



Customer-Oriented,
Integration and Innovation,
Creating Value



Residential Solar Energy Storage System (Energy Storage Inverter & Battery)

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 Nanjing Ifusion Technology Co., Ltd.

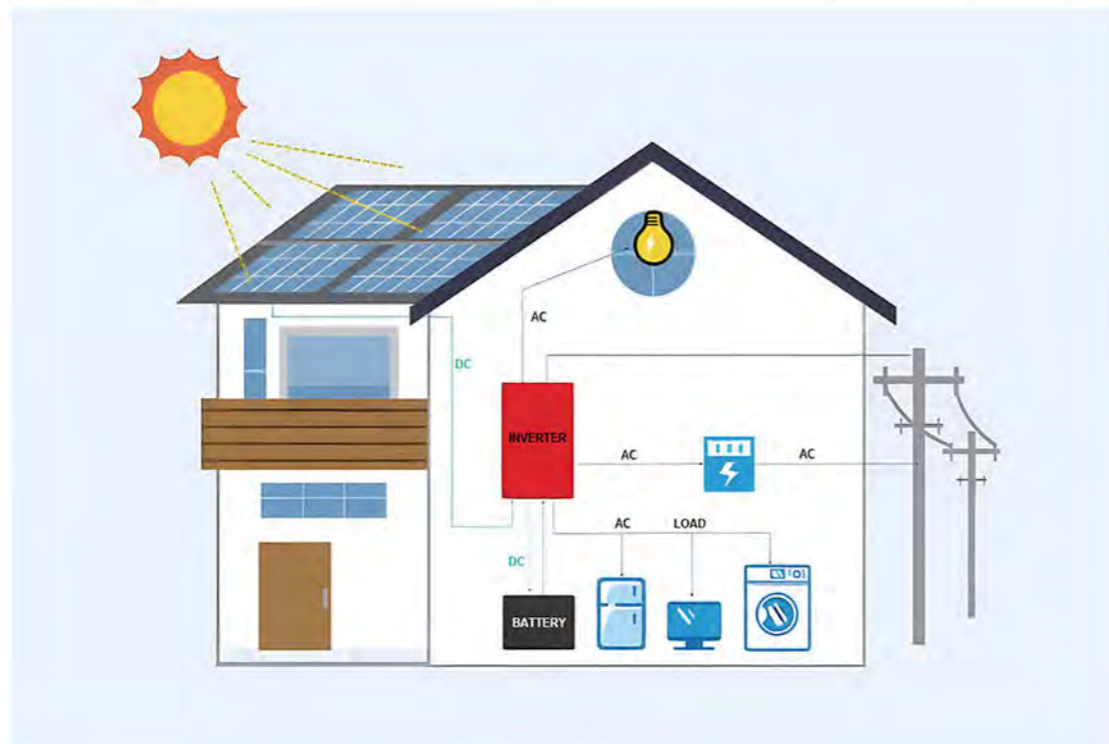
COMPANY PROFILE

Nanjing IFusion Technology Co., Ltd. (IFT) is an innovative enterprise dedicated to the research and development of photovoltaic micro-inverter technology, providing advanced solutions for the green energy sector. As a pioneer in the new energy field, IFT adheres to the corporate philosophy of "Customer-Oriented, Integration and Innovation, Creating Value." Leveraging over 20 years of industry management experience from its founding team, IFT applies its extensive communication research achievements to the green energy industry, aiming to become a globally renowned green energy management company.

IFT collaborates closely with several top universities in China, boasting strong R&D capabilities. Through cutting-edge technology research, the company has accumulated numerous patents, driving continuous product optimization and innovation to maintain a leading position and competitiveness in the photovoltaic micro-inverter field. IFT's micro-inverters utilize advanced simulation technology and practical engineering experience to optimize thermal design, improve communication modules, and incorporate advanced third-generation semiconductor materials. Combined with optimized MPPT algorithms and an efficient management platform, these innovations ensure high thermal performance, high conversion efficiency, and stable communication capabilities.


IFT's product range spans from 600W to 2000W, meeting the diverse power requirements of customers. Additionally, IFT provides various micro-inverter application solutions, including grid-tied and energy storage options, to cater to different customer needs. Our solutions are characterized by efficiency, safety, convenience, and adaptability to various scenarios, offering comprehensive solutions for diverse applications.

