

SOLAR INVERTER

Customized Solutions

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COMPANY HONOR

















HIGH-TECH ENTERPRISE

Some Authoritative Test Reports And Certificates Of Honor.

















01ABOUT MULTIFIT SOLAR

OFF-GRID SOLAR POWER SOLUTIONS /02

01 POWERSUN SERIES
PURE SINE WAVE LOW FREQUENCY
INVERTER /03

02 SUNINVM SERIES
MPPT HYBRID INVERTER CHARGER /04

03 MUC-MB SERIES

MPPT SOLAR CHARGE CONTROLLER /05

03

JOIN US FOR MUTUAL SUCCESS

ENERGY STORAGE SOLUTIONS M-ESS SERIES	/06
01 STACKABLE ALL-IN-ONE ENERGY STORAGE SYSTEM	/07
02 LITHIUM BATTERY ENERGY STORAGE SYSTEM	/08
04	
M-PSS SERIES SOLAR POWER SUPPLY	/09
M-LFP SERIES RACK-MOUNT LIFEPO4 BATTERY	/10
M-LFPE SERIES STACKABLE LIFEPO4 BATTERY	/11
05	
APPLICATION	/12
PROJECT CASES	/13

/15



ABOUT MULTIFIT SOLAR



2009 SINCE

60 +**PATENTS**

CE CERTIFICATES

20+**COPYRIGHTS**

80+ **EXPORT COUNTRIES**

100MW **SOLAR POWER STATIONS**

Multifit Solar is a leading high-tech enterprise specializing in solar energy solutions, including R&D, production, and sales of Solar Inverter, Energy Storage Systems and Solar Cleaning Robots. Headquartered in Beijing, with production facilities in Shantou, Guangdong, and a branch in Shenzhen, we serve over 50 countries across Europe, the Americas, Asia, Africa, and Latin America.

Since 2009, Multifit Solar has focused on delivering innovative and efficient solar power solutions, from system design and construction to cleaning and O&M services. Our product backed by over 50 patents, includes MPPT controllers, portable solar power systems, and solar LED lighting.

Certified with ISO9001, ISO14001, ISO45001, CE, and FCC, we are recognized as a National Technology-based SME and a Guangdong Provincial Specialized and Innovative Enterprise.

Committed to our mission of Promoting Energy Efficiency and Enabling Access to Green Energy, Multifit Solar aims to lead the global transition to sustainable energy solutions.









POWERSUN Series

Pure Sine Wave Low-Frequency Inverter



Product Features

Customizable: ① 70A Charging current;

Adjustable: ① Output voltage (110V/115V/120V or 220V/230V/540V); ② Output frequency (50Hz/60Hz);

Supports: ① RS232 data communication; ② WiFi module (optional);



HIGH EFFICIENCY & FAST SWITCHING

- Toroidal transformer ensures low power consumption and high energy efficiency.
- Fast switching time (<10ms) guarantees uninterrupted load operation during power outages.
- Automatic switching between battery inverter mode and grid power.

MULTIPLE PROTECTIONS & PATENTED DESIGN



- Automatic shutdown at temperatures ≥100°C.
- Smart fan control: Fan activates when heatsink temperature >50°C or load >70%, and deactivates below 40°C.
- 32-bit integrated CPU for faster, more stable performance with built-in data storage for settings.
- Intelligent battery management to maximize battery lifespan.
- Customizable working parameters and fault reporting, high-recognition patented design.

