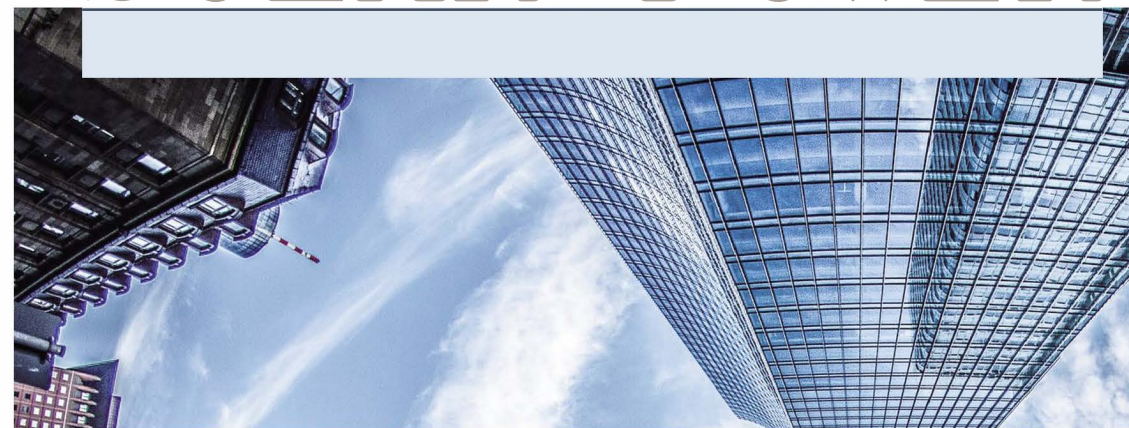


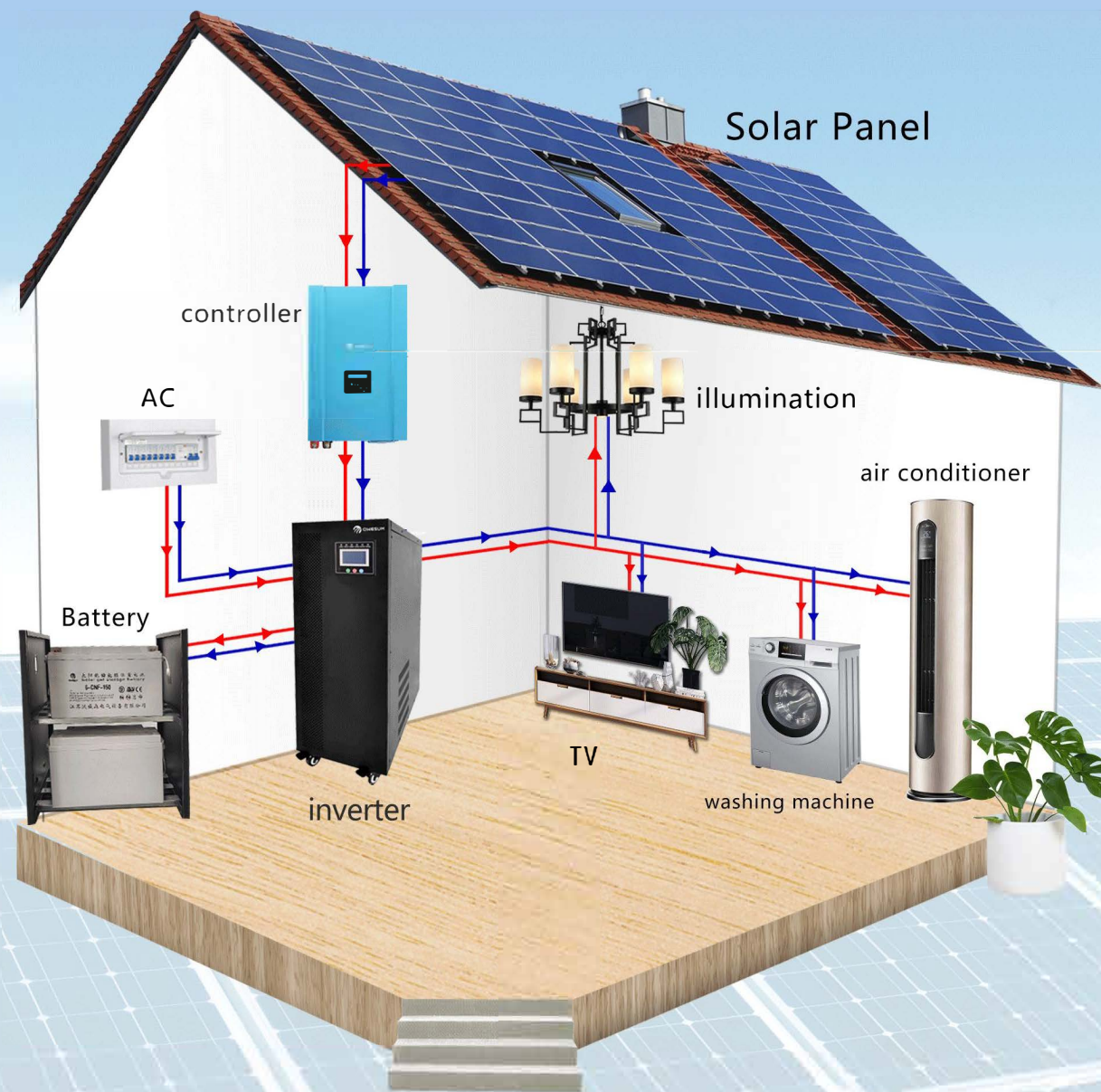
SOLAR POWER



Solar Power

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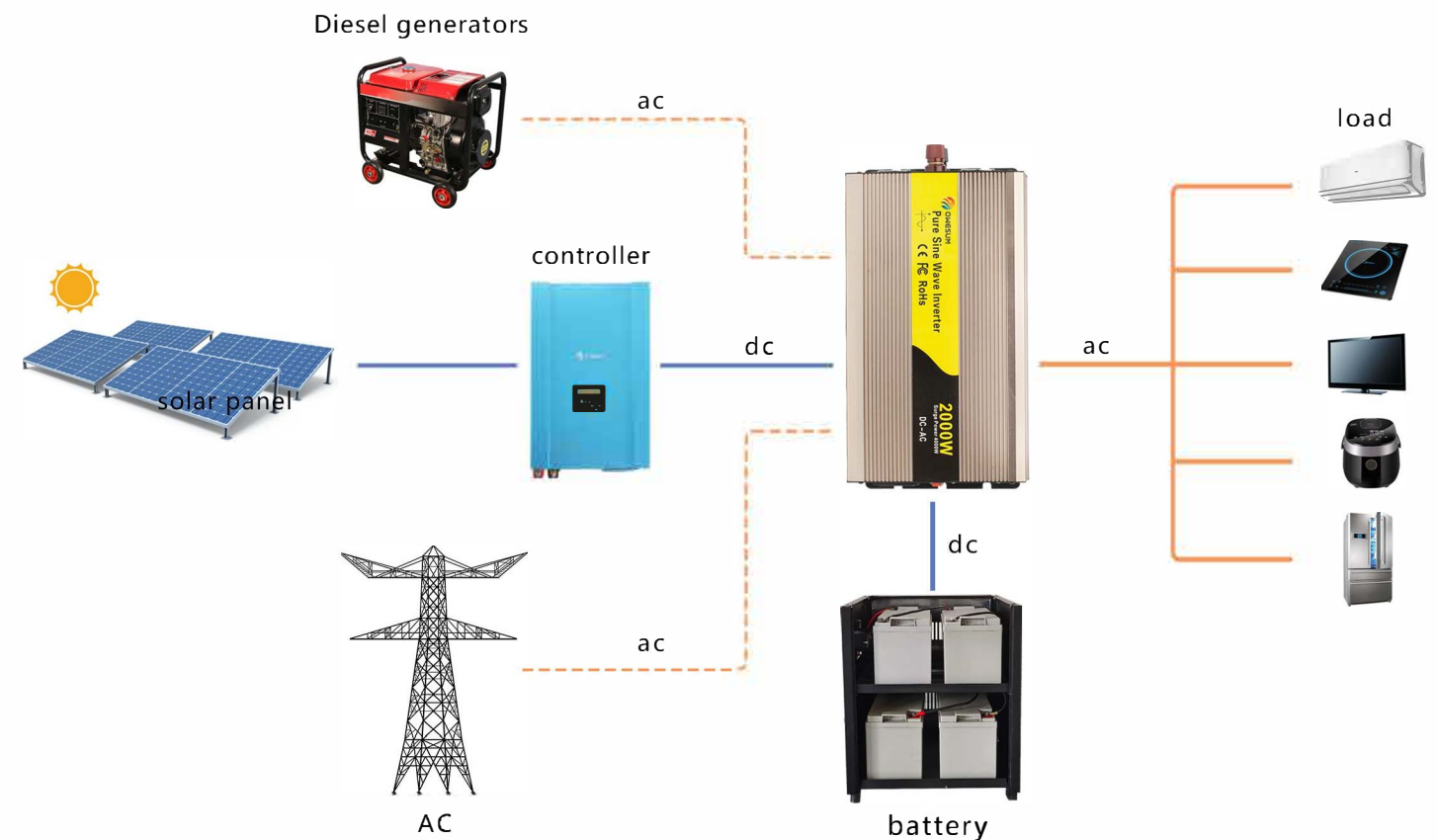


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ONH Pure Sine Wave Inverter With battery charger Series



PRODUCT INTRODUCTION AND APPLICATION FIELDS

- The high-frequency inverter adopts the magnetic core material with small volume and light weight characteristic so as to improve the power density of the circuit and the efficiency of the system greatly and make the open circuit loss of the inverter small. Our Peak conversion efficiency will be more than 90%
- Adopt High quality components and promise strict production process, so our products are suitable for relatively harsh working environment and also with reliable performance and long-lifespan characteristic.
- Pure sine wave inverter with low price. It has all-round protection function for battery against undervoltage, overvoltage, overheating, output overload, output short circuit, etc., The time of the power supply can be configured arbitrarily according to different requirements. We try to make the system be easy installation and maintenance. The internal circuit adopts CPU control for detection and management. The input and output all adopt EMI filtering, which is suitable for various and electric equipments
- It is widely used in the areas with power supply shortage, such as mountain tops, islands, border posts, communication base stations, farmland irrigation, road monitoring, medical equipment, banks , etc;

ONH pure Sine Wave Inverter



Model	ONH-300			ONH-500			ONH-600			
Rated power	300W			500W			600W			
Peak power	600W			1000W			1200W			
Input voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V	
Output voltage	100VAC or 110VAC or 120VAC or 220VAC or 230VAC or 240VAC±5%									
Unload current less than	0.3A	0.2A	0.2A	0.4A	0.3A	0.2A	0.4A	0.3A	0.2A	
Output frequency	50Hz±0.5Hz or 60Hz±0.5Hz									
Output waveform	Pure Sine Wave									
Waveform distortion	THD<3%(Linear load)									
USB port	5V 1A									
Max. efficiency	90%									
Input voltage range	10-15.5V	20-31V	40-61V	10-15.5V	20-31V	40-61V	10-15.5V	20-31V	40-61V	
Low voltage alarm	10.5±0.5V	21±0.5V	42±1V	10.5±0.5V	21±0.5V	42±1V	10.5±0.5V	21±0.5V	42±1V	
Low voltage protection	10±0.5V	20±0.5V	40±15V	10±0.5V	20±0.5V	40±15V	10±0.5V	20±0.5V	40±15V	
Over voltage protection	15.5±0.5V	31±0.5V	61±1V	15.5±0.5V	31±0.5V	61±1V	15.5±0.5V	31±0.5V	61±1V	
Low voltage recover	12.3±0.5V	24±0.5V	48±1V	12.3±0.5V	24±0.5V	48±1V	12.3±0.5V	24±0.5V	48±1V	
Over voltage recover	14.8V±0.5V	29.5V±0.5V	59V±1V	14.8V±0.5V	29.5V±0.5V	59V±1V	14.8V±0.5V	29.5V±0.5V	59V±1V	
Protect function	Low voltage	Alarm at first, voltage continuously reduce. LED Red light on & shut down								
	Over voltage	LED Red light on, shut down								
	Over load	LED Red light on, shut down								
	Over temperature	Alarm at first, temperature continuously rise. LED Red light on & shut down								
	Short circuit	LED Red light on								
	Input reverse polarity	Fuse burn-out								
Working temperature	-10°C ~ +50°C									
Storage temperature	-30°C ~ +70°C									
Dimension(mm)	208×112×60			255×112×60						
Packing(mm)	235×157×105			275×157×105						
gross weight(g)	850/1020			1080/1280						
QTY/Ctn	20Pcs			10Pcs						
Meas.Ctn(mm)	480×330×543			480×305×380						
Warranty	2 years									
Cooling method	Intelligent air cooling									

ONH pure Sine Wave Inverter



Model	ONH-1000			ONH-1500			ONH-2000			
Rated power	1000W			1500W			2000W			
Peak power	2000W			3000W			4000W			
Input voltage	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V	DC12V	DC24V	DC48V	
Output voltage	100VAC or 110VAC or 120VAC or 220VAC or 230VAC or 240VAC±5%									
Unload current less than	0.4A	0.3A	0.2A	0.4A	0.3A	0.2A	0.4A	0.3A	0.2A	
Output frequency	50Hz±0.5Hz or 60Hz±0.5Hz									
Output waveform	Pure Sine Wave									
Waveform distortion	THD<3%(Linear load)									
USB port	5V 1A									
Max. efficiency	90%									
Input voltage range	10-15.5V	20-31V	40-61V	10-15.5V	20-31V	40-61V	10-15.5V	20-31V	40-61V	
Low voltage alarm	10.5±0.5V	21±0.5V	42±1V	10.5±0.5V	21±0.5V	42±1V	10.5±0.5V	21±0.5V	42±1V	
Low voltage protection	10±0.5V	20±0.5V	40±15V	10±0.5V	20±0.5V	40±15V	10±0.5V	20±0.5V	40±15V	
Over voltage protection	15.5±0.5V	31±0.5V	61±1V	15.5±0.5V	31±0.5V	61±1V	15.5±0.5V	31±0.5V	61±1V	
Low voltage recover	12.3±0.5V	24±0.5V	48±1V	12.3±0.5V	24±0.5V	48±1V	12.3±0.5V	24±0.5V	48±1V	
Over voltage recover	14.8V±0.5V	29.5V±0.5V	59V±1V	14.8V±0.5V	29.5V±0.5V	59V±1V	14.8V±0.5V	29.5V±0.5V	59V±1V	
Protect function	Low voltage	Alarm at first, voltage continuously reduce. LED Red light on & shut down								
	Over voltage	LED Red light on, shut down								
	Over load	LED Red light on, shut down								
	Over temperature	Alarm at first, temperature continuously rise. LED Red light on & shut down								
	Short circuit	LED Red light on								
	Input reverse polarity	Fuse burn-out								
Working temperature	-10°C ~ +50°C									
Storage temperature	-30°C ~ +70°C									
Dimension(mm)	300×180×80			365×180×80			395×180×80			365×180×80
Packing(mm)	340×240×145			410×240×145			440×240×145			410×240×145
gross weight(g)	2920/3360			3880/4350			4320/4960			3900/4450
QTY/Ctn	6Pcs			4Pcs			4Pcs			4Pcs
Meas.Ctn(mm)	497×348×452			500×297×435			500×297×465			500×297×435
Warranty	2 years									
Cooling method	Intelligent air cooling									



ONG800/ONGTT800

Pure sine wave off-grid inverter



PRODUCT INTRODUCTION AND APPLICATION FIELDS

These series inverter adopts advanced full digital control technology ,touch color LCD screen, advanced DSP core control module, programmable logic device (CPLD), the sixth generation low loss high-power IGBT and static switch, which deduces the classic legend of the digital age. The large capacity, high reliability and stable performance all rank at the international first-class level.