IFT consistently upholds its 'Customer-Oriented' service philosophy, committed to delivering advanced technology and high-quality service to customers. Through continuous innovation and product optimization, we strive to be the ideal choice for green energy solutions. Nanjing IFusion Technology Co., Ltd. will continue to delve deep into the green energy field, promoting industry technological advancements and partnering with customers to create a brighter future.



Factory Appearance



-  Independent R & D team
-  One to One customer service consultation
-  Professional design team, private customization.
-  Perfect after-sales service system
-  Experienced/qualified in exporting





ENERGY STORAGE INVERTER

IEP SERIES

ENERGY STORAGE INVERTER IEP 1500VA~3800VA



FEATURES

- Pure sine wave output
- DC Start & Automatic Self-Diagnostic Function
- Automatically send signal to start generator
- High efficiency design for optimized battery performance
- Selectable charging current based on applications
- lead acid battery/Lithium battery
- AC start-up voltage auto restart voltage/ 110V/120V Output Available

APPLICATION



Courtyard Lighting



Spray System



CCTV system



Photovoltaic environmental monitoring instrument

IEP SERIES

PARAMETES

Model	IEP1524	IEP2024	IEP3024	IEP3824
AC Input Voltage	220VAC(standard)			
Input Voltage Range	154-264VAC±5V(Nor Model);185-264VAC±3V(UPS Model)			
Input Frequency	50/60Hz±5%			
Output Power	1500VA	2000VA	3000VA	3800VA
Rated Power	1200W	1600W	2400W	3000W
AC Model Output Voltage	220V±10%			
AC Model Output Frequency	Same as the input frequency			
Battery Model Output Voltage	220VAC±3%			
Battery Model Output Frequency	50Hz or 60Hz±1%			
Battery Model Output Waveform	Sinusoidal wave			
Battery Type	External lead-acid battery; Gel battery; Water battery or Lithium battery			
Battery Voltage	24VDC			
Battery Charging Voltage	27.4VDC			
Max PV Array Power	1600W			
MPPT Voltage Range	30V-105VDC			
Max PV Open Circuit Voltage	105VDC			
Maximum PV Charging Current	60A			
Maximum AC Charging Current	15A	19A	29A	35A
Battery Charging Voltage Range	154-275VAC±5V			
Transfer Time	≤10ms(UPS Model)/≤20ms(INV Model)			
Load Peak Ratio(max)	3:1			
Protection Function	Input Circuit: overcurrent fuse; Inverter:overload protection, short circuit protection,low voltage protection, (anti-reverse connection available for the battery)			
LCD Display	AC voltage,AC frequency,PV voltage,PV current,output voltage, output frequency,battery voltage,load current and other parameters			
Audible Alarm	Low battery protection: buzzer sends long beep voice Low battery: buzzer beeps once per second Machine fault: buzzer beeps continuously Overload: buzzer beeps continuously If the overload is less than 130%,the buzzer will sound once per second,and the output power will be turned off after 30s. If the overload is more than 150%,the output power will be turned off after 300ms.			
Operating Temperature	-10°C~50°C			
Storage Temperature	-15°C~45°C			
Relative Temperature	-10°C~90°C (no condensation)			
Noise	<45dB			
Dimension(mm)	465*310*135			



ENERGY STORAGE
INVERTER
IEP SERIES

ENERGY STORAGE INVERTER IEP 5000VA~12500VA

FEATURES



- Pure sine wave output
- Can support WIFI / GPRS
- MPPT Efficiency max 98%
- Optional built-in MPPT/PWM30-60A controller
- DC Start & Automatic Self-Diagnostic Function
- Automatically send signal to start generator
- High efficiency design for optimized battery performance
- Selectable charging current based on applications
- AC start-up voltage auto restart voltage/ 110V/120V Output Available
- lead acid battery/Lithium battery
- BMS function for lithium battery