PURE SINE WAVE & HIGH LOAD CAPACITY & ENERGY SAVING

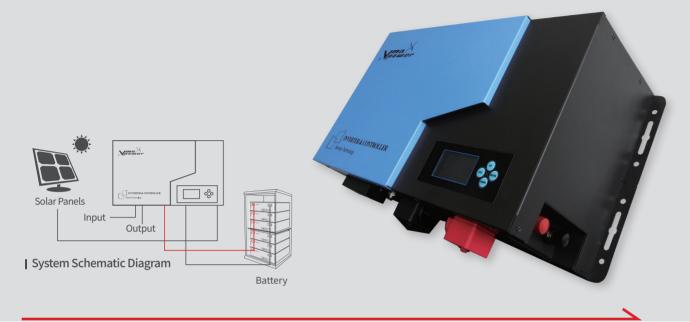
- Pure sine wave output.
- Strong load capacity: Supports household and office appliances like air conditioners, refrigerators, pumps, TVs, lights, and fans.
- Zero power loss in sleep mode; energy-saving mode designed for refrigerators and similar loads.
- Low-frequency transformer technology, ideal for harsh environments and unstable power conditions.
- Compatible with generators.

I Technical Data

recilline	at Da	<u></u>								
Specification	500W	1KW	1.5KW	2KW	3KW	4KW	5KW	6KW	8KW	10KW
Rated Power	500W	1000W	1500W	2000W	3000W	4000W	5000W	6000W	8000W	10000W
Input										
Voltage				AC1	65-275V /	AV85-13	5V			
Frequency					40-65	HZ				
Output										
Voltage			220)/230/240	V(110/11	5/120V) /	Adjustab	le		
Frequency				50)-60HZ Ad	djustable				
Waveform					Pure Sine	e Wave				
THD					€30	%				
Efficiency					≥80	%				
Battery	ry									
Туре					Optio	nal				
Voltage	DC	12V		DC24V			С	C48V/96V		
Current					0-30A Op	otional				
Others										
Protection	Ove	r Tempera	ature /Ove AC Inp	er Load /E out High \	-	_	•	-	ver Volta	ge/
Working Mode				Stand	dard & En	ergy Sav	ing			
Transfer Time					≤10	ms				
Load Capacity	100%	100%-120% 30s Protection; 125%-140% 15s Protection; ≥150% 5s Protection;								
Temperature		0°C-50°C								
Humidity	10%-90% (No Condensing)									
Battery Input										
DC Voltage 12V	10mm²	16mm²	_	_		_	_			_
DC Voltage 24V			16mm²	25mm ²	35mm ²					_
DC Voltage 48V	_	—	_	—	—	25mm²	35mm ²	35mm²	50mm ²	50mm ²

SUNINVM Series

Solar Hybrid Inverter



Product Features

Maximum Tracking Efficiency of MPPT Customizable: ① 70A Charging current;

Adjustable: ① Output voltage (110V/115V/120V or 220V/230V/540V); ② Output frequency (50Hz/60Hz);

Supports: ① RS232 data communication; ② WiFi module (optional);



HIGH EFFICIENCY & FAST SWITCHING

- Toroidal transformer ensures low power consumption and high energy efficiency.
- Fast switching time (<10ms) guarantees uninterrupted load operation during power outages.
- · Automatic switching between battery inverter mode and grid power.

MULTIPLE PROTECTIONS & PATENTED DESIGN

- Automatic shutdown at temperatures ≥100°C.
- Smart fan control: Fan activates when heatsink temperature >50°C or load >70%, and deactivates below 40°C.
- 32-bit integrated CPU for faster, more stable performance with built-in data storage for settings.
- Intelligent battery management to maximize battery lifespan.
- Customizable working parameters and fault reporting, high-recognition patented design.
- Comprehensive solar system protection mechanisms ensure high reliability.

PURE SINE WAVE & HIGH LOAD CAPACITY & ENERGY SAVING

- Pure sine wave output.
- Strong load capacity: Supports household and office appliances like air conditioners, refrigerators, pumps, TVs, lights, and fans.
- Zero power loss in sleep mode; energy-saving mode designed for refrigerators and similar loads.
- Low-frequency transformer technology, ideal for harsh environments and unstable power conditions.
- Compatible with generators.