This series of inverters has comprehensively broken through the technical bottleneck in the era of analog circuits. Digital control technology and high-precision SMD technology ensure that they are 100% suitable for various power grid environments. They are widely used in areas with dry power and power supply shortage, such as domestic power, mountaintops, islands, border posts, communication bases, farmland irrigation, road monitoring, etc

PERFORMANCE CHARACTERISTICS

FULL DIGITAL CONTROL TECHNOLOGY

- Advanced digital circuit stable system

This series product use the digital circuit to replace the traditional analog circuit. In the digital circuit mode, high-speed digital signal processor and programmable logic devices perform better than the circuit control, parameter setting and operation management. The sine wave voltage after digital transformation is very pure and stable, which can ensure the stable operation of the system ;

- Intelligent battery management, durable and worry free

This series of products manage the battery discharge according to the power consumption environment. In addition, it can detect and manage the battery operation status through the monitoring interface Ensure efficient operation of the battery. The intelligent battery management system can prolong the service life of the battery by more than 55%

THE SIXTH GENERATION IGBT INVERTER TECHNOLOGY

IGBT has good high-speed switching characteristics, with high voltage and large current operating characteristics. It adopts voltage type drive and only needs very small control power;

FRIENDLY MAN-MACHINE INTERFACE

- Humanized large screen display in Chinese and English

Visual display of flow chart operation status, display of data and event records, and optional menu operation in Chinese and English

- Intuitive LED status indication

Workflow type status indication, clear at a glance

OTHER PERFORMANCE CHARACTERISTICS

- superior load characteristics

Fully meet the jump from 0 to 100% load without switching to bypass, and protect the stable and reliable output

- Perfect protection function

It has various system protection and alarm functions such as excellent input / output over / under voltage protection, input surge protection, phase sequence protection, battery overcharge / over discharge protection, output overload / short circuit protection, over temperature protection, etc

Ongtt800 series three-phase independent control realizes the control of instantaneous overload balance degree, and can output 100% load imbalance

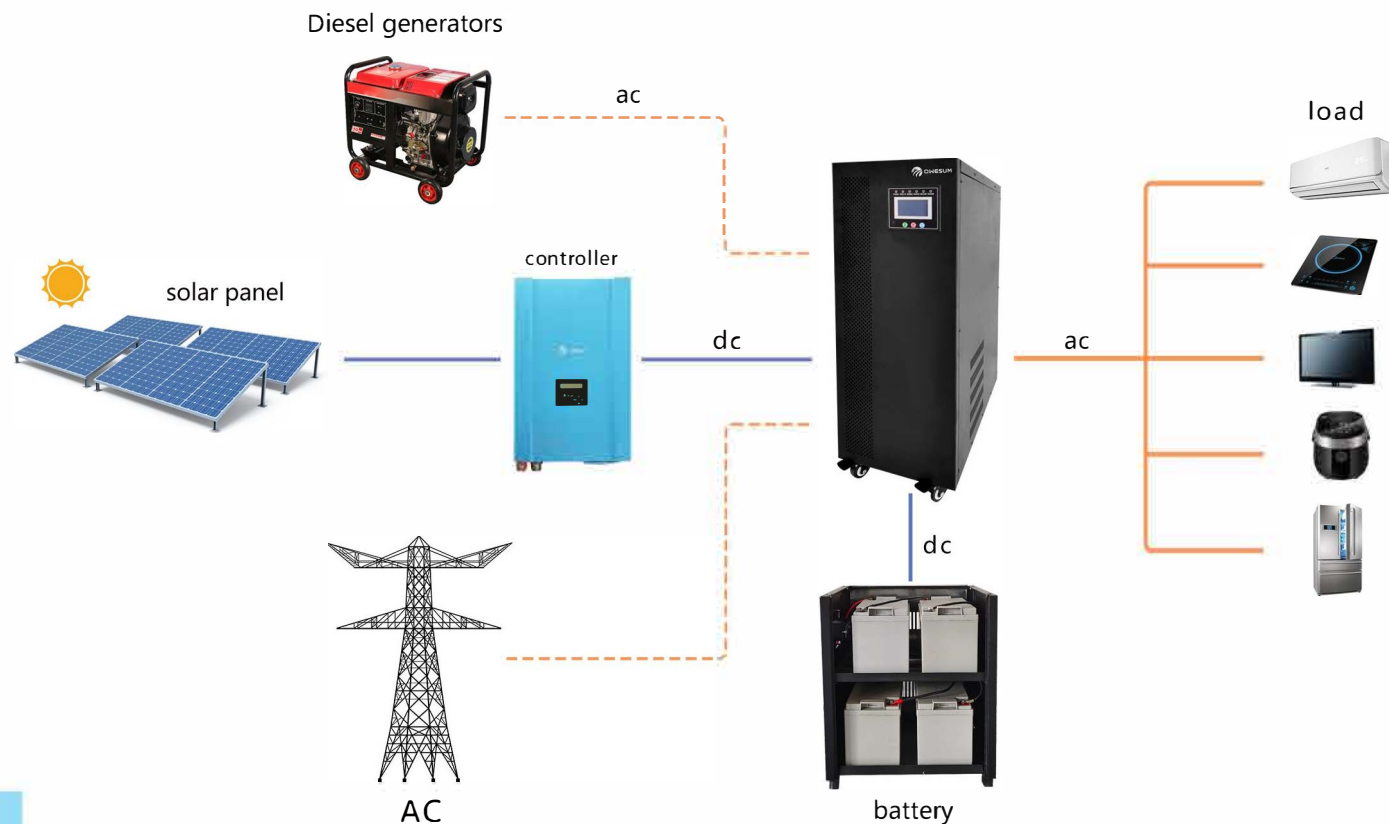


ONG800 Pure sine wave off-grid inverter



► Performance characteristics:

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor
- Pure sine wave, stable output, strong impact resistance and adaptability. Resistive and inductive load;
- Suitable for various types of batteries;
- Power frequency transformer isolation mode is adopted, which is safe and reliable;
- Mains priority / battery priority (settable)
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload and short circuit;
- All clients can monitor equipment operation data and modify the parameters from of the machine from the LCD screen
- Automatic switching so as to realize unattended operation;
- Stable performance, safe and reliable, high efficiency and long service life-span



Technical parameter

Model	ONG801	ONG802	ONG803	ONG804	ONG806	ONG808	ONG810	ONG815	ONG820	ONG830	ONG840	
(KW) Rated Power	1KVA	2KVA	3KVA	4KVA	6KVA	8KVA	10KVA	15KVA	20KVA	30KVA	40KVA	
battery	battery type											
	VRLA battery											
battery	Battery voltage					48VDC/192VDC						192VDC
	phase											
inverter	single phase											
	Rated voltage											
	220VAC											
	Voltage stability											
	± 1% (Linear Load), ± 3%(inductive load)											
	Frequency stability											
	50Hz < ± 0.5%											
	crest factor											
> 3:1												
inverter	Output Distortion											
	Sine wave , Linear Load < 3%, inductive load < 5%											
	overload protection											
	105%normal. 115% 10min, 135% 1min, 200%,10ms											
inverter	Inverter efficiency								> 92%(full load)		> 93% (full load)	
	phase											
bypass	single phase(L+N)											
	voltage											
	220VAC											
bypass	conversion time											
	4ms(static switch)											
protection	input protection											
	overrun voltage overrun frequency											
	output protection											
	overcurrent short circuit overvoltage undervoltage											
	battery protection											
overcharge protection over discharge protection												
protection	temperature protection											
	Over Temperature Protection											
protection	Hardware fault protection											
	Abnormal auxiliary power supply, breaker trip、 fusible cutout、 over current and voltage for power device、											
system parameters	working condition											
	Temperature 0~40℃ relative humidity30%~90% elevation < 1000m(Power decreases by 1% for every 100m increase, up to 4000m)											
	Cooling mode											
	Forced ventilation											
	communication interface											
	RS232、 RS485、 optional connection point、 SNMP											
	surge handing capability											
	10/700us, 5KA; 8/20us, 20KA											
	IP code											
	IP21											
Safety												
insulation resistance >2M (500VDC)												
system parameters	noise(dB)			45~50			50~55			55~60		
	size (W+D+H)											
system parameters	mm											
	210x500x47		210x560x510		210x560x550		305x585x870		410x680x950		415x680x990	
system parameters	weight(Kg)											
	35	58	65	70	73	85	108	200	230	280	320	

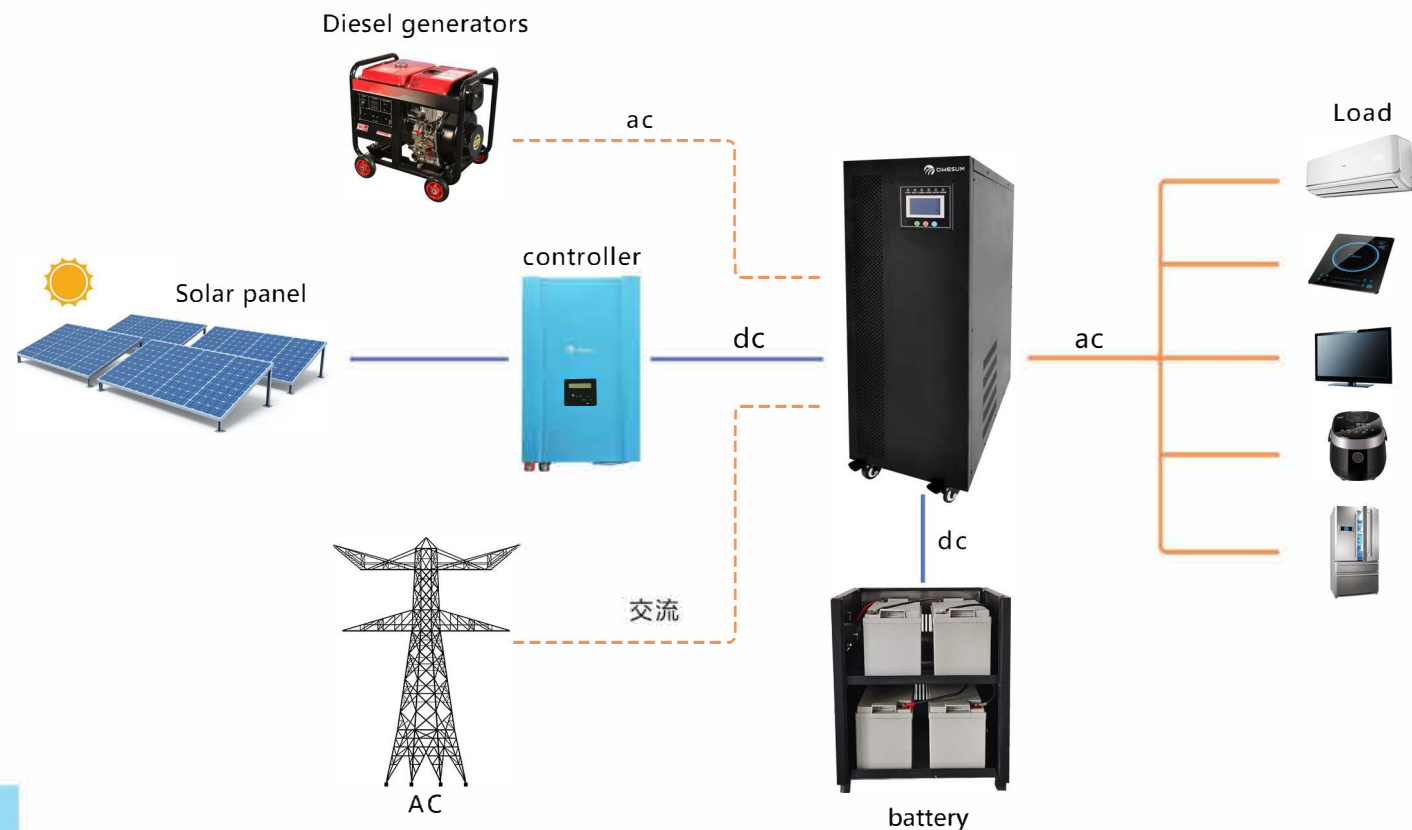


ONGTT800 Pure sine wave off-grid inverter



Performance characteristics:

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor ;
- Pure sine wave, stable output, strong impact resistance, adaptable to capacitive, resistive and inductive loads Applicable to various types of batteries;
- Power frequency transformer isolation mode is adopted, which is safe and reliable;
- Parallel redundancy: realize the parallel redundancy function of 4 inverters;
- Mains priority / battery priority (settable);
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload, short circuit, etc ;
- Touch color screen, Chinese and English optional menu operation, visual display of operation status, touch button of icon and event recording display;
- Automatic switching, unattended;
- Stable performance, safe and reliable, high efficiency, long service life;



Technical parameter

model	ONGTT810	ONGTT815	ONGTT820	ONGTT830	ONGTT840	ONGTT850	ONGTT860
(KW) rated power	10KVA	15KVA	20KVA	30KVA	40KVA	50KVA	60KVA
working mode	inverter first/AC first						
phase	three phases+L+N						
battery	type	VRLA battery					
	capacity	7-999AH(can be settled)					
	voltage	192VDC/220V/360VDC /384VDC					
inverter	phase	three phases +null line					
	power factor	0.8					
	rated voltage	380VAC					
	Voltage stability	±1% (Linear Load), ±3%(inductive load)					
	Frequency stability	50Hz, 60Hz < ±0.1(under inverter condition					
	crest factor	> 3:1					
	Output Distortion	Sine wave , Linear Load < 3%, inductive load < 5%					
	unbalanced voltage	< ±5%					
	overload protection	105%normal. 115% 10min, 135% 1min, 200%,10ms					
	Inverter efficiency	> 92%(full load)			> 92%(full load)		
bypass	phase	three phases +N					
	rated input voltage	380VAC					
	rated output voltage	380VAC					
	conversion time	4ms(static switch)					
protection	input protection	overrun voltage, overrun frequency, phase stagger, phase loss					
	output protection	overcurrent short circuit overvoltage undervoltage					
	battery protection	overcharge protection over discharge protection					
	temperature protection	Over Temperature Protection					
	Hardware fault protection	Abnormal auxiliary power supply, breaker trip, fusible cutout, over current and voltage for power device					
system parameters	working condition	Temperature 0~40°C relative humidity30%~90% elevation < 1000m(Power decreases by 1% for every 100m increase, up to 4000m)					
	Cooling mode	Forced ventilation					
	communication interface	RS232, RS485, optional connection point, SNMP					
	unequal fluidity for parallel	≤5%					
	redundancy function	Series or parallel connection hot standby					
	surge handing capability	10/700us, 5KA; 8/20us, 20KA					
	IP code	IP21					
	Safety	insulation resistance >2M(500VDC)					
	noise(dB)	48~55					
	size (W+D+H) mm	450x730x1140			450x795x1235		525x940x1330
weight(Kg)	200	230	265	310	342	385	402