APPLICATION



Shipping/fishing



Construction/housing



Base station/cell tower



Agriculture/animal husbandry

IEP SERIES
PARAMETERS

Model	IEP5048	IEP6348	IEP8048	IEP10048	IEP12548
AC Input Voltage	220VAC(standard)				
Input Voltage Range	154-264VAC±5V(Nor Model);185-264VAC±3V(UPS Model)				
Input Frequency	50/60Hz±5%				
Output Power	5000VA	6000VA	8000VA	10000VA	12500VA
Rated Power	4000W	5000W	6000W	8000W	10000W
AC Model Output Voltage	220V±10%				
AC Model Output Frequency	Same as the input frequency				
Battery Model Output Voltage	220VAC±3%				
Battery Model Output Frequency	50Hz or 60Hz±1%				
Battery Model Output Waveform	Sinusoidal wave				
Battery Type	External lead-acid battery; Gel battery; Water battery or Lithium battery				
Battery Voltage	48VDC				
Battery Charging Voltage	54VDC				
Max PV Array Power	3200W	6400W			
MPPT Voltage Range	60V-150VDC				
Max PV Open Circuit Voltage	150VDC				
Maximum PV Charging Current	60A	120A			
Maximum AC Charging Current	24A	29A	38A	48A	60A
Battery Charging Voltage Range	154-275VAC±5V				
Transfer Time	≤10ms(UPS Model)/≤20ms(INV Model)				
Load Peak Ratio(max)	3:1				
Protection Function	Input Circuit: overcurrent fuse; Inverter: overload protection, short circuit protection, low voltage protection, (anti-reverse connection available for the battery)				
LCD Display	AC voltage, AC frequency, PV voltage, PV current, output voltage, output frequency, battery voltage, load current and other parameters				
Audible Alarm	Low battery protection: buzzer sends long beep voice Low battery: buzzer beeps once per second Machine fault: buzzer beeps continuously Overload: buzzer beeps continuously If the overload is less than 130%, the buzzer will sound once per second, and the output power will be turned off after 30s. If the overload is more than 150%, the output power will be turned off after 300ms.				
Operating Temperature	-10°C~50°C				
Storage Temperature	-15°C~45°C				
Relative Temperature	-10°C~90°C no condensation				
Noise	<45dB				
Dimension(mm)	545*400*200				



ENERGY STORAGE
INVERTER
IEH SERIES

ENERGY STORAGE INVERTER IEH 2000W~6200W

FEATURES



- Lithium Battery Auto-restart Function, More Convenient for Lithium Battery Charging
- Intelligent Power Supply Mode, Intelligent Distribution of Solar Panel/Mains/Battery Power Shares
- Utility Charging Voltage/PV Charging Voltage Adjustable, Match Different Battery Charging Requirements
- Slim Body, Convenient Installation And Transportation
- Battery Reverse Connection Protection with Fuse Switch, Safer Installation
- PFI.0, High Efficiency, Lower Consumption, Energy Conservation/ Environmental Protection/ Electricity Saving/ Cost Saving
- Support Working without Battery: Reduce Solar System Cost
- Parallel Function Up to Maximum 9 Units: Enlarge More Loads
- High Precision of Output Voltage, ±5%, Take Care of Your Appliances
- Communication Option: External WIFI, Supervise at Any Time
- BMS function for lithium battery

APPLICATION



Commercial car park



Street lighting/monitoring



Family/greenhouse



Commercial/construction

IEH SERIES
PARAMETERS

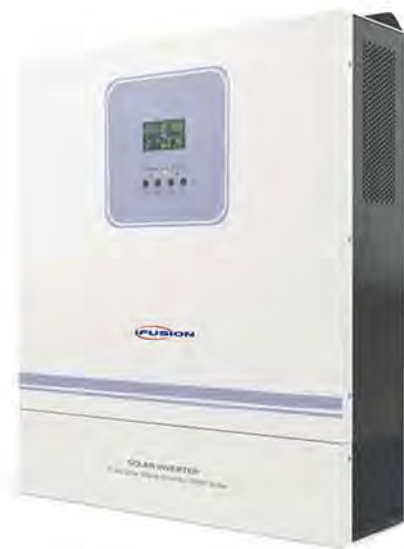
Model	IEH2024	IEH3024	IEH3024A	IEH3624A	IEH5548A	IEH6248A
Input Formation	L+N+PE					
AC Input	220/230/240VAC					
Input Voltage Range	90-280VAC±3V(Normal Mode)185-264VAC±3V (UPS Mode)					
Frequency	50/60Hz(Adaptive)					
Rated Power	2000W	3000W	3000W	3600W	5500W	6200W
Output Voltage	208/220/230/240VAC±5%					
Output Frequency	50/60Hz±0.1%					
Output Wave	Pure Sine Wave					
Transfer Time(Adjustable)	10ms for Computer Equipment,20ms for Household Equipment					
Peak Power	4000VA	6000VA	6000VA	7200VA	11000VA	12400VA
Overload Ability	Battery Mode : 21s@102%-110% load 10s@110%-130% load 3s@130%-150% load 400ms@>150% load					
Peak Efficiency(Battery Model)	>94%					
Rated Voltage	24VDC			48VDC		
Constant Charging Voltage	28.2VDC			56.4Vdc		
Float Charging Voltage	27VDC			54VDC		
PV Charging Method	MPPT					
Max PV Input	2000W	3000W	4200W	4200W	5500W	6200W
MPPT Tracking Range	30~450VDC	40~500VDC	90~500VDC	90~500VDC	90~500VDC	90~500VDC
MAX PV Input Voltage	450VDC	500VDC	500VDC	500VDC	500VDC	500VDC
MAX PV Charge Current	60A	100A	100A	100A	100A	100A
MAX AC Charge Current	60A	60A	60A	80A	60A	80A
MAX Charge Current	80A	100A	100A	120A	100A	100A
LCD Display	Can display operating mode/load/input/output					
RS232	5PIN/Pitch2.54mm,Baud Rate 2400					
Expansion Slot Communication Interface	Lithium Battery BMS Communication Card,WIFI 2×5PIN/Pitch2.54mm					
Parallel Interface	Not Support Parallel			Support Parallel		
Operating Temperature	0°C~40°C					
Storage Temperature	-15°C~60°C					
Altitude	<1000m					
Humidity	Non Condensing					
Noise	<50dB					
Dimension	395*285*118mm		495*312*125mm			