	recrimicat	Data								
	Specification	500W	1KW	1.5KW	2KW	3KW	4KW	5KW	8KW	10KW
	Rated Power	500W	1000W	1500W	2000W	3000W	4000W	5000W	8000W	10000W
	PV Controller Type				P	WM & MPF	PT			
	PWM Controller (Optional)	12V40A	12V60A	24V50A	24V60A	48V60A	48V60A	48V80A	48V100A	48V100A
	PWM Input Voltage Range	16-50V	16-50V	30-50V	30-50V	60-100V	60-100V	60-100V	60-100V	60-100V
	MPPT Controller	•	•	•	24V30A	48V60A	48V60A	48V60A	48V60A	48V60A
	MPPT Input Voltage Range						MPPT:	50-150V		
	Input									
	Voltage				AC165-	275V / AC	85-135V			
	Frequency				5	0HZ / 60H	Z			
ı	Output									
	Voltage		220/230/240/110/115/120V							
	Frequency				50-6	0HZ (Opti	onal)			
	WaveForm		Pure Sine Wave							
	Distortion					€3%				
	Efficiency					≥80%				
	Battery									
	Туре					Optional				
	Voltage	DC	12V		DC	24V			DC48V	
	Current		0-30A Optional							
ı	Others									
	Protection	Over Temperature /Over Load /Battery Discharge Voltage /Battery Over Voltage / AC Input High Voltage/Low Voltage Protection								
	Working Mode	Standard & Energy Saving								
	Transform Time	≤10ms								
	Load Capacity	100%-1	120% 30s	Protection	n; 125%	-140% 15s	Protection	on; ≥150	0% 5s Prot	ection;
	Temperature					0°C-50°C				
	Humidity				10%-90%	6 (No Con	idensing)			

MUC-MB Series

MPPT Solar Charge Controller



Multiple **Protections**



Efficient Heat Dissipation



Intelligent Control



98% **Efficiency**

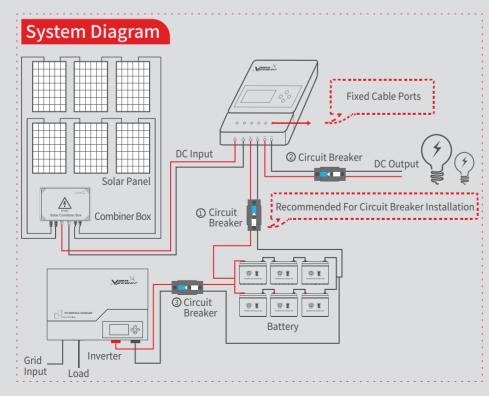


Product Overview

The MUC-MB series MPPT solar charge controller utilizes advanced MPPT control algorithms to track the maximum power point of PV arrays in any environment, significantly improving solar panel efficiency. It is widely applicable in off-grid solar systems, communication base stations, residential solar systems, solar street lighting, and field monitoring.

Product Features

- MPPT tracking efficiency ≥99.5%.
- 3-stage charging (constant current, constant voltage, float charging) to extend battery life.
- Current-limiting charging function.
- Supports parallel connection for system power expansion.
- High-definition LCD display for realtime data and operational status monitoring.
- Certified with CE, ROHS, and FCC, supports customer-specific certifications.