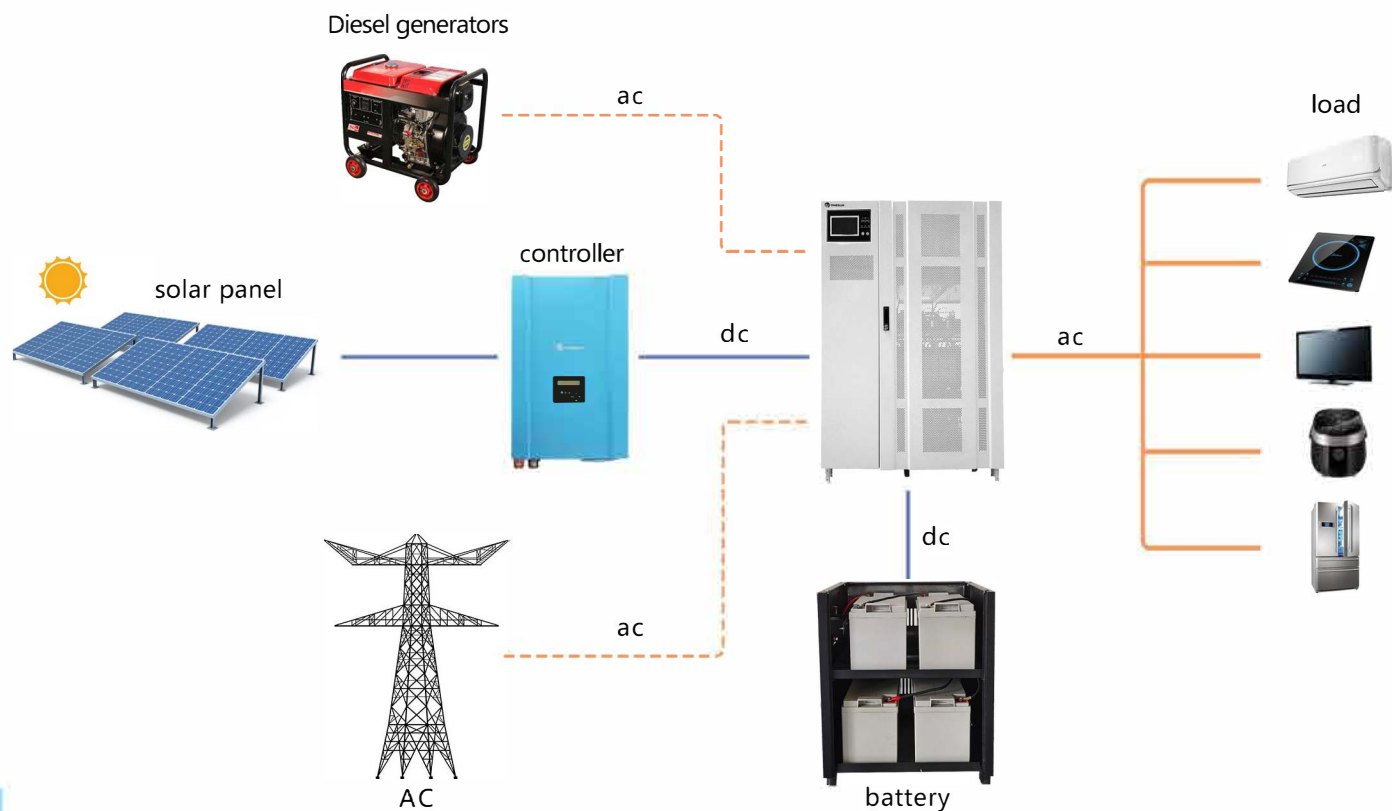
ONGTT800

Pure sine wave off-grid inverter



► Performance characteristics:

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor;
- Pure sine wave, stable output, strong impact resistance and adaptability. Resistive and inductive load;
- Suitable for various types of batteries;
- Power frequency transformer isolation mode is adopted, which is safe and reliable;
- Mains priority / battery priority (settable);
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload and short circuit;
- All clients can monitor equipment operation data and modify the parameters from of the machine from the LCD screen;
- Automatic switching so as to realize unattended operation;
- Stable performance, safe and reliable, high efficiency and long service life-span;



Technical parameter

MODEL	ONGTT880	ONGTT8100	ONGTT8120	ONGTT8150
(KW) Rated Power	80KVA	100KVA	120KVA	150KVA
working mode	inverter first/AC first			
phase	three phases+L+N			
battery	type	VRLA battery		
	capacity	7-999AH(can be settled)		
	voltage	360VDC/384VDC		
inverter	phase	three phases +null line		
	power factor	0.8		
	rated voltage	380VAC		
	Voltage stability	±1% (Linear Load), ±3%(inductive load)		
	Frequency stability	50Hz, 60Hz < ±0.1		
	crest factor	> 3:1		
	Output Distortion	Sine wave, Linear Load < 3%, inductive load < 5%		
	unbalanced voltage	< ±5%		
	overload protection	115%normal. 125% 10min, 150% 1min, 200%,1s		
Inverter efficiency	> 92%(full load)		> 92%(full load)	
bypass	phase	three phases +N		
	rated input voltage	380VAC		
	rated output voltage	380VAC		
	conversion time	4ms(static switch)		
protection	input protection	battery protection		
	output protection	overcurrent short circuit overvoltage undervoltage		
	battery protection	overcharge protection over discharge protection		
	temperature protection	Over Temperature Protection		
	Hardware fault protection	Abnormal auxiliary power supply, breaker trip, fusible cutout, over current and voltage for power device		
	system parameters	working condition	Temperature 0~40°C relative humidity30%~90% elevation < 1000m(Power decreases by 1% for every 100m increase, up to 4000m)	
Cooling mode		Forced ventilation		
communication interface		RS232, RS485, optional connection point, SNMP		
unequal fluidity for parallel		≤5%		
redundancy function		Series or parallel connection hot standby		
surge handing capability		10/700us, 5KA; 8/20us, 20KA		
IP code		IP21		
Safety		insulation resistance >2M(500VDC)		
noise(dB)		55~60		
size (W+D+H) mm		1100x860x1680		
weight(Kg)	560	850	910	1300



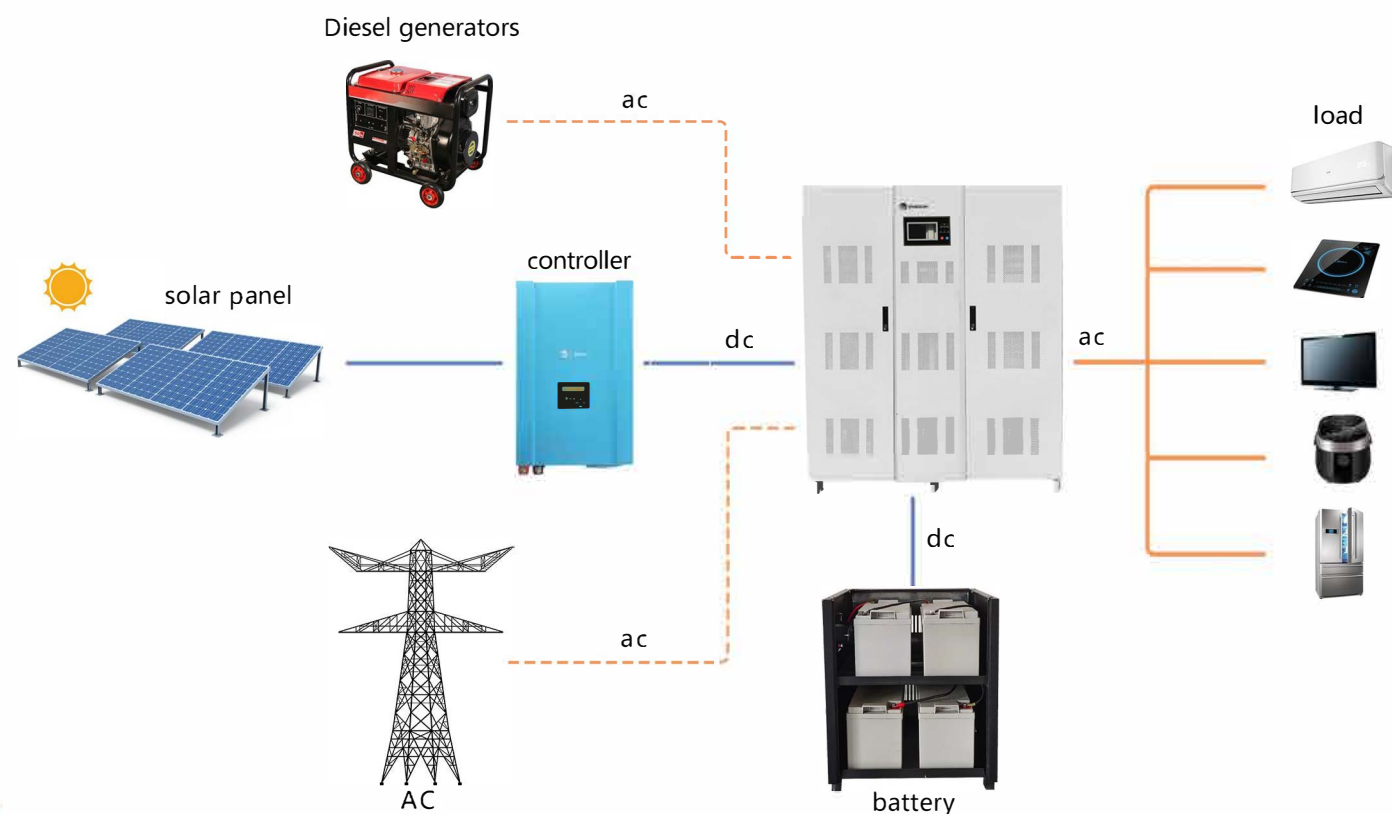
ONGTT800

Pure sine wave off-grid inverter



performance characteristics

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor;
- Pure sine wave, stable output, strong impact resistance and adaptability. Resistive and inductive load;
- Suitable for various types of batteries;
- Power frequency transformer isolation mode is adopted, which is safe and reliable;
- Mains priority / battery priority (settable);
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload and short circuit;
- All clients can monitor equipment operation data and modify the parameters from of the machine from the LCD screen;
- Automatic switching so as to realize unattended operation;
- Stable performance, safe and reliable, high efficiency and long service life-span;



Technical parameter

model		ONGTT8160	ONGTT8200
(KW) rated power		160KVA	200KVA
working mode		inverter first/AC first	
phase		three phases+L+N	
battery	type	VRLA battery	
	capacity	7-999AH(can be settled)	
	voltage	360VDC/384VDC	
inverter	phase	three phases + null line	
	power factor	0.8	
	rated voltage	380VAC	
	Voltage stability	±1% (Linear Load), ±3%(inductive load)	
	Frequency stability	50Hz, 60Hz < ±0.1 (under inverter condition)	
	crest factor	> 3:1	
	Output Distortion	Sine wave , Linear Load < 3%, inductive load < 5%	
	unbalanced voltage	< ±5%	
	overload protection	115%normal. 125% 10min, 150% 1min, 200%,1s	
	Inverter efficiency	> 92%(full load)	
bypass	phase	three phases +N	
	rated input voltage	380VAC	
	rated output voltage	380VAC	
conversion time	4ms(static switch)		
protection	input protection	battery protection	
	output protection	overcurrent short circuit overvoltage undervoltage	
	battery protection	overcharge protection over discharge protection	
	temperature protection	Over Temperature Protection	
	Hardware fault protection	Abnormal auxiliary power supply, breaker trip, fusible cutout, over current and voltage for power device	
system parameters	working condition	Temperature 0~40°C relative humidity30%~90% elevation < 1000m(Power decreases by 1% for every 100m increase, up to 4000m)	
	Cooling mode	Forced ventilation	
	communication interface	RS232、RS485、 optional connection point、SNMP	
	unequal fluidity for parallel	≤5%	
	redundancy function	Series or parallel connection hot standby	
	handing capability	10/700us, 5KA; 8/20us, 20KA	
	IP code	IP21	
	Safety	insulation resistance >2M(500VDC)	
	noise(dB)	60~65	65~70
	size (W+D+H) mm	1500x1120x1800	
weight(Kg)	1300	1680	



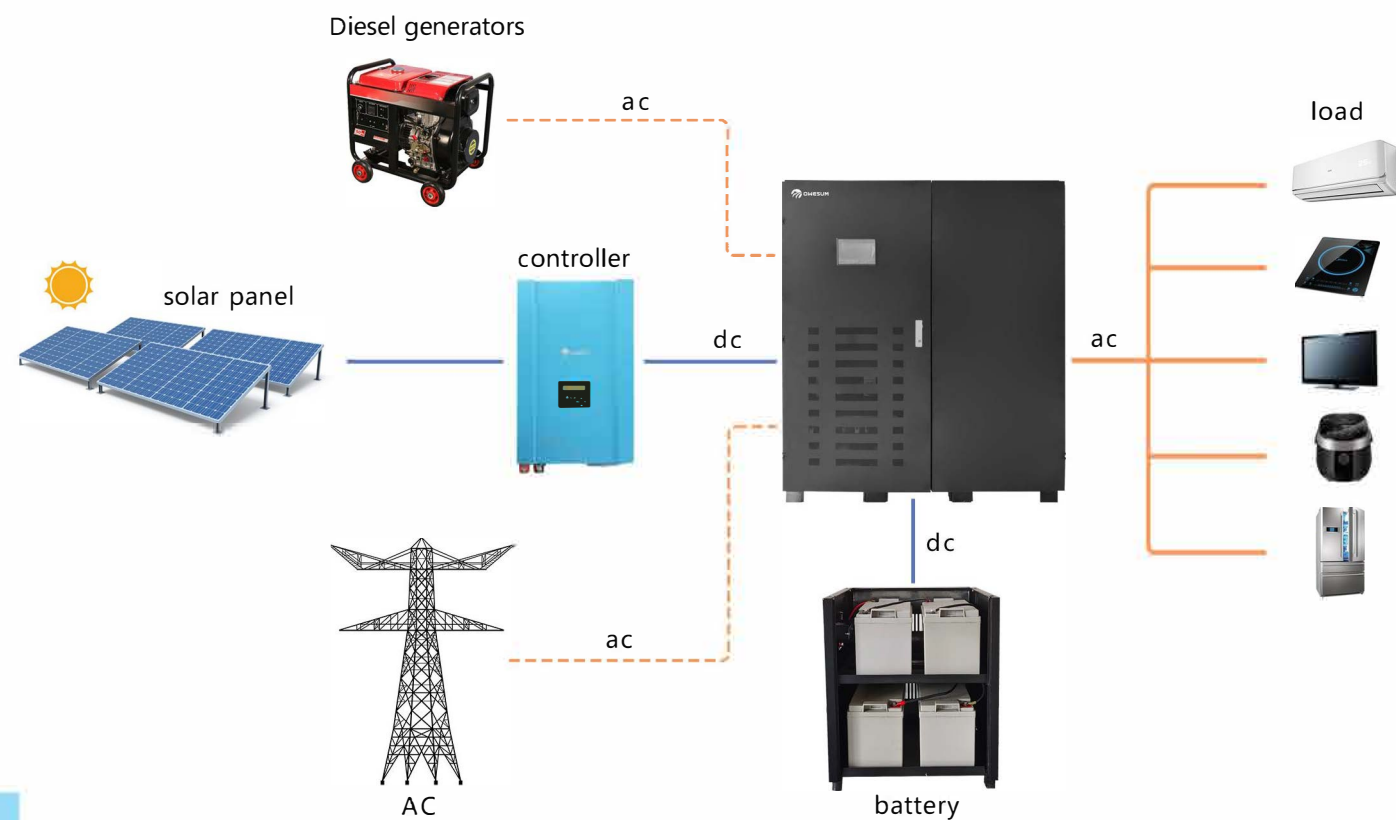
ONGTT800

Pure sine wave off-grid inverter



performance characteristics

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor;
- Pure sine wave, stable output, strong impact resistance and adaptability. Resistive and inductive load;
- Suitable for various types of batteries;
- Power frequency transformer isolation mode is adopted, which is safe and reliable;
- Mains priority / battery priority (settable);
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload and short circuit;
- All clients can monitor equipment operation data and modify the parameters from of the machine from the LCD screen;
- Automatic switching so as to realize unattended operation;
- Stable performance, safe and reliable, high efficiency and long service life-span;



