	5000W
	Rated Charge Current	80A(Max)	100A(Max)
	MPPT Efficiency	≥99%	
	Average Charging Voltage(lead acid battery)	56.8VDC	
	Floating Charge Voltage	55.2VDC	
	Operating Ambient Temperature	-15~50°C	
	Storage Ambient Temperature	-20~50°C	
	Operating/Storage Environment	0~90% No Condensation	
	Dimensions:W*D*H(mm)	476*319*877	
	Packing Size: W*D*H(mm)	575*420*950	
	Net Weight (KG)	58.5	78
	Gross Weight (KG)	76	96.5

Note: Our company has the right of changing this user manual without any information

FT Low Frequency Inverter

1KW/1.5KW/2KW/3KW/4KW/5KW/6KW/8KW/10KW

MAIN FEATURES

- Pure sine wave
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		FT-1000	FT-1500	FT-2000	FT-3000	FT-4000	FT-5000	FT-6000	FT-8000	FT-10K
Rated Power		1000W	1500W	2000W	3000W	4000W	5000W	6000W	8000W	10000W
Battery	Rated Voltage	12/24/48VDC			24/48VDC			48VDC	48/72/96VDC	
	Charge Current	30A(default) -CO-C6								
	Battery Type	U0~U7								
Input	Voltage Range	85~138/170~275VAC								
	Frequency	45~65Hz								
Output	Voltage Range	100/110/120VAC 200/210/220/230/240VAC							220/230/240VAC	
	Frequency	50/60Hz±1%(Inversion mode)								
	Output Wave	Pure Sine Wave								
	Conversion Time	<10ms(Typical load)								
	Efficiency	>85%(80% resistive load)								
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms								
	Protection Function	Battery overvoltage protection,battery undervotage protection,overload,protection, short circuit protection,overtemperature protection,etc.								
	Ambient Temperature For Operation	0~40°C								
	Ambient Temperature For Storage	-15~50°C								
	Operation/Storage Ambient	0~90% No Condensation								
Net Weight (KG)		14.2	15	17	19	25	29	32	49	52
Gross Weight (KG)		15	17	19	22	27	31	35	55	58

FTS Low Frequency Split Phase Inverter

2KW/3KW/4KW/5KW/6KW

MAIN FEATURES

- Pure sine wave 110VAC/220VAC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		FTS-2000	FTS-3000	FTS-4000	FTS-5000	FTS-6000
Rated Power		2000W	3000W	4000W	5000W	6000W
Battery	Rated Voltage	12/24/48VDC	24/48VDC			48VDC
	AC Charge Current	30A(default)				
	Battery Type	can be set				
Input	Voltage(HOT1-HOT2)	170~275VAC				
	Frequency	45~65Hz				
Output	Voltage/Power(HOT1-HOT2)	220VAC/2KW	220VAC/3KW	220VAC/4KW	220VAC/5KW	220VAC/6KW
	Voltage/Power (N-HOT1)	110VAC/1KW	110VAC/1.5KW	110VAC/2KW	110VAC/2.5KW	110VAC/3KW
	Voltage/Power(N-HOT2)	110VAC/1KW	110VAC/1.5KW	110VAC/2KW	110VAC/2.5KW	110VAC/3KW
	Frequency	50/60Hz±1%(Inverter mode)				
	Output Wave	Pure Sine Wave				
	Conversion Time	<10ms(typical load)				
	Efficiency	>85%(80% Resistance load)				
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms				
	Protection	Battery overvoltage/low voltage,overload,short circuit protection,overtemperature protection,etc.				
Operating Ambient Temperature		0~40°C				
Storage Ambient Temperature		-15~50°C				
Operating/Storage Ambient		0~90% No condensation				
Machine Size:L*W*H(mm)		486*247*179		563*307*189		
Package Size:L*W*H(mm)		550*310*230		640*370*240		
Net Weight/Gross Weight(KG)		17/18	20/22	24/28	27/31	31/35