ENERGY STORAGE INVERTER
IEH SERIES

ENERGY STORAGE INVERTER IEH 8600W ~11000W

FEATURES



- Lithium Battery Auto-restart Function, More Convenient for Lithium Battery Charging
- Intelligent Power Supply Mode, Intelligent Distribution of Solar Panel/Mains/Battery Power Shares
- Utility Charging Voltage/PV Charging Voltage Adjustable, Match Different Battery Charging Requirements
- Slim Body, Convenient Installation And Transportation
- Battery Reverse Connection Protection with Fuse Switch, Safer Installation
- PFI.0, High Efficiency, Lower Consumption, Energy Conservation/Environmental Protection/Electricity Saving/Cost Saving
- Support Working without Battery: Reduce Solar System Cost
- Parallel Function Up to Maximum 9 Units: Enlarge More Loads
- High Precision of Output Voltage, ±5%, Take Care of Your Appliances
- Communication Option: External WIFI, Supervise at Any Time
- BMS function for lithium battery

APPLICATION



Island



Construction/housing



Factory/Meeting Center



Agriculture/animal husbandry

IEH SERIES
PARAMETERS

Model	IEH8648A	IEH11048A	
Nominal Voltage	220/230/240VAC		
Voltage Range	90-280VAC±3V (Inverter Mode) 170-280VAC±3V (UPS Mode)		
Frequency	50-60Hz Auto sensing		
Rated Output Power	8600W	11000W	
Output Voltage (AC)	220/230/240VAC±5%		
Output Frequency	50/60Hz±0.1%		
Waveform	Pure sine wave		
Transfer time (AC to DC)	10ms for Computer Equipment, 20ms for Household Equipment		
Peak Power	16000VA	22000VA	
Overload Capacity (Battery Mode)	21s@105%-150% Load	11s@150%~200% Load 400ms@>200% Load	
Grid connected Operation	Output Voltage	220/230/240VAC	
	Grid Voltage Range	195-253VA	
	Grid Frequency Range	49-51±1Hz/59-61±1Hz	
	Output Current	34.7A	47.8A
	Power Factor Range	>0.99	
Peak Efficiency (Battery Model)	98%		
Norminal Voltage	48VDC		
Constant Charging Voltage	56.4VDC		
Float Charging Voltage	54VDC		
PV Charging Way	MPPT		
Max PV Input Power	2*5500W	2*5500W	
MPPT Controller Voltage	90-500VDC		
MAX PV Input Voltage	500VDC	500VDC	
MAX PV Charge Current	150A	150A	
MAX AC Charge Current	120A	150A	
MAX Charge Current	150A	150A	
LCD Display	AC input Voltage, AC input frequency, PV Voltage, PV Current, Output Voltage, Output Frequency, Battery Voltage, Load Current, etc.		
RS232	5PIN/Pitch2.0mm		
Expansion Slot Communication Interface	2*5PIN/Pitch2.54mm, Lithium battery BMS communication card, WIFI, etc		
Parallel Interface	Yes		
Operating Temperature	0-40°C		
Humidity	20%-95% (Non-condensing)		
Storage Temperature	-15-60°C		
Altitude	<1000m		
Noise	≤50db		
Dimension	500*148*571 mm		

BPW SERIES (WALL MOUNTED)

■ PRODUCT INTRODUCTION

The product adopts modular design, higher integration, saves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years; one-key switch machine, front operation, front wiring, easy installation Convenient maintenance and operation; various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS, photovoltaic power generation and other main equipment; various forms of communication interactions. CAN/RS485, etc. can be customized according to customer needs, which is convenient for remote monitoring and flexible use of the system. High-energy. low-power lithium-ion battery equipment achieves higher energy supply, lower energy consumption, and reduces environmental pollution; all-round, multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.