Technical parameter

model	ONGTT8250	ONGTT8300	
(KW) rated power	250KVA	300KVA	
working mode	inverter first/AC first		
phase	three phases+L+N		
battery	type	VRLA battery	
	capacity	7-999AH(can be settled)	
	voltage	360VDC/384VDC	
inverter	phase	three phases + null line	
	power factor	0.8	
	rated voltage	380VAC	
	Voltage stability	±1% (Linear Load), ±3%(inductive load)	
	Frequency stability	50Hz, 60Hz < ±0.1 (under inverter condition)	
	crest factor	> 3:1	
	Output Distortion	Sine wave , Linear Load < 3%, inductive load < 5%	
	unbalanced voltage	< ±5%	
	overload protection	115%normal. 125% 10min, 150% 1min, 200%,1s	
	Inverter efficiency	> 92%(full load)	
bypass	phase	three phases +N	
	rated input voltage	380VAC	
	rated output voltage	380VAC	
	conversion time	4ms(static switch)	
protection	input protection	battery protection	
	output protection	overcurrent short circuit overvoltage undervoltage	
	battery protection	overcharge protection over discharge protection	
	temperature protection	Over Temperature Protection	
	Hardware fault protection	Abnormal auxiliary power supply, breaker trip, fusible cutout, over current and voltage for power device	
system parameters	working condition	Temperature 0~40°C relative humidity30%~90% elevation < 1000m(Power decreases by 1% for every 100m increase, up to 4000m)	
	Cooling mode	Forced ventilation	
	communication interface	RS232、RS485、 optional connection point、SNMP	
	unequal fluidity for parallel	≤5%	
	redundancy function	Series or parallel connection hot standby	
	handing capability	10/700us, 5KA; 8/20us, 20KA	
	IP code	IP21	
	Safety	insulation resistance > 2M(500VDC)	
	noise(dB)	60~65	
	size (W+D+H) mm	1500x1120x1800	
weight(Kg)	2000	2350	

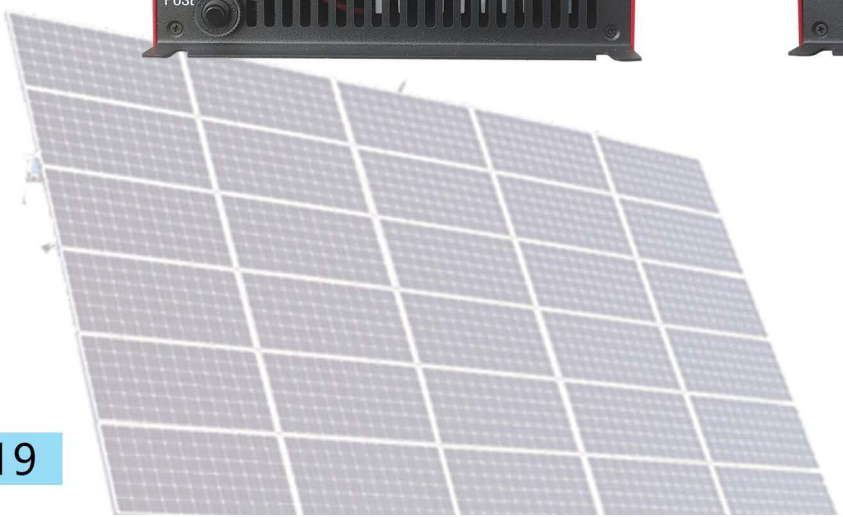
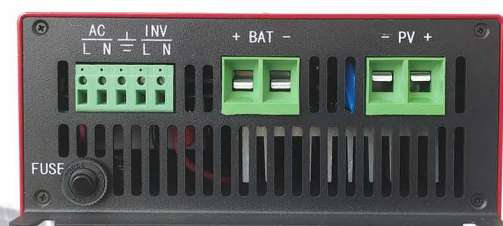


ONSH Pure sine wave control inverter integrated machine



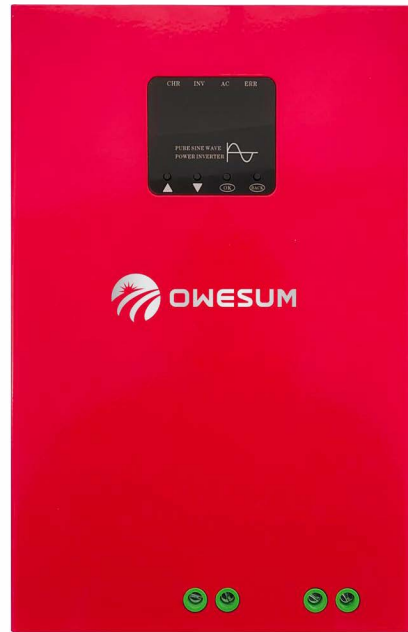
PRODUCT INTRODUCTION AND APPLICATION FIELDS

- This series of control inverter all-in-one machine integrates the functions of high-efficiency photovoltaic controller, inverter and UPS, integrates solar diesel engine, greatly reduces user configuration and maximizes users' economic benefits
- The system provides intelligent power management, friendly man-machine interface ,intuitive system operation mode, perfect protection function, intelligent and modular design, simple structure and powerful function
- Industrial grade high-quality components and strict production process are suitable for relatively harsh working environment such as high temperature and low temperature , and have reliable performance and service life;
- The internal circuit adopts CPU control for automatic detection and management, with high efficiency and low distortion. The input and output adopt EMI filtering, which is suitable for various and electric equipment, and can provide the best pure sine wave
- Visual display function: including battery voltage, photovoltaic voltage, photovoltaic current, inverter output voltage, inverter output current, inverter output frequency, AC input voltage, frequency, etc;
- Visual display function: including battery voltage, photovoltaic voltage, photovoltaic current, inverter output voltage, inverter output current, inverter output frequency, AC input voltage, frequency, etc;



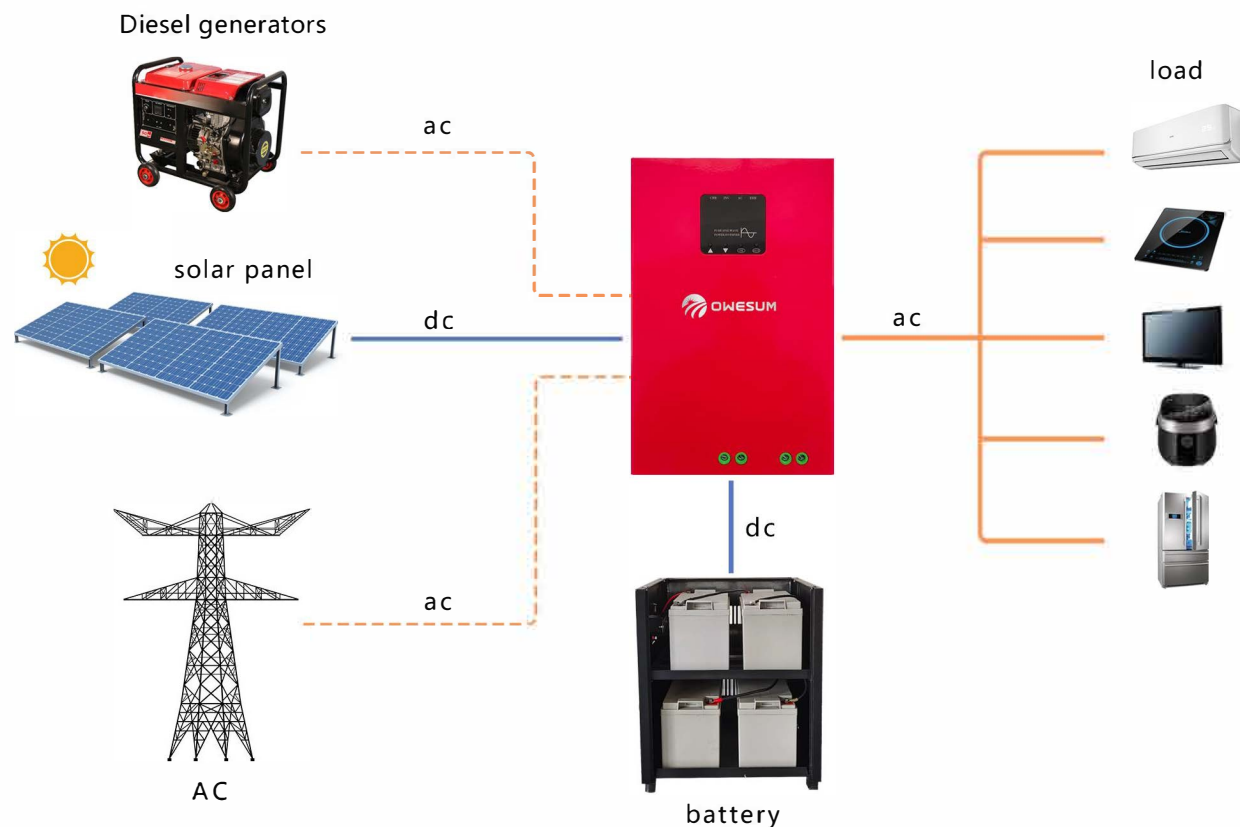


ONSH Pure sine wave control inverter integrated machine



► Performance characteristics

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor;
- Integrated design for the pure sine wave inverter with built-in high-efficiency controller built in and the open circuit loss is low,;
- Suitable for various types of batteries;
- Mains priority / PV priority (settable);
- Complete protection functions: under voltage, over voltage, over heat, over discharge, overcharge, photovoltaic anti reverse connection, etc;
- LED display, you can view the equipment operation data, and support the modification of all-in-one machine parameters;
- Stable output, strong load carrying capacity, adaptable to capacitive, resistive and inductive loads;
- Automatic switching, unattended;
- Stable performance, safe and reliable, high efficiency and long service life;



Technical parameter

MODEL		ONSH-0.5K30C/ ONSH-0.5K30D	ONSH-1K30C/ ONSH-1K30D	ONSH-2K50D	ONSH-3K50D
Rated Capacity (KW)		0.5	1	2	3
DC Input	Input rated voltage	24.0/48.0		48.0	
	Undervoltage point (VDC)	21.6/43.2		43.2	
	Undervoltage recovery point	25.6/51.2		51.2	
	Overvoltage point (VDC)	30/60		60	
	Overvoltage recovery point (VDC)	28/56		56	
Controller	PV maximum input current (A)	30		50	
	charging method	PWM		PWM	
	Maximum allowable PV open circuit voltage (VDC)	50/100		100	
	Float voltage (VDC)	28/56		56	
AC Input	Input voltage allowable range	170~255(±3%)			
	Frequency range (Hz)	45~65			
	switch mode	Mains priority/Inverter priority			
	Switching time (ms)	≤10			
Inverter parameters	output waveform	sine wave			
	Output voltage (VAC)	220±3%			
	Rated output frequency (HZ)	50/60			
	Voltage (THD)	≤5%			
	100% ~ 125% overload	one minute off			
	Over 150% overload	10 seconds off			
	Dynamic Response (1-100%)	5%			
	Current crest factor	3:1			
	peak efficiency	≥85%		≥90%	
	Protective function	Anti-reverse, undervoltage, overvoltage, overload, short circuit, overheating, etc.			
Display method	digital display				
Cooling method	forced air cooling				
surrounding	Noise (dB)	≤50			
	Ambient temperature (°C)	-10°C ~ +45°C			
	Relative humidity	≤95%, no condensation			
	Altitude	≤5000m(More than 1000m, derate according to relevant standards)			
Structural parameters	Protection class	IP20			
	Dimensions (LxWxH mm)	318*190*80		365*290*112	
	Reference weight (Kg)	4.5	5.1	8	9.2

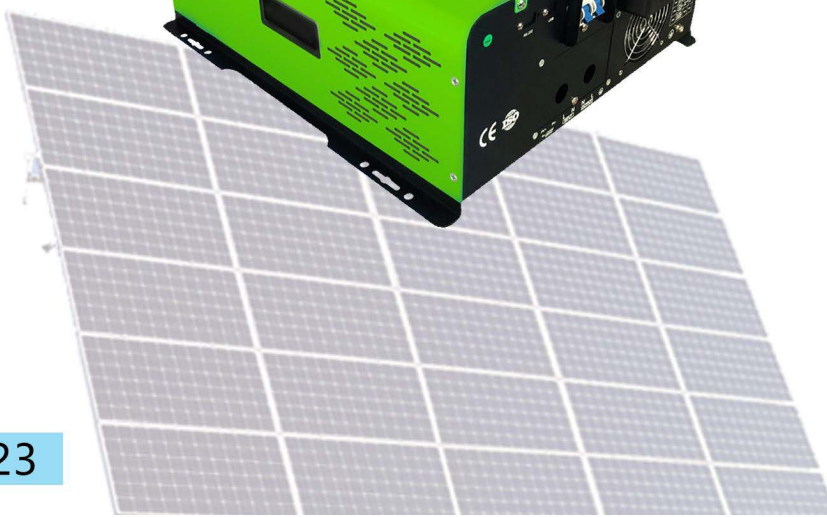


ONSG/ONSGII Pure sine wave control inverter integrated machine



PRODUCT INTRODUCTION AND APPLICATION FIELDS

- This series control inverter all-in-one machine integrates high-performance MPPT controller (dc/dc) and inverter (dc/ac) Ac/dc charger and UPS function, integrating solar energy and diesel engine, greatly reducing user configuration and maximizing user economic benefits
- The system provides intelligent power management, friendly man-machine interface ,intuitive system operation mode, perfect protection function, intelligent and modular design, simple structure and powerful function
- Industrial grade high-quality components and strict production process are suitable for relatively harsh working environment such as dry high temperature and low temperature With reliable performance and service life
- The internal circuit adopts CPU control for automatic detection and management, with high efficiency and low distortion. The input and output adopt EMI filtering, which is suitable for various electrical equipment and can provide the best pure sine wave
- Intuitive display function: including battery voltage, photovoltaic voltage, photovoltaic power, photovoltaic current and battery charging Current, inverter output voltage, inverter output current, voltage, frequency, etc;
- Adopt DC and AC full isolation design scheme
- It is widely used in areas without electricity and in areas with power supply shortage, such as home roof solar energy, mountain tops, islands, border posts, communication base stations , farmland irrigation, road monitoring, etc



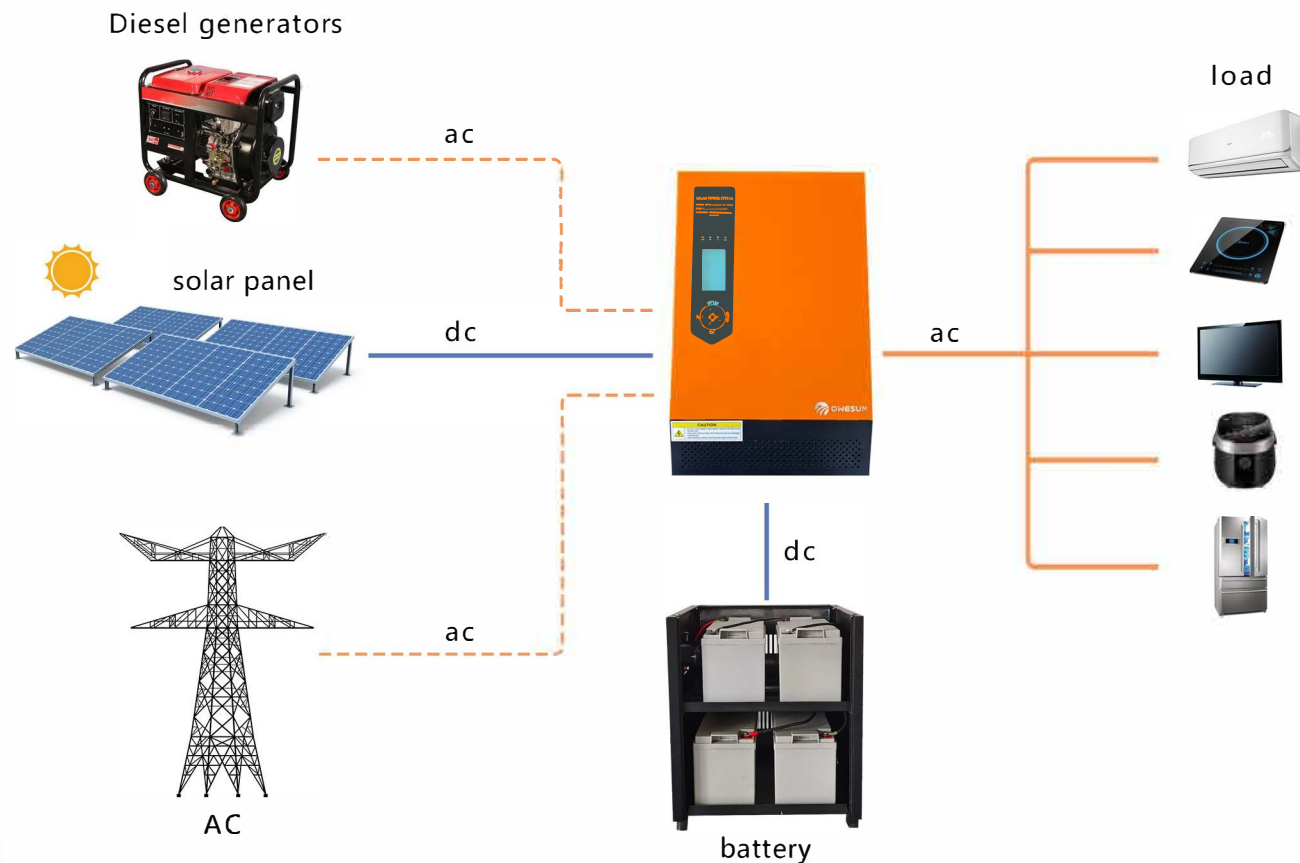


ONSG Pure sine wave control inverter integrated machine



► Performance characteristics

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor
- Built in MPPT controller, higher charging efficiency;
- Pure sine wave, stable output, strong impact resistance , adaptable to capacitive, resistive and inductive loads;
- Applicable to various types of batteries;
- Power frequency transformer isolation mode is adopted , which is safe and reliable;
- Mains priority / PV priority (settable) ;
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload, short circuit, over discharge, overcharge and anti reverse charging;
- LCD display, which can view equipment operation data and support the modification of all-in-one machine parameters;
- Automatic switching, unattended;
- Stable performance, safe and reliable, high efficiency and long service life