_		iicat D	utu						
Specification				40A	50A	60A			
		Controller Type		MPPT(Maximum Power Point Tracking)					
		MPPT Efficiency		≥99.5%					
	Tuno	Systen	n Voltage		Auto - identify				
	Type	Heat Dissi	pation Mode		Natural Cooling				
			n Voltage	DC9V-DC15	5V(12V sys) /DC18V-DC30V((24V sys)			
		Recogni	tion Range	DC32V-DC4	0V(36V sys) /DC42V-DC60V	(48V sys)			
		Max.PV Ir	nput Voltage		DC150V				
		Start Cha	arge Voltage		Battery Voltage+20V				
		Low Voltag	ge Protection	Battery Vo	oltage+2V	Battery Voltage+5V			
		Over Volta	ge Protection		DC150V				
	Input	Low Voltage	Recovery Point		DC145V				
		PV Rated Power	12V System	600W	700W	850W			
			24V System	1000W	1200W	1500W			
			36V System	1500W	1800W	2200W			
			48V System	2000W	2500W	3000W			
		Battery Types		Gel Battery,Lead-Acid Battery,Lithium Battery					
	Datton	Rated Charge Current		40A	50A	60A			
	Battery	Output Voltage Regulation Accuracy		≥±1.5%					
		Charge	e Method	3 stages:CC(Constant Current),CV (Constant Voltage),CF (Floating Charge)					
		Load	Voltage	5	Same as Battery Voltage				
	Load	Rated Charge Current		40A	50A	60A			
	LUau	Load Control Mode		On,Off,PV control,Dual time control,PV+Time control					
		Low Voltage Protection		The default value is 11V					
	Display	M	lode		LCD & Backlight Display				
		Prot	ections	Input Over/Low Voltage, Output Over/Low Voltage, Reverse Connection, Over Temperature, Short Circuit					
		Working 1	Геmperature	-20°C~+50°C					
		Storage T	emperature	-40°C~+75°C					
		IP (Ingress	s Protection)	IP43					
	Others	Max.Conn	ection Cable	35mm ²					
		Net We	eight (kg)		2.4				
		Gross V	Veight(kg)		2.7				
		Product	Size (mm)		300x100x75				
		Packing	Size (mm)		320x230x120				

Energy Storage Solutions



M-ESS Series

Stackable **All-in-One Energy System**



High **Efficiency**



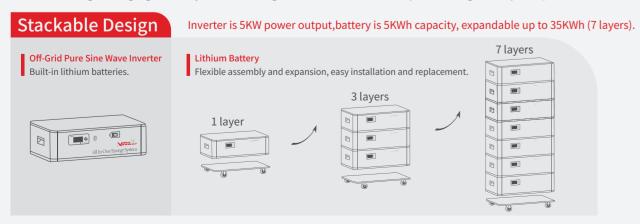
Portability Space-Saving





Product Features

- Integrates inverter, automatic charging, and grid/battery auto-switching with a fast transition time (<4ms), ensuring uninterrupted load operation during power outages.
- High charging current, adjustable up to 80A.
- Selectable voltage and frequency: 220V/110V \pm 10%, 50/60Hz.
- Utilizes low-frequency design and electrical isolation technology for strong load capacity and high impact resistance.
- Pure sine wave output with stable frequency and voltage, minimal ripple.
- Intelligent fan control: Fan activates at heatsink temperature ≥30°C and auto-shutdown at ≥100°C for protection.
- Fully automated microcomputer CPU control.
- Ultra-low standby power consumption, saving at least 12% energy in no-load conditions, efficient and eco-friendly.
- Supports hot-swappable battery operation.
- Compatible with generators.
- Smart 4-stage charging with adjustable voltage and current, effectively extending battery lifespan.



I Technical Data

	Sp	pecification	4KW	4KW 5KW				
	F	Rated Power	4000W	5000W	6000W			
	MP	PPT Controller		48V 60A/100A/120A				
	MPPT In	put Voltage Range		MPPT: 80-150V				
	Input	Voltage	,	AC165-275V / AC85-135V				
	IIIput	Frequency		50HZ/60HZ				
		Voltage	22	20/230/240/110/115/120	V			
		Frequencya		50HZ/60HZ Adjustable				
ı	Output	Waveform	Pure Sine Wave					
		THD	≤3%					
		Efficiency	≥80%					
		Туре	Lithium Battery					
ı	Battery	Voltage	51.2V					
		Capacity		5.12KWH(Max.7 Layers)	KWH(Max.7 Layers)			
		Protection	Over Temperature/Over Load/Battery Discharge Voltage/ Battery Over Voltage/AC Input High Voltage/Low Voltage Protection					
		Working Mode	Standard & Energy Saving					
	Others	Transfer Time	≤10ms					
	Others	Load Capacity	100%-120% 30s Protection, 125%-140% 15s Protection, >150% 5s Protection					
		Temperature	0-50°C					
		Humidity	10	0%-90% (No Condensing	g)			

M-ESS Series

Cabinet All-in-One **Solar & Battery Energy System**







Portability Space-Saving



Product Features

GRID INTEGRATION: Enables peak shaving and self-consumption.