FTB Low Frequency Inverter

0.5KW/1KW/1.5KW/2KW/3KW/4KW/5KW/6KW

MAIN FEATURES

- Pure sine wave
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		FTB-500	FTB-1000	FTB-1500	FTB-2000	FTB-3000	FTB-4000	FTB-5000	FTB-6000
Rated Power		500W	1000W	1500W	2000W	3000W	4000W	5000W	6000W
Battery	Rated Voltage	12/24VDC			12/24/48VDC	24/48VDC			48VDC
Input	Voltage Range	73~138/145~275VAC							
	Frequency	45~65Hz							
Output	Voltage Range	110/220VAC±5%(Inversion mode)							
	Frequency	50/60Hz±1%(Inversion mode)							
	Output Wave	Pure Sine Wave							
	Conversion Time	<10ms(Typical load)							
	Efficiency	>85%(80% resistive load)							
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms							
	Protection Function	Battery overvoltage protection, battery undervoltage protection, overload, protection, short circuit protecion, overtemperature protecion, etc.							
	Ambient Temperature For Operation	0~40°C							
	Ambient Temperature For Storage	-15~50°C							
	Operation/Storage Ambient	0~90% No Condensation							
Product Size:L*W*H(mm)		302*122*188	316*149*215	432*210*330			551*215*344		
Package Size: L*W*H(mm)		375*195*260	410*215*280	498*305*402			622*315*416		
Net Weight (KG)		5.8	8.2	16	18.5	20.7	25	32	32
Gross Weight (KG)		7	9	23	25.5	27.5	27	42	35

SN Low Frequency Inverter(IGBT)

5KW/10KW/15KW/20KW

MAIN FEATURES

- Pure sine wave 110VAC or 220VAC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in strip transformer)
- Support multiple output priority:SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		SN-5000	SN-10K	SN-15K	SN-20K
Rated Power		5000W	10000W	15000W	20000W
Battery	Rated Voltage	96/192VDC		192/220/240VDC	
	Charge Current	10~20A			
	Low Voltage Protection	84/168VDC		168VDC	
	Charging Voltage	96VDC:108VDC 192VDC:217VDC		192VDC:217VDC 220VDC:248VDC 240VDC:276VDC	
Input	Voltage Range	88~132/176~264VAC			
	Frequency	45~65Hz			
Output	Voltage Range	110/220VAC±5%(Inversion mode)			
	Frequency	50/60Hz±1%(Inversion mode)			
	Output Wave	Pure Sine Wave			
	Conversion Time	<10ms(Typical load)			
	Efficiency	>85%(100% Resistive Load)	>90%(100% Resistive Load)		
	Overload	110~120%/60s;120~130%/10s 130~150%/2s;>150%/500ms			
	Protection Function	Battery overvoltage protecion, battery undervoltage protection,overload,protection, short circuit protection,overtemperature protection, etc.			
	Ambient Temperature For Operation	0~40°C			
	Ambient Temperature For Storage	-15~50°C			
	Operation/Storage Ambient	0~90% No Condensation			
	Product Dimensions:D*W*H(mm)	555*368*695			655*383*795
	Gross Weight (KG)	80	110	150	170

TP Low Frequency Three-phase Inverter (IGBT)

10KW/20KW/30KW/50KW/80KW/100KW/150KW/200KW

MAIN FEATURES

- Pure sine wave 220VAC/380VAC
- Compatible work with gel battery
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		TP-10K	TP-20K	TP-U-30K	TP-U-50K	TP-U-80K	TP-U-100K	TP-U-150K	TP-U-200K
Rated Power		10KW	20KW	30KW	50KW	80KW	100KW	150KW	200KW
Working Methods And Principles		PWM (pulse width modulation) based on DSP accurate control technology and double built-in MCUs Complete isolation of the outout power supply							
AC Input	Phase	Three phase N+G							
	Voltage	220/380VAC±20%							
	Frequency	50/60Hz±5%							
DC Input	DC Voltage	192/220/240/384VDC			384VDC				
	Floating Battery	13.6V of each battery*battery quantity [13.6V*16 batteries=217.6V]							
	Cut-off Voltage	10.8V of each battery*battery quantity [10.8V*16 batteries=172.8V]							
AC Output	Phase	Three phase N+G							
	Voltage	220/380VAC±1% (steady load)							
	Frequency	50/60Hz±5%(mains);50Hz±0.5% (battery)							
	Efficiency	≥90%(Load100%)							
	Output Wave Form	Sine Wave							
	Total Harmonic Distortion	Linear load<3%,Non-linear loads<5%							
	Dynamic Load Voltage	<±5% (From 0~100%)							
	Instant Recovery Time	<100ms							
	Battery And Mains Switching	3~5s			<4ms				
	Unbalanced Voltage	<±3%(Unbalanced battery voltage)<±1%(Unbalanced load voltage)							
	Overload	120%,20s;>150%,100ms			125%,20s;>150%,1s				
System Specifications	Working Efficiency	≥90%(load:100%)							
	Computer Communication	RS232/485(SNMP Remote Monitoring Network Adapters)							
	Operating Temperature	-10~40°C							
	Relative Humidity(no condensation)	0~90%(no condensation)							
	Noise From The Machine 1M	40~50dB			50~60dB				
Structure	Dimensions:D*W*H(mm)	580*750*920			608*728*1475	1138*795*1725		1138*945*1725	
	Weight (KG)	180	220	261	470	680	688	954	1120