Technical parameter

MODEL	1012/24	1512/24	2012/24	3024/48	3824/48	5024/48
Rated voltage	800W	1200W	1600W	2400W	3000W	4000W
Battery voltage (DC)	12/24V	12/24V	12/24V	24/48V	24/48V	24/48V
AC recharging current	20/10A	30/15A	35/18A	30/15A	35/18A	40/20A
input (v)	220VAC/110VAC					
Input voltage range	154-265VAC/77-135VAC					
frequency	50-60Hz automatic adaptation					
output voltage	220VAC/110VAC					
output frequency	50/60Hz					
waveform	pure sine wave					
switching time	<8ms					
Conversion efficiency	>90%					
low voltage shutdown	@load < 20%, 11V*N; @load > 50%, 10V*N or 10.5V*N					
undervoltage	@load < 20%, 11.5V*N; @load > 50%, 10.5V*N or 11V*N					
Brown-out recovery point	@load < 20%, 12V*N; @load > 50%, 11V*N or 11.5V*N					
Overvoltage point	16V*N					
Overvoltage Recovery Point	15V*N					
Protective function	Overload protection, short circuit protection, undervoltage protection, overvoltage protection, battery feedback (optional)					
Overload shutdown time	Capacity of overload 100%-130% it will turn off after 30s; 150% maintain 300ms and then shut down.					
Maximum array power	12V:800W 24V:1600W 48V:3200W					
PV input voltage range	12V:MPPT 15-150V/PWM 15-30V		24V:MPPT 30-150V/PWM 30-60V		48V:MPPT 60-150V/PWM 60-105V	
PV Maximum Array Open Circuit Voltage	12V:MPPT 150V/PWM 30V		24V:MPPT 150V/PWM 60V		48V:MPPT 150V/PWM 105V	
PV maximum charging current	60A					
PV maximum tracking efficiency	99%					
Status Display	input Voltage, Input frequency, AC charging current, PV voltage, Output voltage, Output frequency, Load current, battery Voltage, Alarm, ect					
LED indicator status	AC : green					
	Inverter: green					
	Charge: yellow					
Low battery alarm	Warn: red					
	1s second beep					
Overload alarm	Continuous beep					
Fault	Continuous beep					
temperature	0-40°C					
humidity	C0-95%, no condensation					
acoustic noise (db)	<45dB					
Product Size	545*320*140mm					
Package dimensions	610*415*235mm					
kg Product net weight/gross weight kg	12/14	12.5/14.5	14.5/17.5	17.5/20.5	19/22	22/25

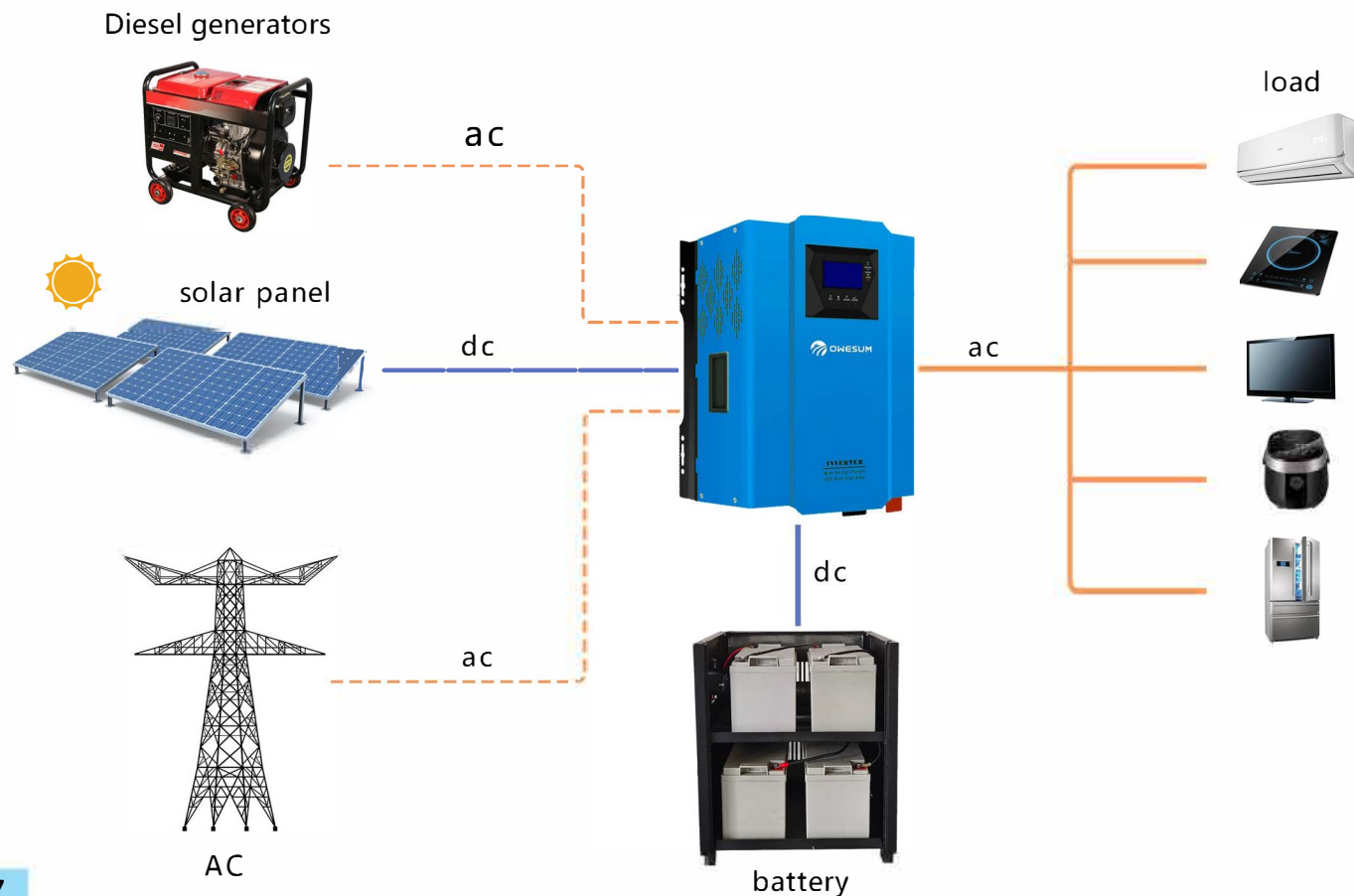


ONSGII Pure sine wave control inverter integrated machine



► Performance characteristics

- Adopt the most advanced digital control technology, high-speed 32-bit Cortex-M3 core microprocessor
- Built in MPPT controller, higher charging efficiency;
- Pure sine wave, stable output, strong impact resistance , adaptable to capacitive, resistive and inductive loads;
- Applicable to various types of batteries;
- Power frequency transformer isolation mode is adopted , which is safe and reliable;
- Mains priority / PV priority (settable) ;
- Perfect protection function: a series of alarm and protection functions such as battery reverse connection, undervoltage, overvoltage, over temperature, overload, short circuit, over discharge, overcharge and anti reverse charging;
- LCD display, which can view equipment operation data and support the modification of all-in-one machine parameters;
- Automatic switching, unattended;
- Stable performance, safe and reliable, high efficiency and long service life



Technical parameter

MODEL	1012	1512/24	2012/24	3024/48	5024/48/96	6024/48/96	8048/96	10048/96
Battery voltage	12V	12/24V	12/24V	24/48V	24/48/96V	24/48/96V	48/96V	48/96V
AC recharging current	20A	30/15A	35/18A	30/15A	40/20/10A	45/22/11A	35/17A	50/25A
input voltage	220VAC/110VAC							
Input voltage range	154-265VAC/77-135VAC							
frequency	50-60Hzautomatic adaptation							
Rated voltage	800W	1200W	1600W	2400W	4000W	4800W	6400W	8000W
output voltage	220VAC/110VAC							
output frequency	50/60Hz							
waveform	pure sine wave							
switching time	< 8ms							
Conversion efficiency	>90%							
low voltage shutdown	@load < 20%, 11V*N;@load > 50%, 10V*N or 10.5V*N							
undervoltage	@load < 20%, 11.5V*N;@load > 50%, 10.5V*N or 11V*N							
Brown-out recovery point	@load < 20%, 12V*N;@load > 50%, 11V*N or 11.5V*N							
Overvoltage point	16V*N							
Overvoltage Recovery Point	15V*N							
Protective function	Overload protection, short circuit protection,undervoltage protection, overvoltage protection, battery feedback (optional)							
Overload shutdown time	Capacity of overload 100%-130%it will turn off after 30s; 150%maintain 300ms and then shut down.							
Maximum array power	12V:800W 24V:1600W 48V:3200W							
input voltage range	12V:MPPT 15-150V/PWM 15-30V		24V:MPPT 30-150V/PWM30-60V			48V:MPPT 60-150V/PWM 60-105V		
PV Maximum Array Open Circuit Voltage	12V:MPPT 150V/PWM 30V		24V:MPPT 150V/PWM 60V			48V:MPPT 150V/PWM 105V		
PV maximum charging current	60A							
PV maximum tracking efficiency	99%							
Status Display	input Voltage, Input frequency,AC charging currentPVvoltageOutput voltage, Output frequency,Load current , batteryVoltageAlarm.ect							
LED indicator status	Ac: green							
	Inverter: green							
	Charge: yellow							
	Warn: red							
Low battery alarm	1s second beep							
Overload alarm	Continuous beep							
Fault	Continuous beep							
temperature	0-40°C							
humidity	C0-95%, no condensation							
acoustic noise (db)	< 45dB							
Product Size	470*335*210mm						650*335*201mm	
Package dimensions	546*392*260mm						665*399*324mm	
Product net weight/gross weight kg	12	16	17.5	18.5	19	22	30	38



OSM MPPT Solar energy controller



PRODUCT INTRODUCTION AND APPLICATION FIELDS

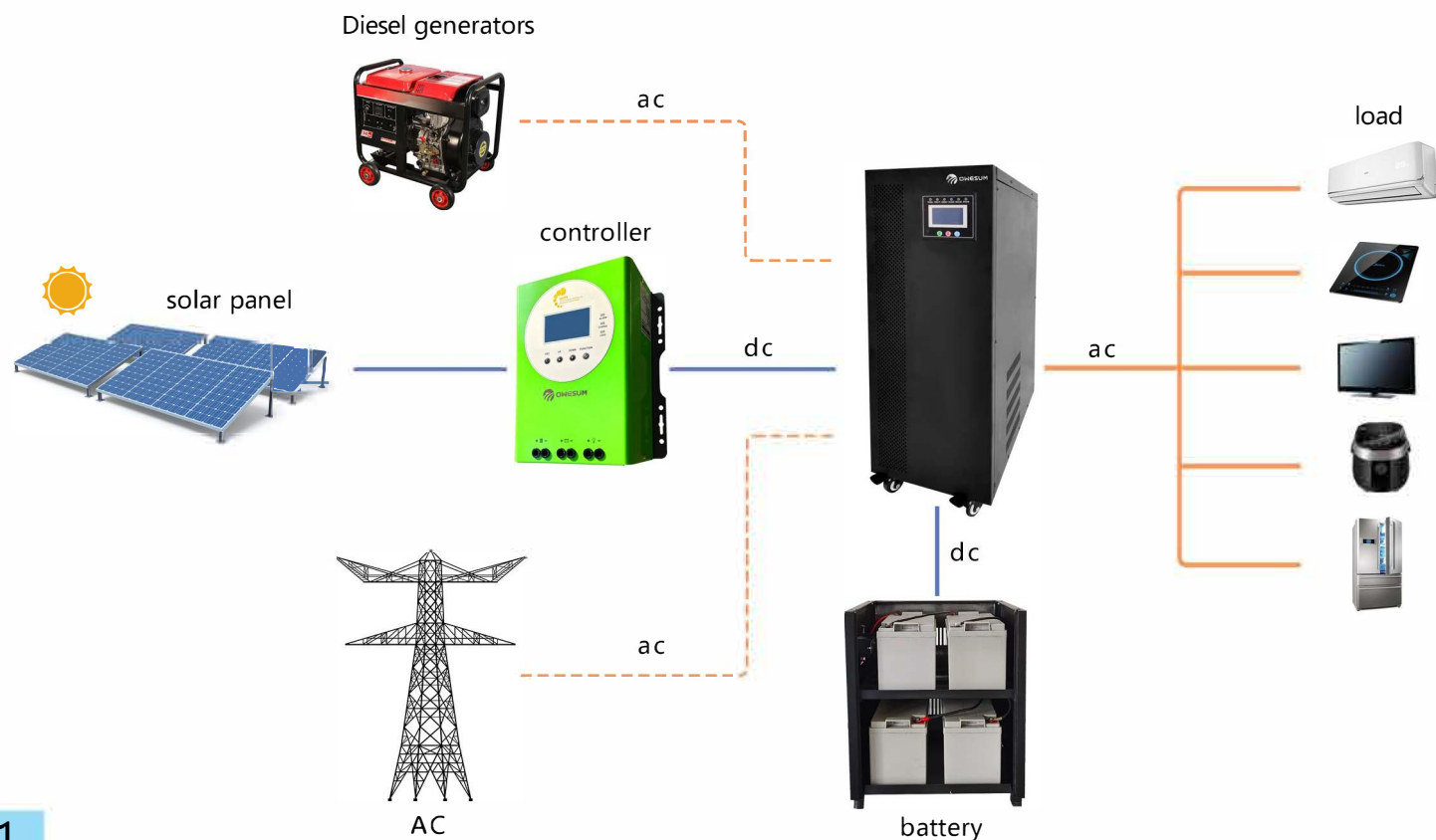
- The solar controller is a high-performance step-down solar power generation equipment. It uses MPPT (maximum power point tracking) algorithm to make full use of solar photovoltaic energy. The PV input voltage range is wide, and it can charge a variety of batteries. In addition, the three-stage charging effectively improves the service life of batteries
- The modular design of the controller allows multiple controllers to be used in parallel, allowing customers to configure freely and flexibly
- The solar charging and discharging controller is the control center connecting the solar cell array, various electric facilities and battery packs. By adjusting and distributing the input and output power of the system, various control functions of the solar photovoltaic system are realized. The solar controller adopts the design method of modularization and hierarchical control to manage the charging and discharging of the battery pack
- The DC power from the solar PV array is charged to the battery by the intelligent controller. When the battery is not fully charged, the controller is used to charge the battery to the maximum extent. When the battery is fully charged, the controller controls the power from the solar energy to make the battery in a floating charge state. When the battery is discharged to a voltage close to the battery over discharge point, the controller will give an alarm of insufficient battery power and cut off the battery discharge circuit, To protect the battery
- It is widely used in areas without electricity and in areas with power supply shortage, such as home roof solar energy, mountain tops, islands, border posts, communication base stations, farmland irrigation, road monitoring, etc