■ PERFORMANCE CHARACTERISTICS

- Wall-hanging installation, save space
- Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code
- Standard configuration with LCD display, real time knowing battery status, Screen direct selection of inverter communication
- Environmentally friendly non-polluting materials, free of heavy metals, green and environmentally friendly
- Standard cycle life is more than 6000 times
- Remote viewing of errors and online software upgrades



■ TECHNICAL PARAMETERS

Type	BPW24-100	BPW24-200	BPW48-100	BPW48-200	BPW51-100	BPW51-200
Nominal voltage (V)	25.6		48		51.2	
Nominal capacity (AH)	100	200	100	200	100	200
Nominal energy capacity (kWh)	2.56	5.12	4.8	9.6	5.12	10.24
Operating voltage range (V)	2.4-29.2		42-54.75		44.8-58.4	
Recommended charging voltage (V)	27.6		51.75		55.2	
Standard charging current (A)	50	100	50	100	50	100
Maximum continuous charging current (A)	100	200	100	200	100	200
Standard discharging current (A)	50	100	50	100	50	100
Maximum continuous discharging current (A)	100	200	100	200	100	200
Cooling method	Natural cooling					
Operating temperature	-30~60°C					
Relative humidity	<95%					
Storage temperature	10~35°C					
Protection degree	IP20					
Life cycles	6000times@80% DOD					
Dimension (mm)	687*450*186			682*465*276	687*450*186	682*465*276
Weight (kg)	28	49	46	89	49	93



BPM SERIES (REMOVABLE)

■ PRODUCT INTRODUCTION

The product adopts modular design, higher integration, saves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years; one-key switch machine, front operation, front wiring, easy installation Convenient maintenance and operation; various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS, photovoltaic power generation and other main equipment; various forms of communication interfaces. CAN/RS485, etc. can be customized according to customer needs, which is convenient for remote monitoring and flexible use of the system. High-energy, low-power lithium-ion battery equipment achieves higher energy supply, lower energy consumption, and reduces environmental pollution; all-round, multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

■ PERFORMANCE CHARACTERISTICS

- Wheeled design for easy movement
- LCD display, checking the electricity in real time
- Embedded connection, safe and reliable



■ TECHNICAL PARAMETERS

Model	BPM48-300	BPM48-600	BPM51-300	BPM51-600
Nominal voltage (V)	48		51.2	
Nominal capacity (AH)	300	600	300	600
Nominal energy capacity (kWh)	14.4	28.8	15.36	30.72
Operating voltage range (V)	42-54.75		44.8-58.4	
Recommended charging voltage (V)	51.75		55.2	
Rated charging current (A)	100	100	100	100
Maximum continuous charging current (A)	150	200	150	200
Rated discharging current (A)	100	100	100	100
Maximum continuous discharging current (A)	150	200	150	200
Cooling method	Natural cooling			
Operating temperature	-30~60°C			
Relative humidity	< 95%			
Storage temperature	10~35°C			
Protection degree	IP20			
Life cycles	6000times@80% DOD			
Dimension (mm)	880*680*248	1060*890*350	880*680*248	1060*890*350
Weight (kg)	144	295	147	300

BPS SERIES (STACK TYPE)

■ PRODUCT INTRODUCTION

This product is mainly composed of high-quality lithium iron phosphate battery module and intelligent PDU. When there is sufficient sunlight during the day, the excess power generated by the rooftop photovoltaic system will be stored in the energy storage system, and the energy from the battery is released at night to supply power for household loads, so as to achieve self-sufficiency in household energy management, the economy of the new energy system is greatly improved. At the same time, in case of sudden power outage/power failure of the power grid the energy storage system can take over the electricity demand of the whole house in time, With a single battery capacity of 5kWh/10kWh and a maximum stacked capacity of 20kWh/40kWh, the system can be used seamlessly with mains equipment such as photovoltaic power generation, as well as with a UPS to provide a stable power supply for home.