NKD Low Frequency Photovoltaic Inverter (IGBT)

10KW/15KW/20KW30KW

MAIN FEATURES

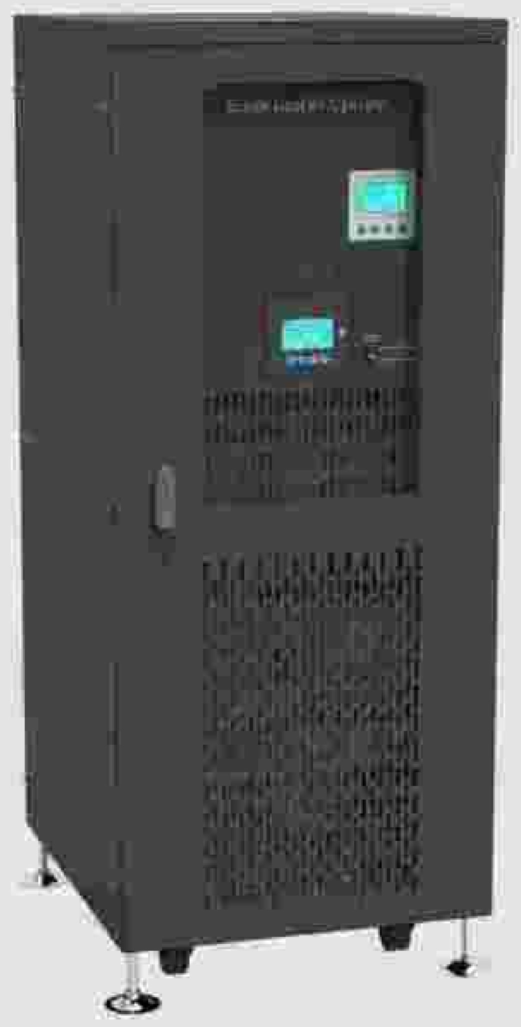
- Pure sine wave 220VAC/230VAC
- Compatible work with LiFePO4 battery via RS485
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKD-10K	NKD-15K	NKD-20K	NKD-30K
Rated Power		10000W	15000W	20000W	30000W
Battery	Battery Voltage	192/220/240VDC			
	Voltage Of Over Discharge Protection	168/189/210VDC			
	Restart Voltage After Low Battery	216/243/270VDC			
MPPT Controller	Controller Types	With maximum power point tracking (MPPT) function controller			
	Rated Current	Solar1:50A Solar2:50A			
	Current Limiting Protection	Solar1:52A Solar2:52A			
	Rate Voltage	192/220/240VDC			
	Operating Voltage Range	260~420VDC			
	Charge Mode	Three stages:constant current(quick charge),constant pressure,floating charge			
	Battery Type	Sealed lead-acid battery, colloidal lead-acid battery, open lead-acid battery (you can customize parameters to charge other types of batteries)			
	PV Module Input Power	192VDC:Solar1,10KW;Solar2,10KW 220VDC:Solar1,11.5KW;Solar2,11.5KW 240VDC:Solar1,12.5KW;Solar2,12.5KW			
	Vmax-pv	<420VDC			
	Vlow-pv	240/250/270VDC			
	Vstar-pv	260/270/290VDC			
	Vovet-pv	425VDC			
	Floating Charge Votage (Lead Acid Battery)	220.8/248.4/276VDC(Can be customized)			
	Average Charge Voltage (Lead Acid Battery)	232/261/290VDC(Can be customized)			
	PV Module Utilization	≤99.97%			
	Machine Efficiency	≥96.5%			
	Output Regulation Accuracy	≤±1.5%			
	Temperature Accuracy	±0.02%/°C			
	Protective Function	Input/output overvoltage protection,anti reverse protection,short circuit protection,over temperature protection,etc			
Inverter	Input Voltage	380VAC±15%			
	Input Frequency	50/60Hz±5%			
	Output Voltage	220VAC±5%			
	Output Frequency	50/60Hz±1%			
	Output Wave	Pure Sine Wave THD<4%(full load)			
	Conversion Time	1~3s			
	Overload	120%/20s;>150%/100ms			
	Efficiency	≥90%(100% resistive load)			
	Accuracy Of Load Transient Voltage	<±5%(0~100%)			
	Defensive Function	Output short circuit, overvoltage, low voltage, low battery power protection			
Operating Ambient Temperature		-10~40°C			
Environment Relative Humidity		20~90%(No Condensation)			
Product Size:L*W*H(mm)		536*560*1015			635*566*1295
Weight(KG)		148	165	182	252