OSM MPPT Solar energy controller

► Performance characteristics

- Controlled by microcomputer chip, each parameter point of charge and discharge can be programmed and set arbitrarily;
- Can adapt to special requirements of different occasions;
- Complete protection: a series of alarm and protection functions such as overcharge, over discharge, overload, short circuit, reverse connection and anti reverse charging at night;
- With HD LCD display function, you can view the equipment operation data and working status, and support the modification of controller display parameters;
- relatively harsh working environment such as high temperature and low temperature, and has reliable performance and service life;
- Applicable to various types of battery charging; Wide input photovoltaic voltage;
- Charging mode: three-stage charging (constant current, constant voltage and floating charging) can effectively prolong the service life of the battery;
- The efficient MPPT controller algorithm can track the maximum power of solar modules in real time, and the maximum tracking power can reach more than 99%, which greatly improves the utilization of photovoltaic modules;



Technical parameter

MODEL	4015	6015	8015	10015	8025	
Rated current (A)	40	60	80	100	80	
Rated voltage (DC)	12/24/48(automatic adaptation)				96	
charging mode	MPPT maximum power point tracking					
Applicable battery type	Lead-acid battery / gel battery / water battery, etc.					
charging method	Three stages: constant current, constant voltage, floating charge					
Maximum open circuit voltage (VDC)	150				250	
Start Time (s)	≤10					
Dynamic response recovery time	≤50us					
Static power (W)	≤1.2		≤2.5			
Maximum tracking efficiency	≥99.5%					
Conversion efficiency	>98%					
Identify the voltage range (VDC)	8~64				72~128	
Rated charging power (W)	12V	540	800	1040	1300	-
	24V	1080	1600	2080	2600	-
	48V	2160	3200	4160	5200	-
	96V	-	-	-	-	8320
load voltage (VDC)	same battery voltage					
LOAD control method	Normally open normally closed mode					
Load undervoltage protection	Default 10.5V*N (N is the number of batteries), adjustable parameters					
Cooling method	air cooling					
Display method	HD LCD display					
Protective function	Over and under voltage protection, anti-reverse connection protection, over temperature protection, load over current protection					
temperature compensation system	-3mV/°C / 2V					
communication method	RS485					
Noise (dB)	≤50					
Operating temperature	-20°C~50°C					
Storage temperature	-40°C~70°C					
Relative humidity	0~90%RH					
Altitude (M)	0~3000					
Machine size(MM)	219*260*110			275*348*109		
weight (KG)	2.8			5.2		

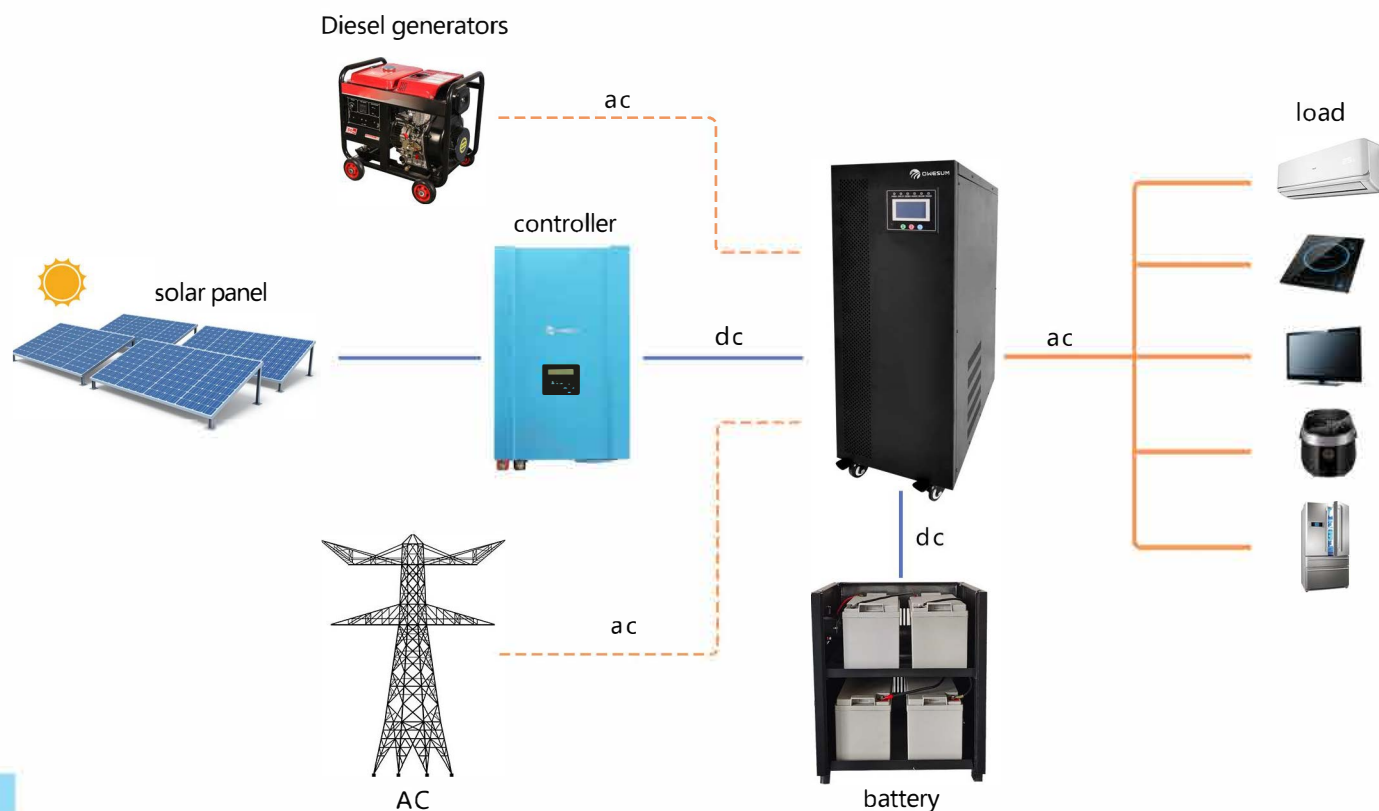


OSM MPPT Solar energy controller



► Performance characteristics

- Controlled by microcomputer chip, each parameter point of charge and discharge can be programmed and set arbitrarily;
- Can adapt to special requirements of different occasions;
- Complete protection: a series of alarm and protection functions such as overcharge, over discharge, overload, short circuit, reverse connection and anti reverse charging at night;
- With HD LCD display function, you can view the equipment operation data and working status, and support the modification of controller display parameters;
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- The efficient MPPT controller algorithm can track the maximum power of solar modules in real time, and the maximum tracking power can reach more than 99%, which greatly improves the utilization of photovoltaic modules;



Technical parameter

MODEL	OSM48	OSM96	OSM192	OSM220	OSM240
Rated voltage(VDC)	48	96	192	220	240
Overvoltage protection (VDC)	62.0	124.0	248.0	279.0	310.0
Overvoltage Recovery Point (VDC)	60.0	120.0	240.0	270.0	300.0
float voltage(VDC)	54.0	108.0	216.0	243.0	270.0
Equalizing voltage(VDC)	56.8	113.6	227.2	255.6	284.0
Max charging current(A)	60/120/180/240	50/100/150/200			
charging method	Three stages: constant current (MPPT), constant voltage, floating charge				
maximum output power(kWp)	3.4/6.8/ 10.2/13.6	5.7/11.4/ 17.1/22.8	11.4/22.8/ 34.2/45.6	12.8/25.6/ 38.4/51.2	14.2/28.4/ 42.6/56.8
Starting voltage(VDC)	60	120	240	270	300
Maximum open circuit voltage(VDC)	170	300	480		
Maximum efficiency	>98%				
MPPT effectiveness	>99%				
noise(dB)	<55				
show	LCD+LED				
Communication	RS485 (optional)				
Operating temperature	-10°C~+50°C				
Relative humidity	0~95%(No condensation)				
altitude(m)	≤5000m, use with derating above 1000m				
Protection level	IP20				
size (D*W*H mm)	168*417*550/450*440*1000				
Protective function	Photovoltaic array reverse connection protection; battery reverse connection protection; night anti-reverse charging protection; battery overcharge protection, over discharge protection; over temperature protection, etc.				



CNF series Solar energy storage gel battery

MODEL	Rated voltage(v)	Rated Capacity (Ah/10Hr)	Size (mm)			Weight (kg)
			long	width	high	
CNF-100	2	100	72	171	345	5.5
CNF-200	2	200	106	171	345	12.5
CNF-250	2	250	151	171	345	14
CNF-300	2	300	151	171	345	17
CNF-400	2	400	196	171	345	21
CNF-500	2	500	241	171	345	26.5
CNF-600	2	600	283	171	345	32
CNF-800	2	800	383	171	345	44
CNF-1000	2	1000	471	171	345	53
CNF-1500	2	1500	363	318	390	80
CNF-2000	2	2000	363	385	390	106
CNF-3000	2	3000	570	365	390	163.5

STRUCTURAL FEATURES

- (1) Grid: made of Lead-calcium-tin alloy with good corrosion resistance and long lifespan characteristic.
- (2) Plate: For adding 4BS crystal, we can take full advantage of active material. So it has the strong self-recovery capability after deep discharging and cycling.
- (3) separator: made of super-thin fiber glass, its internal resistance is low and the discharge performance is good at high rate
- (4) Battery cover: made of high-strength ABS material with good corrosion resistance, impact resistance characteristic. there is also no potential risk of leakage and deformation
- (5) Terminals: major diameter and good conductivity. copper core-lead base pole embedded, and with corrosion resistance and strong current carrying capacity
- (6) sealing: unique multi-layer sealing technology and special cable sealing glue ensure that the battery is safe and reliable without leakage and acid bag escape



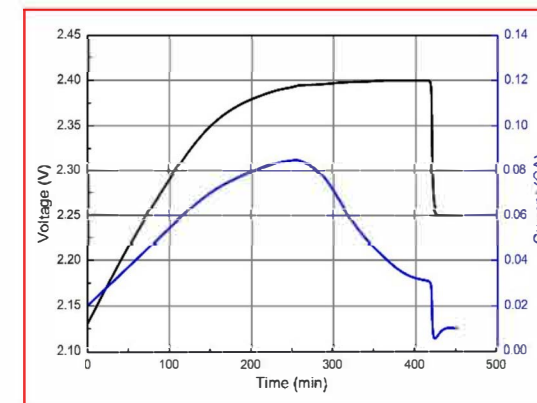
STRUCTURAL FEATURES

- (1) long lifespan
- (2) small self-discharge
- (3) High reaction efficiency: $\geq 99\%$
- (4) good consistency characteristic

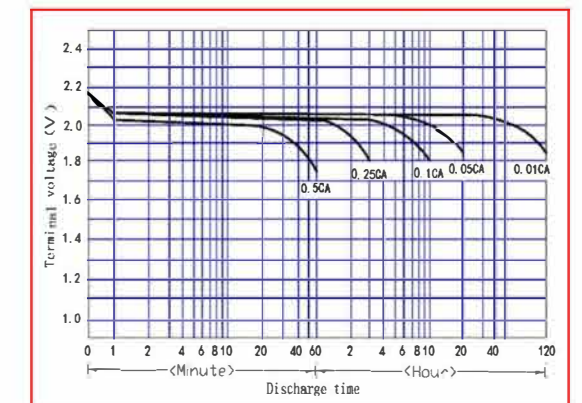


BATTERY CHARACTERISTIC CURVE

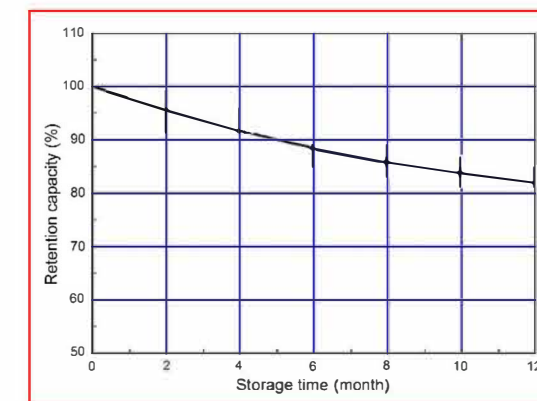
1 Charging Curve



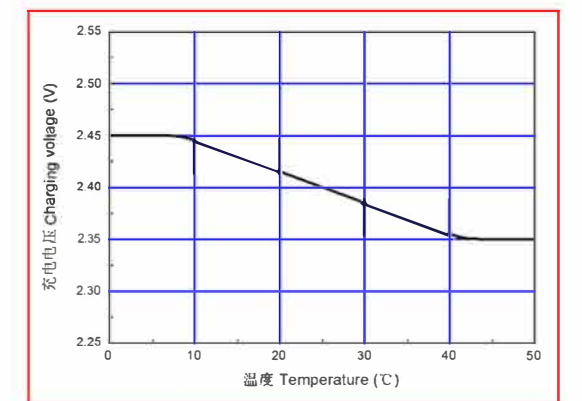
2 Discharging Curve(25 °C)



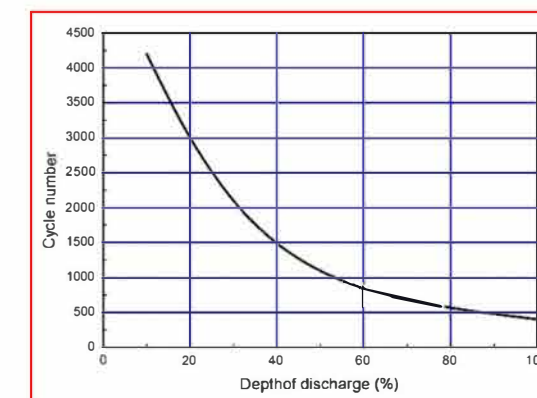
3 Self-discharge Characteristics(25 °C)



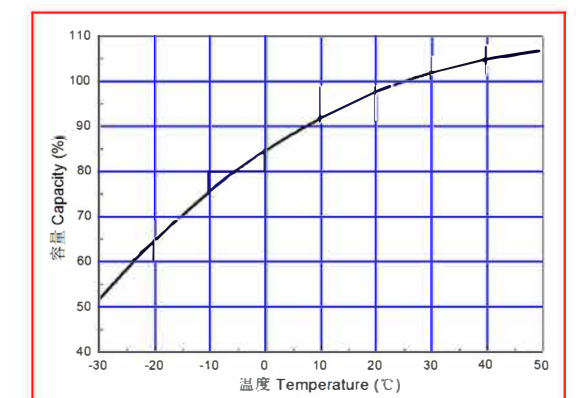
4 Relationship of Charging Voltage and Temperature



5 Relationship of Cycle-Life and Depth of Discharge (25 °C)



6 Relationship of Capacity and Temperature





6-CNF series Solar energy storage gel battery

MODEL	Rated voltage(v)	Rated Capacity (Ah/10Hr)	Size (mm)			Weight (kg)
			long	width	high	
6-CNF-24	12	24	165	162	172	7.5
6-CNF-33	12	33	196	165	174	11
6-CNF-38	12	38	196	165	174	12.5
6-CNF-50	12	50	284	168	175	16
6-CNF-60	12	60	328	172	174	18.5
6-CNF-65	12	65	328	172	174	20.5
6-CNF-80	12	80	329	172	220	24
6-CNF-90	12	90	329	172	220	26
6-CNF-100	12	100	407	174	232	27
6-CNF-110	12	110	407	174	232	31
6-CNF-120	12	120	407	174	232	32
6-CNF-150	12	150	483	170	240	41
6-CNF-180	12	180	522	240	222	51
6-CNF-200	12	200	522	240	220	54
6-CNF-220	12	220	522	240	220	59
6-CNF-250	12	250	522	268	218	63