■ PERFORMANCE CHARACTERISTICS

- Chinese and English display will summarize all battery information, inverter communication can be selected directly from screen
- One key switch on/off the system
- Automatic dial-up between PACK groups is realized, without manual setting
- Bluetooth+Wifi solution, can be viewed and operated remotely, through mobile App
- Multi-cluster parallel operation, supporting up to 32 battery packs in parallel



■ TECHNICAL PARAMETERS

Model	BPS48-100	BPS51-100	BPS48-200	BPS51-200
Battery type	Lithium iron phosphate			
Nominal capacity (Ah)	104		210	
Rated voltage (V)	48	51.2	48	51.2
Moduler, Cluster	2-4			
Maxc.Energy capacity of single cluster (kWh)	20		40	
Max.Parallel number of battery cluster	8			
Working voltage range (V)	42-54.75	44.8-58.4	42-54.75	44.8-58.4
Recommended equalizing charge Voltage (V)	52.5	56	52.5	56
Recommended discharge cut-off Voltage (V)	45	48	45	48
Max.Charge current (A)	100			
Max.Discharge current (A)	100			
Dimension of each cluster (mm)	425*700* (672/964/1056)		479*700* (848/1128/1408)	
Weight of each cluster (kg)	145/199/254	147/201/256	228/324/420	230/326/422
Communication method	CAN/485/Blue tooth			
Working temperature	-20~65°C (Recommended 10~35°C)			
Storage temperature	30~60°C (Recommended 10~35°C)			
Relative humidity	0~85%			
Protection degree	IP20			
Cooling method	natural air cooling			
Life cycles	>6000			
Safety standand	CE.UN383.MSDS			



IAF SERIES
PARAMETERS

Model	IAF0612	IAF0812	IAF1012	IAF1612	IAF1624	IAF2024	IAF3024	IAF3048	IAF5048	IAF10048	
AC input voltage	220V/110V										
Input voltage range	220V: 145-275VAC±3V 110V: 73-137VAC±3V					220V:154-264VAC±3V(Normal mode) 185-264VAC±3V(UPS mode) 110V:77-132VAC±3V(Normal mode) 92-132VAC±3V(UPS mode)					
Input frequency	50/60Hz±5%										
Output rated power	400W	640W	800W	1200W	1200W	1600W	2400W	2400W	4000W	8000W	
AC Mode output voltage	The same as input voltage										
AC Mode output frequency	The same as input frequency										
Battery Mode output voltage	220VAC±10%(110VAC±10%)										
Battery Mode output frequency	50HZ or 60HZ±1%										
Battery Mode output wave	Pure Sine Wave										
Battery type	Lead acid battery/water battery/lithium battery										
Battery voltage	12V			24V				48V			
Battery charging voltage	13.75VDC			27VDC				54VDC			
Max AC charging current	8A	13A	18A	30A	15A	20A	30A	15A	22A	56A	
Battery charging voltage range	150-280VAC										
Transfer time	≤10ms										
Load peak ratio	(MAX)3:1										
ECO Mode	6W	8W	9W	11W	12W	15W	16W	16W	23W	32W	
Protection	Overload /Short circuit/Low voltage/Battery reverse connection protection										
Status display	AC voltage/AC frequency/Output frequency/Battery voltage/Load current										
Audible alarm	Low battery protection buzzer long beep Low battery buzzer every second Overload buzzer long Overload less than 130%, buzzer every second;overload more than 150%, after 300ms, it will turn off Machine fault buzzer long										
Working temperature	0°C~40°C										
Storage temperature	-15°C~45°C										
Relative temperature	-10°C~90°C No condensation										
Noise	<45dB										
Dimension (mm)	300*144*213					385*190*382				552*190*382	
Net weight (kg)	6.5	6.9	7.8	8.59	9.5	14.6	17.2	17.85	22	36.1	

POWER STORAGE SYSTEM IAF 400W~8000W

DESCRIPTION

Storage the AC power by battery;
Discharge the battery energy to alternating current when AC power off.

FEATURES

- Pure sine wave output
- DC Start & Automatic Self-Diagnostic Function
- Automatically send signal to start generator
- High efficiency design for optimized battery performance
- Selectable charging current based on applications
- AC start-up voltage auto restart voltage With AVR voltage regulate function
- lead acid battery/Lithium battery



APPLICATION



Outdoor reconnaissance



Base station/base



Farming/animal husbandry



Fisheries