NKG Low Frequency Three-phase Solar Inverter(IGBT)

10KW/15KW/20KW/30KW



MAIN FEATURES

- Pure sine wave 220VAC/380VAC
- Compatible work with gel battery
- Low frequency(Built in ring transformer)
- Support multiple output priority: SBU,SUB
- Communication interface:RS232/RS485/Dry contact
- EQ function to optimize battery performance and extend lifecycle

Product Specifications

Model		NKG-10K	NKG-15K	NKG-20K	NKG-30K
Rated Power		10000W	15000W	20000W	30000W
Battery	Battery Voltage	192/220/240VDC			
	Voltage Of Over Discharge Protection	168/189/210VDC			
	Restart Voltage After Low Battery	216/243/270VDC			
MPPT Controller	Controller Types	With maximum power point tracking(MPPT) function controller			
	Rated Current	Solar1:50A Solar2:50A			
	Current Limiting Protection	Solar1:52A Solar2:52A			
	Rate Voltage	192/220/240VDC			
	Operating Voltage Range	260~420VDC			
	Charge Mode	Three stages:constant current(quick charge), constant pressure, floating charge			
	Battery Type	Sealed lead-acid battery, colloidal lead-acid battery, open lead-acid battery (you can customize parameters to charge other types of batteries)			
	PV Module Input Power	192VDC:Solar 1,10KW;Solar 2,10KW / 220VDC:Solar 1,11.5KW;Solar 2,11.5KW / 240VDC:Solar 1,12.5KW;Solar 2,12.5KW			
	Vmax-pv	<420VDC			
	Vlow-pv	240/250/270VDC			
	Vstar-pv	260/270/290VDC			
	Vovet-pv	425VDC			
	Floating Charge Votage (Lead Acid Battery)	220.8/248.4/276VDC(Can be customized)			
	Average Charging Voltage (Lead Acid Battery)	232/261/290VDC(Can be customized)			
	PV Module Utilization	≤99.97%			
	Machine Efficiency	≥96.5%			
	Output Regulation Accuracy	≤±1.5%			
	Temperature Coefficient	±0.02%/°C			
	Protective Function	Input and output over-voltage protection,anti-reverse protection,short circuit protection,etc.			
Inverter	Input Voltage	380VAC±15%			
	Input Frequency	50/60Hz±5%			
	Output Voltage	220/380VAC±2%			
	Output Frequency	50/60Hz±1%			
	Output Wave	Pure Sine Wave THD<4%(full load)			
	Conversion Time	1~3s			
	Overload	120%/20s;>150%/100ms			
	Efficiency	≥90%(100% resistive load)			
	Dynamic Load Voltage Transient	<±5%(0~100%)			
	Defensive Function	Output short circuit, overvoltage,low voltage,low battery power protection			
Other	Operating Ambient Temperature	-10~40°C			
	Environment Relative Humidity	20~90%(No Condensation)			
Product Size: L*W*H(mm)		536*560*1015			635*566*1295
Weight(KG)		148	165	182	252