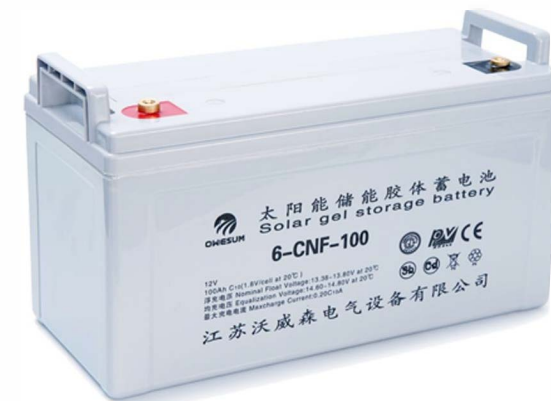
STRUCTURAL FEATURES

- (1) Grid: made of Lead-calcium-tin alloy with good corrosion resistance and long lifespan characteristic.
- (2) Plate: For adding 4BS crystal, we can take full advantage of active material. So it has the strong self-recovery capability after deep discharging and cycling.
- (3) separator: made of super-thin fiber glass, its internal resistance is low and the discharge performance is good at high rate
- (4) Battery cover: made of high-strength ABS material with good corrosion resistance, impact resistance characteristic. there is also no potential risk of leakage and deformation
- (5) Terminals: major diameter and good conductivity. copper core-lead base pole embedded, and with corrosion resistance and strong current carrying capacity
- (6) sealing: unique multi-layer sealing technology and special cable sealing glue ensure that the battery is safe and reliable without leakage and acid bag escape



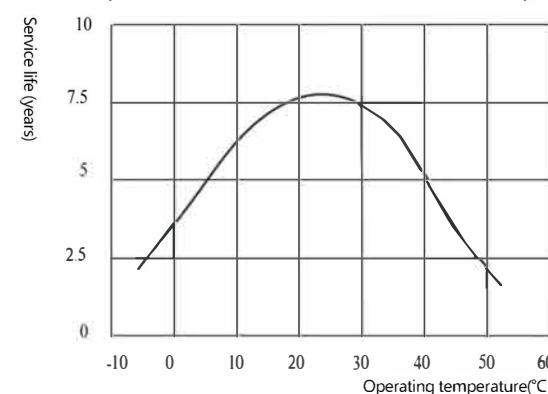
STRUCTURAL FEATURES

- (1) long lifespan
- (2) small self-discharge
- (3) High reaction efficiency: $\geq 99\%$
- (4) good consistency characteristic

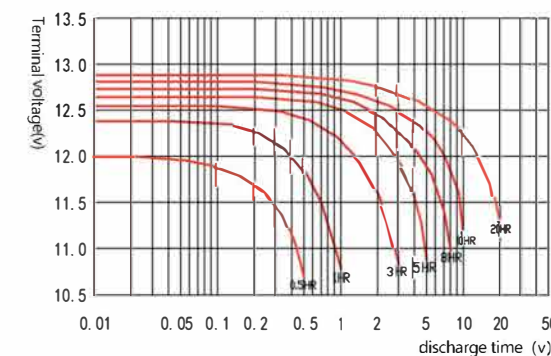


BATTERY CHARACTERISTIC CURVE

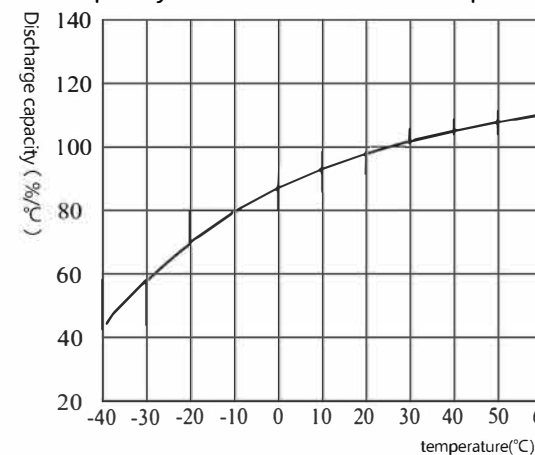
Temperature and life relationship curve



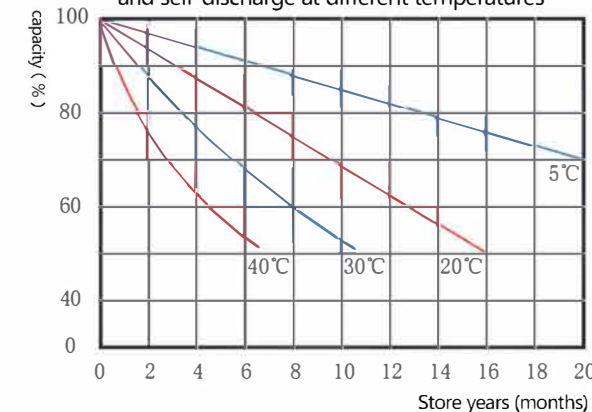
Discharge performance at different discharge rates



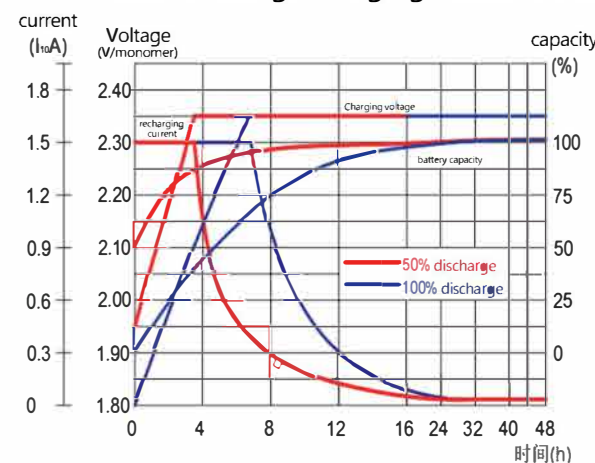
Capacity curves at different temperatures



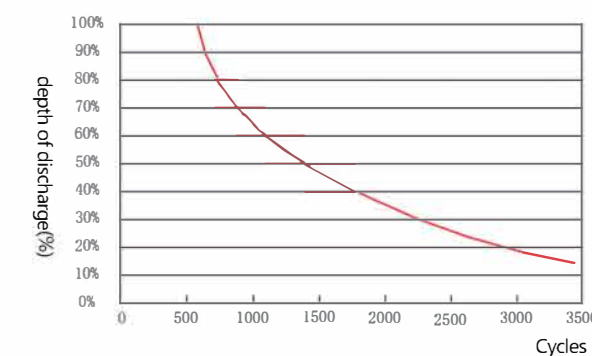
The relationship between storage time and self-discharge at different temperatures



Constant voltage charging characteristics



Depth of discharge and cycle life



solar

M60PCS

290W/280W/270W/265W/260W/250W

产品简介

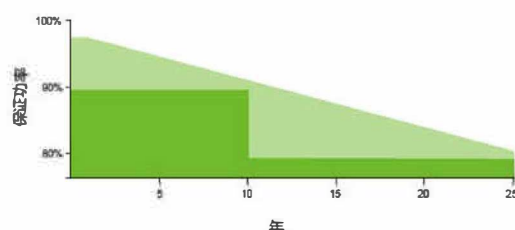


- Industry leading component output power guarantee
- Pass the 1S09001 quality management system certification
- Good PID resistance, salt spray resistance, ammonia corrosion resistance
- All series of components pass TUV SUD test
- International quality, safety and performance certification
- Beautiful appearance, good durability, easy to install
- Can be customized according to customer requirements



Warranty

- 10 - year material and workmanship guarantee
- 10 - year minimum 90% output power guarantee
- Minimum 80% output power guarantee for 25 years
- 25-year component performance guarantee



P72PCS 340W/330W/320W/ 310W/300W/290W Product specification

Dimension	1640x992x40/35mm
Weight	18.5Kgs/18Kgs
Tempered glass	3.2mm
Cable Area	4 mm ²
Cable length	2900 mm
Connector	MC4
Solar cell	Monocrystalline
Solar cell dimension	156mmx156mm
Quantity of solar cell	60pieces

Electrical parameters under standard test conditions

(STC:AM=1.5, 1000W/m², battery temperature 25°C)

Model	290W	280W	270W	265W	260W	250W
Peak Power (W)	290	280	270	265	260	250
Vmp(V)	32.44	31.72	31.25	31.11	30.96	30.79
Imp(A)	8.94	8.83	8.64	8.52	8.4	8.12
VodV)	39.11	38.11	37.49	37.32	37.12	36.9
Isc(A)	9.54	9.38	9.15	9.02	8.89	8.59
Solar cell Eff.(%)	20.63	19.92	19.40	19.04	18.68	17.96
Solar panel Eff.(%)	17.82	17.21	16.60	16.29	15.98	15.37
Max.System Vo Itage	DC 1000V(TUV)/600V(UL)					
Maxfuse Current	15A					

Temperature characteristic

Short-circuit current temp. coefficient	0.07% / °C
Open circuit voltage temp. coefficient	(-0.36%) / °C
Peak power temperature coefficient	(-0.38%) / °C
Normal working temperature	(-40~+85%)°C
Nominal battery operating temperature	45±2°C

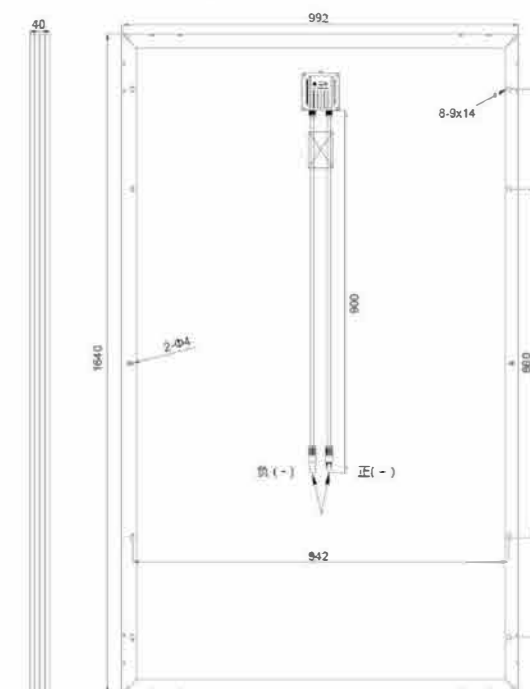
Packing information

Dimension	1640x992x40/35mm
Quantity/Pallet	27pieces/Pallet
Total Pallet	50Pallets

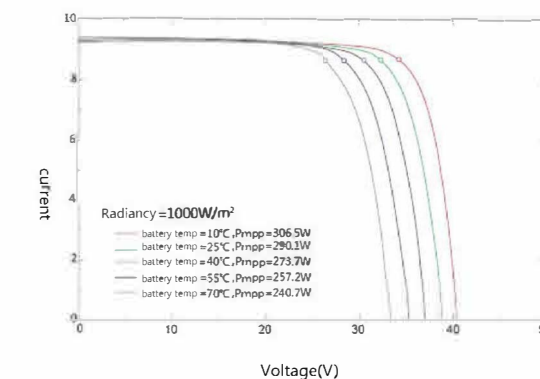
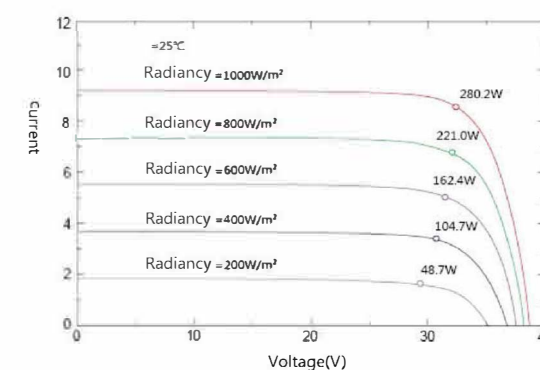
Certificates

Testing standard	IEC 61215, IEC 61730, UL 1703
Certification	ISO 9001, ISO14001, ISO18001
Certificates	TUV,CE,MCS,PV CYCLE,CEC,CHUBB,CQC,UL
Stress resistance test	Wind bearing limit(2400 Pa) Snow bearing limit(5400 Pa)
Tolerance	0~5W
Junction Box	IP67

Drawing



Current - Voltage & Power - Voltage diagram



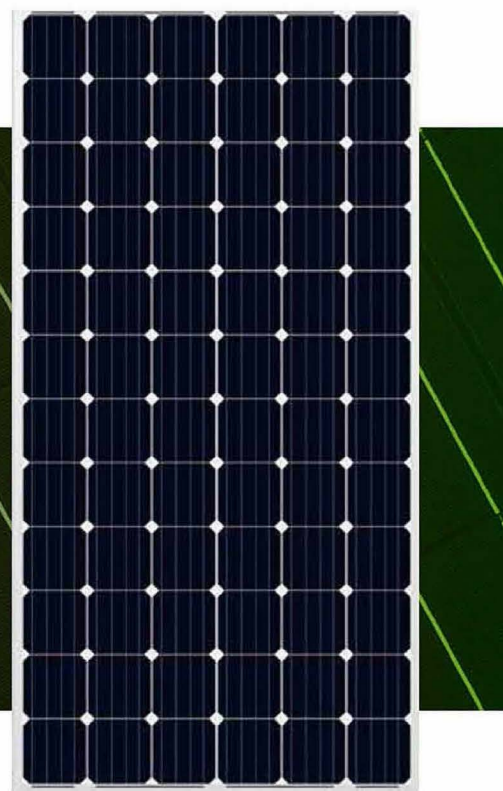
Quality service / Genuine Guarantee / After sale in place

solar

M72PCS

350W/340W/330W/320W/310W/300W

产品简介



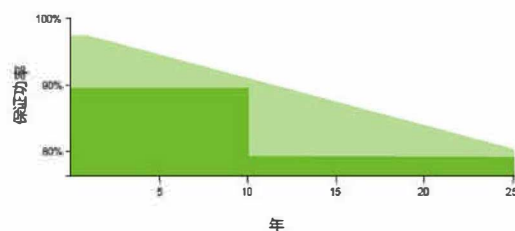
- Industry leading component output power guarantee
- Pass the 1S09001 quality management system certification
- Good PID resistance, salt spray resistance, ammonia corrosion resistance
- All series of components pass TUV SUD test
- International quality, safety and performance certification
- Beautiful appearance, good durability, easy to install
- Can be customized according to customer requirements



Quality service / Genuine Guarantee / After sale in place

Warranty

- 10 - year material and workmanship guarantee
- 10 - year minimum 90% output power guarantee
- Minimum 80% output power guarantee for 25 years
- 25-year component performance guarantee



P72PCS 340W/330W/320W/310W/300W/290W Product specification

Dimension	1956x992x40mm
Weight	22kgs
Tempered glass	3.2 mm
Cable Area	4 mm ²
Cable length	900 mm
Connector	MC4
Solar cell	Poly
Solar cell dimension	156mmx156mm
Quantity of solar cell	72 pieces

Electrical parameters under standard test conditions

(STC:AM=1.5, 1000W/m², battery temperature 25°C)

Model	350W	340W	330W	320W	310W	300W
Peak Power(W)	350	340	330	320	310	300
Vmp(V)	39.11	38.25	37.76	37.61	37.54	37.13
Imp(A)	8.95	8.89	8.74	8.51	8.26	8.08
VodV)	47.24	46.05	45.3	45.10	44.98	44.51
Isc(A)	9.56	9.46	9.26	9.01	8.75	8.54
Solar cell Eff.(%)	20.75	20.15	19.56	18.97	18.40	17.78
Solar panel Eff.(%)	18.03	17.52	17	16.50	16.00	15.46
Max.System Vo Itage	DC 1000V(TUV)/600V(UL)					
Maxfuse Current	15A					