COMPATIBILITY: Works with professional energy management systems and features three-stage charging, compatible with various lithium battery types.

ADJUSTABLE: Charging current customizable for different battery types.

OPTIONS: Multiple communication interfaces: GPRS, RS485, CAN*2 (for lithium batteries), WiFi (optional), IP20/IP65 protection levels available.

HIGH EFFICIENCY & FAST SWITCHING

- Configurable power priority: battery or grid.
- Seamless 4ms switch during grid outages for uninterrupted power.
- Built-in lithium battery, configurable from 1.2KWh to 48KWh.
- Flexible, simple, and diverse system assembly.

MULTIPLE PROTECTIONS & PATENTED DESIGN

- High conversion efficiency, low temperature rise, and low noise.
- Smart fan control: activates at >50°C heatsink temperature or >70% load; deactivates below 40°C. Auto-shutdown at ≥100°C.
- 32-bit integrated CPU for faster, more stable performance with built-in data storage for settings.
- Intelligent battery management to maximize battery lifespan.
- · Comprehensive system protection for long cycle life, stable power supply, and high reliability.

PURE SINE WAVE & HIGH LOAD CAPACITY & ENERGY SAVING

- Pure sine wave output.
- Strong load capacity: supports household and office appliances like ACs, refrigerators, pumps, TVs, lights, and fans.
- Zero power loss in sleep mode with energy-saving design for refrigerators and similar loads.
- Feature-rich, reliable, and cost-effective.
- Compatible with generators.

	Specification	2K	3K	4K	5K	8K	10K	20K
Ī	System							
	Power	2.4KWh	4.8KWh	4.8KWh	9.6KWh	19.2KWh	24KWh	38.4KWh
	Capacity	24V 100AH	24V 100AH	48V 100AH	24V 200AH	48V 400AH	48V 500AH /95V 250AH	96V 400AH
	Rated Power	2KW	3KW	4KW	5KW	8KW	10KW	20KW
I	Inverter							
	DC Input	24V	24V	48V	48V	48V	48V/96V	96V
	AC Output		220-	240Vac/100-	120Vac 50,	/60Hz (optio	nal)	
	Wave Form			P	ure Sine Wav	е		
	Charging Current			10-	50A Adjustal	ole		
	THD				€3%			
	Factor				1.0			
	Transfer Time				<4ms			
ı	Battery							
	Recycle	2000) times(100%	DOD) /4000	times(80%	DOD) /7000	times(50% D	OD)
	Туре			Lif	FePO4 Batte	ry		
I	MPPT Controller							
	Voltage			0-15	50V(96V 0-43	0V)		
	Current	24V60A	24V60A	48V80A	48V100A	48V80A*2	48V100A*2 /96V 100A	96V 100A*2
I	Others							
	APPs		Re	emote Monit	oring & Cont	rol (optiona	l)	
	LCD Display	Display th	ne parameter	s of Inverter	/MPPT Contr	roller/Lithiu	m Batteries (optional)
	Installation				Floor Type			
	Weight	90KGS	120KGS	140KGS	190KGS	300KGS	380KGS	500KGS
	Protection		IP20/IP65 (optional)					

M-PSS Series

Solar Portable Power Station







Fast Charging



Product Overview

MULTIFIT designed this compact portable power station for travelers, adventurers, technicians, and tech enthusiasts who need reliable backup power on the go. It's ideal for various outdoor scenarios, providing safe and cord-free power anytime, anywhere.