CM MPPT Solar Charging Controller

30A/40A/50A/60A/80A/100A

MAIN FEATURES

- Excellent heat dissipation design and intelligent controlled
- Innovative maximum power point tracking technology,the conversion rate of up to 97%
- Quick scan of the entire I-V curve.Efficient track the maximum power point
- Three types of lead-acid battery,sealed,colloid,open type battery and lithiumbattery series charging procedures are optional
- With the functions of over charge,over discharge,overload and short circuitautomatic protection
- With RS485 communicate interface.It can communicate with multiple and the uppercomputers,which is convenient to check the operating parameters of the controller

Product Specifications

Model			CM-30A	CM-40A	CM-50A	CM-60A	CM-80A	CM-100A
Charging Mode			MPPT Automatic Maximum Power Point Tracking					
Charging Method			Three stages:Constant Current (MPPT), Balanced Charging, Floating Charge					
System Type	12/24/48V		Automatic Identification/Manual Setting					
System Identification Voltage Range	12V System		9~15VDC					
	24V System		18~30VDC					
	48V System		36~60VDC					
Soft Start Time	12/24/48V		≤10s					
Dynamic Response Recovery Time	12/24/48V		≤500us					
Static Power	12/24/48V		≤2W					
Machine Efficiency	12/24/48V		≥96.5%					
PV Module Utilization	12/24/48V		≤99%					
Input Characteristics	MPPT Operating Voltag Range	12V System	18~150VDC					
		24V System	34~150VDC					
		48V System	65~150VDC					
	Maximum Solar Panel Input Power	12V System	420W	570W	700W	900W	1100W	1350W
		24V System	840W	1130W	1400W	1700W	2200W	2750W
		48V System	1650W	2270W	2800W	3400W	4400W	5400W
Output Characteristics	Optional Battery Type(Default is lead-acid maintenance-free battery)	12/24/48V	Lead-acid maintenance-free Battery,Gel Battery,Lithium Battery (Can also be customized for other types of battery)					
	Current Limiting Protection	12/24/48V	32A	42A	52A	62A	82A	102A
	Temperature Accuracy	12/24/48V	±0.02%/°C					
	Temperature Compensation	12/24/48V	14.2V-(Maximum Temperature -25°C)*0.3					
	Output Regulation Accuracy	12/24/48V	≤±15%					
Protection	Input Low Voltage Protection		Reference Input Characteristics					
	Input High Voltage Protection		Reference Input Characteristics					
	Short Circuit Protection		After 5 trial starts will enter the protection state,Restart Recovery					
	Temperature Protection		90°C					
	Temperature Rise Protection		Reduce Power Output When Exceed 85°C					
Other Parameters	Noise		≤50dB					
	Heat Dissipation Method		Forced air cooling,fan speed is adjusted by temperature					
	Class Of Protection		IP21					
	Humidity		0~90%RH(No condensation)					
PV Module Configuration	System Battery Voltage		PV module load voltage (Recommended Value)					
	12V System		18~60V(30V module*1 string, 36V module*1 string)					
	24V System		36~72V(30V module*2 string, 36V module*2 string)					
	48V System		72~144V(30V module*3 string, 36V module*3 string)					

SCB PV Combiner Box

4 Arrays to 10 Arrays

MAIN FEATURES

- IP65 waterproof design
- Built-in 16A Fuses each arrays
- The standard surge arrester is grounded safely
- Compatible work with on/off grid solar system
- PV input with DC breaker control