Product Features



Reliable





Functionality









Portable

Outdoor-Ready

- 1280WH/1000W High Capacity.
- Dual universal outlets included.
- Supports grid, solar, and car charger input.
- Intelligent system with circuit protection.
- Multiple USB ports and car cigarette lighter socket.
- 3W white LED spotlight for emergency or continuous lighting.

Multiple Protections













Multiple Outputs



























Specifi	cation	300W	600W	1000W	1.2KW					
Rated Power		300W	600W	1000W	1200W					
	Voltage									
	Frequency	50Hz/60Hz (optional)								
	Waveform		Pure Sine Wave							
AC Output	THD		€3	3%						
ne output	Load Capacity		>100%-120% >125%-140% >150% 5	30s Protection 20s Protection ss Protection						
	Protection	Over Temperatu	ire/Over Voltage/Un	der Voltage/Over Lo	ad/Short Circuit					
	Туре		LiFePO4	Battery						
Battery	Voltage	12.8V								
	Capacity	8000mAH	230400mAH	332800mAH	512000mAH					
	Power	256WH	576WH	832WH	1280WH					
	Cells	LiFePO4, 2500+ Recycle Times								
	Protection	Over Temperature/Over Voltage/Under Voltage/Over Load/Short Cir								
	DC5525 Charge Port	Gel Battery, Lead-Acid Battery, Lithium Battery								
	Type-C	24W Support DCP/QC2.0/3.0/FCP/SCP/AFC MTK PE+1.1/2.0/SFCP/PD								
DC Input	USB-A	Support DC	24 P/QC2.0/3.0/FCP/SC		2.0/SFCP/PD					
	Cigar Lighter		12V	10A						
	Car Start	12V60A	/100A(Car with disp	lacement of 1.6 and	below)					
	DC5525 Charge Port		DC16V-	25V 8A						
Charging	Adapter	14.6V 4A	14.6\	/ 10A						
	PV Panel	Only PV P	anel of 16V-25V are	allowed to charge th	ne battery					
Working	Temperature		-10°C	~50°C						
Environment	Humidity		10% ~ 90% No	o-Condensing						

M-LFP Series

Rack-Mounted LiFePO4 Battery



Product Overview

The M-LFP Series lithium battery serves as a backup power source for communication equipment, offering high energy density, long cycle life, safety, high-temperature resistance, compact size, low self-discharge, modular design, and eco-friendliness.

Product Features



Supports battery pack parallel; connection for increased capacity;



Built-in BMS (Battery Management System) with multiple protections;

Enables remote real-time battery monitoring;



Long cycle life; Up to 6,000 cycles;



Compatible with multiple communication protocols: RS485, RS232, CAN, etc;



High energy density; Low self-discharge rate;



Lightweight and compact; Fits 19-inch communication cabinets;



Low internal resistance with efficient internal balancing control;



LiFePO4 (LFP) cathode material ensures safety, reliability, and eco-friendly;

I Technical Data

Model No.	Rated Capacity (AH)	Rated Voltage (V)	Dimensions (mm)	Weight (kg)	Terminal Type
M-LFP48V10Ah	10	48	442x285x44	8	DSTBB-2-2-M6
M-LFP48V20Ah	20	48	442x300x88	13	DSTBB-2-2-M6
M-LFP48V30Ah	30	48	442x380x88	23	DSTBB-2-2-M6
M-LFP48V40Ah	40	48	442x430x88	25	DSTBB-2-2-M6
M-LFP48V50Ah	50	48	442x440x135	31	DSTBB-2-2-M6
M-LFP48V80Ah	80	48	442x480x177	42	DSTBB-2-2-M6
M-LFP48V100Ah	100	48	442x480x177	44	DSTBB-2-2-M6
M-LFP48V200Ah	200	48	638x480x220	82	DSTBB-2-2-M6

M-LFPE Series

Stackable **LiFePO4 Battery**



Product Overview

The M-LFPE Series lithium battery is specifically designed for residential solar energy storage systems. It features a sleek, compact design with high capacity, supporting stackable parallel connections for expanded energy storage (up to 7 layers).

As a backup power solution for communication equipment, it offers high energy density, long cycle life, safety, hightemperature resistance, low self-discharge, modular design, and eco-friendliness.

Product Features



Stackable and parallel connection for increased capacity;



Built-in BMS (Battery Management System) with **BMS** multiple protections; Enables remote real-time battery monitoring;



Compatible with multiple communication protocols: RS485, RS232, CAN, etc;



High energy density; Low self-discharge rate;

Long cycle life;

Up to 6,000 cycles;



Lightweight, compact, and equipped with a movable base;





System shutdown in overheating conditions; Charging stops at low temperatures;



LiFePO4 (LFP) cathode material ensures safety, reliability, and eco-friendly;

I Technical Data

Modlel No.	M-LFPE48100	Series-palrallel	16S1P-100AH	
Length	680±2mm	Protection Class	IP54	
Width	430±2mm	Container	Metall plate	
Thickness	160±2mm	Display	LED	
Weight	≈50kg	Tenminal	100A	
Shipping Voltage	52-54.4V	Design Life(Year)	10	
Nominal Voltage	51.2V	Recommend Charge Current	20A	
Nominal Capacity	100AH @ 0.2C	Max.Charge Current	50A	
Energy	5120WH	Max.Continuous Dischange Current	100A	
Internal Resistance(AC)	<50mΩ	Peak Discharge Current	110A(1S)	
Recycle Time	2000+Gycles @ 1C 100% DOD	BMS Discharge Voltage	41.6V	
Monthly Self Discharge	Less than 3.5% per month at 25°C	Charge Temperature	0-45°C	
Efficiency of Charge	100% @ 05C	Dischange Tempereture	-20°C to 60°C	
Efficiency of Discharge	96-99% @ 01C	Storage Temperature	-20°C to 60°C	
Change Voltage	57.6±0.2V	Communication Port	RS485/RS232/CAN	
Charge Model	0.2C to 57.6V,Then 57.6V, Charge CURRENT TO 0.02c	Maximum Modues in parallels	16P	

APPLICATION SCENARIO

- · Solar Power Generation System · Mobile Communication Station
- · Factory Workshop · Mountainous Area · Personal Use











SUNSHINE FOR YOU MULTIFIT TO ALL

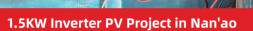




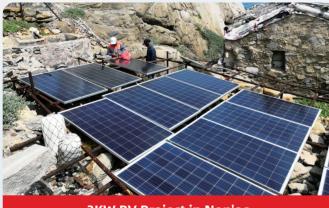


PROJECT CASES

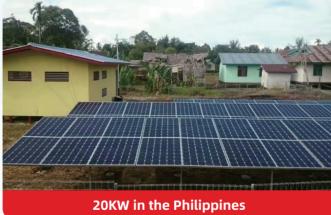








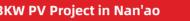










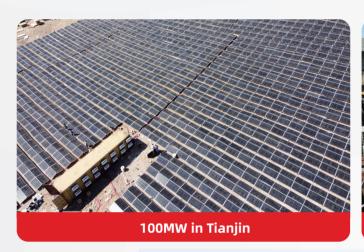








PROJECT CASES

















COOPERATION























COOPERATION



RECRUITMENT

■ Hot blue ocean projects in emerging industry market.

ONE-STOP SUPPORT FOR ENTREPRENEURSHIP

■ The heart-level service of the headquarters saves you the trouble to start.

AUTHORIZED DISTRIBUTION

■ Franchised dealers sell products in authorized areas or channels.

FREE TRAINING

■ Provide marketing and technical training for franchised dealers.

REBATE REWARD

■ Complete the sales task and reward according to the incentive policy.

TECHNICAL SUPPORT

■ Assist in the design of schemes and comprehensive technical consulting services during the support period.

PRODUCT SUPPORT

■ Provide copies of relevant certificates and letters of authorization.