Product Specifications

Model			H4T	H6T	H4T2	H6T2	H8T2	H10T2
Input Data	Number Of PV Input Arrays		4	6	4	6	8	10
	Maximum Current Of Each PV Input Array		16A					
	Fuse For Each PV input Array		16A					
	Wire Number Of Each PV Input Array		PG7,4mm^2					
Output Data	Number Of Output Channel		1		2			
	Maximum Output Current		40A	60A	30A,total 60A		40A,total 80A	50A,total 100A
	Wire Number Of Each Output Channel	250VDC	PG16,8mm^2	PG16,8mm^2	PG16,10mm^2		PG16,10mm^2	PG16,12mm^2
		440VDC		PG16,10mm^2			PG16,12mm^2	
		1000VDC	PG16,10mm^2	PG16,16mm^2			PG16,12mm^2	
	DC Output Circuit Breaker		Yes					
Other Data	Protection		IP65					
	Temperature		-30~60°C					
	Cooling Method		Natural Cooling					
	Surge Protection		Yes					
	Ground Wire Number		≥6mm^2					
	Maximum Output Voltage		250/440/1000VDC					
	Equipment Size(L*W*H)mm	250/440VDC	362*136*358	366*152*409			445*152*420	
		1000VDC	446*162*459	446*153*449				
	Packing Size(L*W*H)mm	250/440VDC	460*225*420	470*225*460			530*255*510	
		1000VDC	510*220*500	540*225*510				

LiFePO4 Battery 12.8~25.6V

12.8V(50AH/100AH/200AH/300AH)/25.6V(50AH/100AH/200AH)

MAIN FEATURES

- The whole module is non-toxic, non-polluting and environmentally friendly
- Cathode material is made from LiFePO4 with safety performance and long cycle life
- Battery management system(BMS)has protection functions includingover-discharge,over-charge, over-current and high/low temperature
- Small size and light weight, comfortable for installation and maintenance

Product Specifications

Electrical Voltage		12.8V				25.6V		
Electrical Specifications	Nominal Capacity	50AH	100AH	200AH	300AH	50AH	100AH	200AH
	Energy	640WH	1280WH	2560WH	3840WH	1280WH	2560WH	5120WH
	Resistance	≤20mΩ						
	Efficiency	99%						
	Self Discharge	Monthly<3%						
Discharge Specifications	Maximum Continuous Discharge Current	50A	100A	200A	200A	50A	100A	200A
	Peak Discharge Current	100A	200A	400A	400A	100A	200A	400A
	Discharge Cut-off Voltage	10V				20V		
Charging Specifications	Recommended Charging Current	25A	50A	100A	100A	25A	50A	100A
	Maximum Charging Current	50A	100A	200A	200A	50A	100A	200A
	Maximum Charge Voltage	14.6V		14.2~14.6V		29.2V		
	Charging Current (-20~10°C)	≤0.05°C						
Mechanical Specifications	Size (L*W*H)mm	229*138*208	260*167*210	502*186*243	384*194*255	330*175*220	521*238*218	521*268*218
	Weight(KG)	7.5	12.8	22	28	12	22	45
	Terminal Type	M8 screw						
	Housing Material	ABS shell						
	Protection Grade	IP65						
	Cell Type	Square aluminum shell						
Temperature Specifications	Discharge Temperature	-20~60°C						
	Charge Temperature	0~55°C						
	Storage Temperature	-20~40°C						
	BMS High Temperature	80°C						
	Reconnect Temperature	50°C						

BL Lithium Iron Phosphate Battery

2.5KWH/5KWH/10KWH/15KWH

MAIN FEATURES

- Flexible expansion, easy installation, saving time and cost
- Equipped with REPT LFP batteries and multiple safety
- UN38.3/MSDS/DG Package
- Reduce electric bill and maximize your solar investment with battery storage
- Built-in BMS safety for home
- Built-in automatic fire extinguishing device

Product Specifications

Model		BL-2500L	BL-5000LE	BL-5000L	BL-10000L	BL-15000L	BL-15000LP
Voltage		25.6V		51.2V			
Capacity		100Ah	200Ah	100Ah	200Ah	280Ah	314Ah
Rated Power		2560W	5120W		10240W	14336W	16076.8W
Maximum Number Of Parallel Machines		15	16				
Display		SOC status indicator light, LED indicator light, LCD display screen					
Communication		RS485,CAN,RS232					
Inverter Protocol (customizable)		pylon,growatt,voltronic,must,goodwe...					
Service Life		25°C ambient temperature environment @ 6000 cycles					
Recommended Charging Voltage		29.2V		58.4V			
Recommended Charging Current		20A	40A	20A	40A	56A	
Discharge Termination Voltage		20V		40V			
Standard Working Current	Charge	20A	40A	20A	40A	56A	
	Discharge						
Maximum Continuous Operating Current	Charge	50A	100A	50A	100A	140A	
	Discharge	100A	200A	100A	200A	200A	
BMS Cut-off Voltage	Charge	29.2V (cell 3.65V)		58.4V (cell 3.65V)			
	Discharge	20V (cell 2.5V)		40V (cell 2.5V)			
Operation Temperature	Charge	0~45°C					
	Discharge	-15~55°C					
Storage Temperature		-5~35°C					
Shipping Voltage		≥25.6V(within 30 days of shipment)		≥51.2V(within 30 days of shipment)			
Shell Material		Cold rolled plate 1.2mm			Cold rolled plate 1.5mm		
Battery Size:L*W*H(mm)		380*145*500 (Excluding bracket)	440*145*640 (Excluding bracket)	440*145*640 (Excluding bracket)	480*225*700 (Excluding bracket)	480*238*780 (Excluding rollers and brackets)	
Packaging Size:L*W*H(mm)		475*250*595	535*250*735	535*250*735	575*330*795	575*340*950	
Net Weight(KG)		25	45	45	85	125/130	
Gross Weight(KG)		27	50	50	90	130/135	
Additional Features(optional)		WiFi, Bluetooth					

Integrated PV Energy Storage Cabinet

MAIN FEATURES

- Built-in fire control,flooding,temperature control,system warning function for multiple security
- STS performs on-grid and off-grid seamless switching to ensure continuous power supply of load
- Integrated BMS/PCS/EMS,suitable for various applications
- Complete fault protection,low baittery circulation,automatic current sharing for multiple parallel machines,fully tested before delivery
- MachinesFully tested before delivery
- Provide various application solutions,fast delivery and installatiof

Product Specifications

Part Number			NKG-S215A100
DC Data	Battery Side	Battery Chemistry	Lithium Iron Phosphatee(LiFePO4)
		Cycle Life	≥6000(@25°C,0.5C/0.5C,70%EOL)
		Cell Spec	3.2V/280Ah
		String Configuration	1P240S
		Number Of Strings	1
		Rack Ratedenergy Capacity	215KW
		Nominal Voltage	768V
		Dc Inputvoltage Range	600~950V
		Max Input Curent	185A
	PV Side	Max PV Input Power	120KW
		PV Open Circuit Voltage Range	200~950V
		MPPT Working Voltage Range	200~850V
		Rated PV Input Voltage	600V
		MPPT Startvoltage	250V
		MPPT Input Route	4(each max input 50A)
		Max Charge Current	180A
AC Data	On Grid	Max Output Power	100KW
		Max Output Current	152A
		Rated Voltage	230V(single phase)/400V(3 phase)
		Frequency Range	50/60Hz
		Harmonic Wave	<3%(greater than 30%load)
	Off Grid	Max Output Power	100KW
		Max Output Current	152A
		Rated Voltage	230V(single phase)/400V(3 phase)
		Frequency Range	50/60Hz
		Harmonic Wave	<1.5%(resistive load)
		Imbalance	100%
		Overload	125%/10s;150%/0.1s
		Max Efficiency	98.78%
	General Data	Dimension(L*W*H)mm	1600*1000*2360
		Weight Of The Whole System	<3900kg
		Degree Of Protection	IP55
		Operating Temperature Range	-20~40°C
		Relative Humidity	0~95%(non-condensing)
		Max Working Altitude	3000m(9,842ft)
		Cooling Method	HVAC
		Communication Interfaces	CAN/RS485/Ethernet
		Communication Interfaces Protocol	Modbus/IEC 61850
		Certifications	EN62477,EN IEC61000,CE,UN38.3,UN3536,IEC62619(Applying)

Case
Show

-Abuja,Nigeria
5KW-NKM

-Mutare,Zimbabwe
10KW-NKH

-Nairobi,Kenya
6KW in parallel-IP54

-Lusaka, Zambia
6.5KW in parallel-AS

-Yaounde,Republic of Cameroon
10KW-FT

-Lae, Papua New Guinea
30KW-TP

-Abidjan, Côte d'Ivoire
20KW-SN