Temperature characteristic

Short-circuit current temp. coefficient	0.07% / °C
Open circuit voltage temp coefficient	(-0.36%) / °C
Peak power temperature coefficient	(-0.38%) / °C
Normal working temperature	(-40~+85%)°C
Nominal battery operating temperature	45±2°C

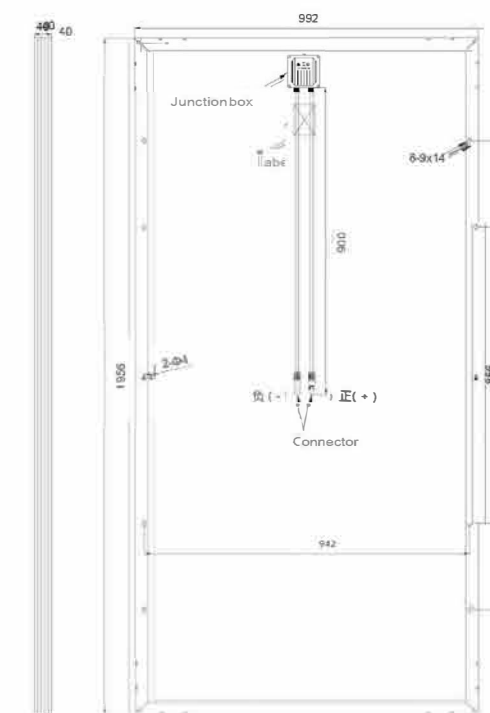
Packing information

Dimension	1956x992x40mm
Quantity/Pallet	27 piece/ Pallet
Total Pallet	30 Pallet

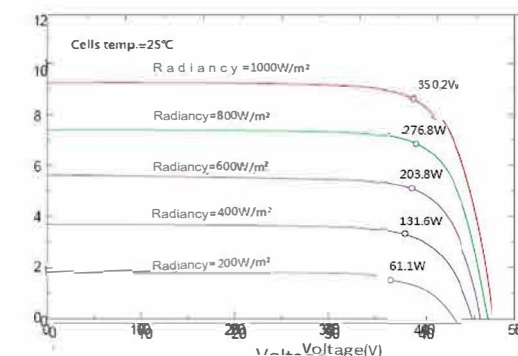
Certificates

Testing standard	IEC 61215, IEC 61730, UL 1703
Certification	ISO 9001, ISO14001, ISO18001
Certificates	TUV,CE,MCS,PV CYCLE,CEC,CHUBB,CQC,UL
Stress resistance test	Wind bearing limit(2400 Pa) Snow bearing limit(5400 Pa)
Tolerance	0~5W
Junction Box	IP67

Drawing

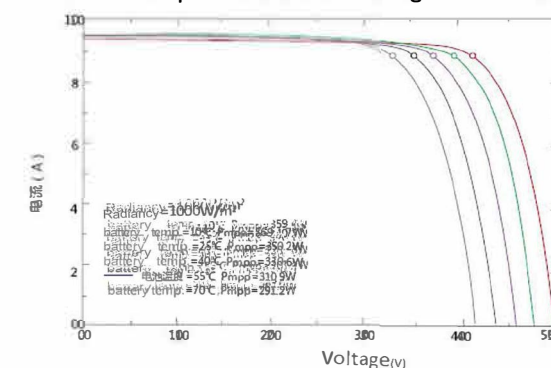


Current - Voltage & Power - Voltage diagram



Current - Voltage

Excellent performance in low light environment



Current - Voltage

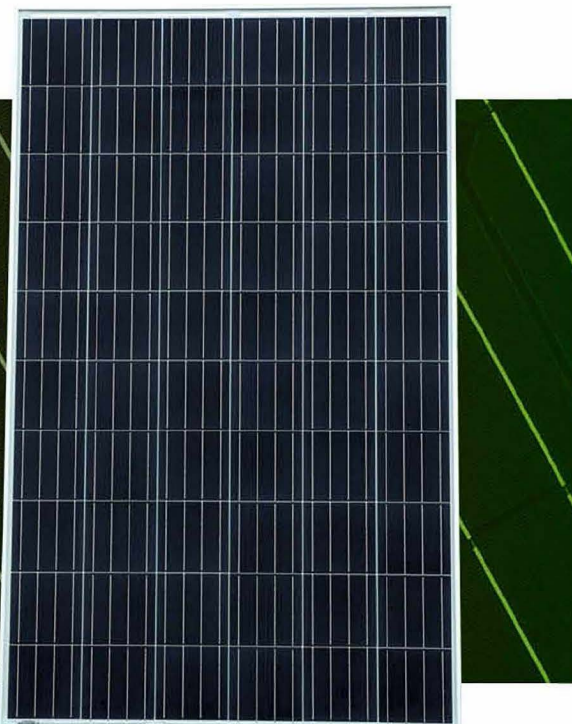
Excellent performance in low light environment

solar

P60PCS

280W/270W/265W/260W/255W/250W

产品简介



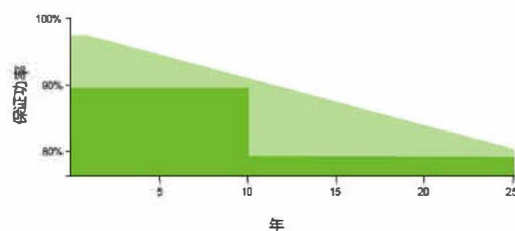
- Industry leading component output power guarantee
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Quality service / Genuine Guarantee / After sale in place

Warranty

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- 10 - year minimum 90% output power guarantee
- Minimum 80% output power guarantee for 25 years
- 25-year component performance guarantee



P72PCS 340W/330W/320W/310W/300W/290W Product specification

Dimension	1640x992x40/35mm
Weight	18.5Kgs/18Kgs
Tempered glass	3.2mm
Cable Area	4 mm ²
Cable length	2900mm
Connector	MC4
Solar cell	polycrystalline silicon
Solar cell dimension	156mmx156mm
Quantity of solar cell	60pieces

Electrical parameters under standard test conditions

(STC:AM=1.5, 1000W/m², battery temperature 25°C)

Model	280W	270W	265W	260W	255W	250W
Peak Power(W)	280	270	265	260	255	250
Vmp(V)	32.15	31.47	31.12	30.82	30.73	30.65
Imp(A)	8.71	8.58	8.52	8.44	8.3	8.16
VodV)	38.76	37.81	37.33	36.97	36.85	36.75
Isc(A)	9.28	9.11	9.03	8.94	8.79	8.64
Solar cell Eff.(%)	19.55	18.86	18.51	18.34	17.98	17.60
Solar panel Eff.(%)	17.21	16.59	16.28	15.98	15.67	15.37
Max.System Vo Itage	DC 1000V(TUV)/600V(UL)					
Maxfuse Current	15A					

Temperature characteristic

Short-circuit current temp. coefficient	0.07% / °C
Open circuit voltage temp. coefficient	(-0.36%) / °C
Peak power temperature coefficient	(-0.38%) / °C
Normal working temperature	(-40~+85%)°C
Nominal battery operating temperature	45±2°C

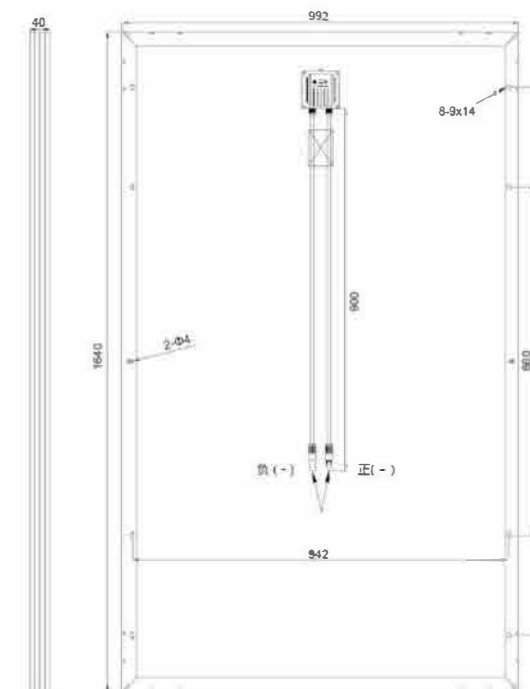
Packing information

Dimension	1640x992x40/35mm
Quantity/Pallet	27pieces/Pallet
Total Pallet	50Pallets

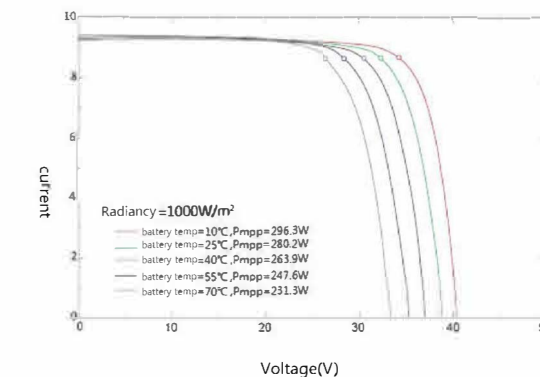
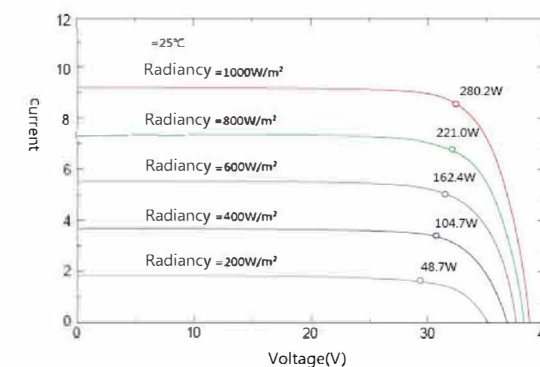
Certificates

Testing standard	IEC 61215, IEC 61730, UL 1703
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Stress resistance test	Wind bearing limit(2400 Pa) Snow bearing limit(5400 Pa)
Tolerance	0~5W
Junction Box	IP67

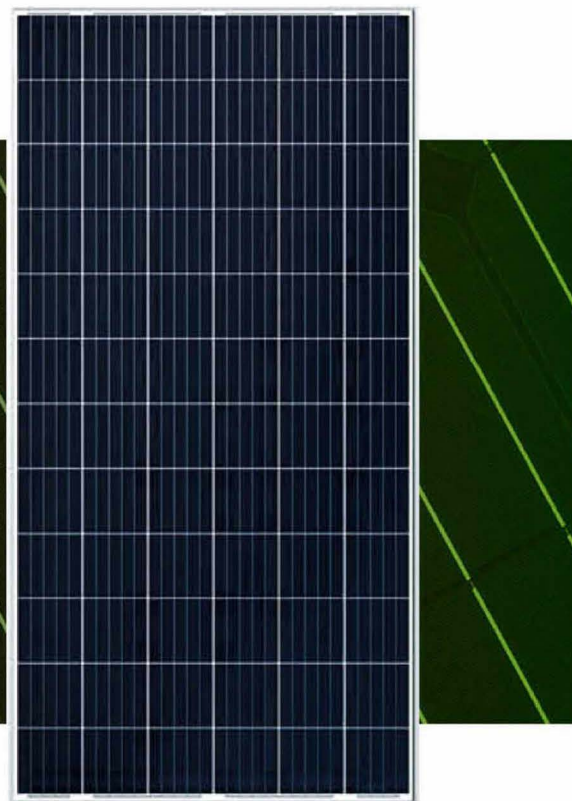
Drawing



Current - Voltage & Power - Voltage diagram



solar



P72PCS 340W/330W/320W/ 310W/300W/290W Product specification

Dimension	1956×992×40mm
Weight	22kgs
Tempered glass	3.2 mm
Cable size	4 mm ²
Cable length	900 mm
Connector	MC4
Solar cell	Poly type
Solar cell dimension	156*156mm
Solar Cell Quantity	72 units

Electrical parameters under standard test conditions (STC:AM=1.5, 1000W/m², battery temperature 25°C)

Model	340W	330W	320W	310W	300W	290W
Peak Power(W)	340	330	320	310	300	290
Vmp(V)	38.95	38.16	37.62	37.45	37.18	37.05
Imp(A)	8.73	8.65	8.51	8.28	8.07	7.83
Voc(V)	47.11	46.00	45.20	44.91	44.57	44.38
Isc(A)	9.34	9.22	9.03	8.77	8.54	8.28
Battery cell Eff. (%)	19.79	19.21	18.62	18.20	17.60	17.00
Solar panel Eff.(%)	17.52	17	16.49	15.97	15.46	14.95
Max. System Voltage	DC 1000V(TUV)/600V(UL)					
Max fuse current	15A					

Temperature characteristic

Short-circuit current temp. coefficient	0.07% /°C
Open circuit voltage temp coefficient	(-0.36%) /°C
Peak power temperature coefficient	(-0.38%) /°C
Normal working temperature	(-40~+85%)°C
Nominal battery operating temperature	45±2°C

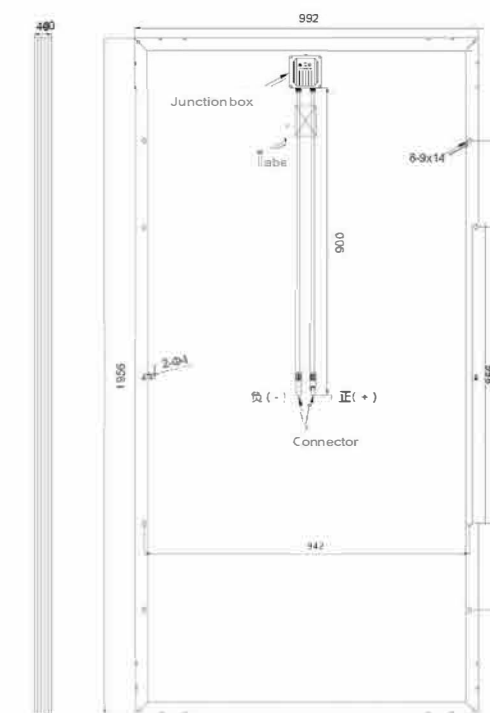
Packing information

Dimension	1956x992x40mm
Quantity/pallet	27 Piece/ Pallet
Total pallets	30 Pallets

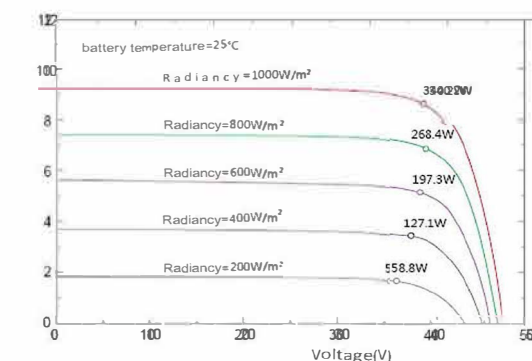
Certificates

Testing standard	IEC 61215, IEC 61730, UL 1703
Certification	ISO 9001, ISO14001, ISO18001
Certificates	TUV,CE,MCS,PV CYCLE,CEC,CHUBB,CQC,UL
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Tolerance	0~5W
Junction Box	IP67

Drawing

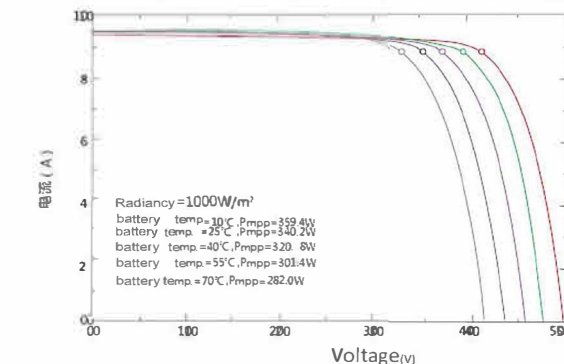


Current - Voltage & Power - Voltage diagram



Current - Voltage

Excellent performance in low light environment



Current - Voltage

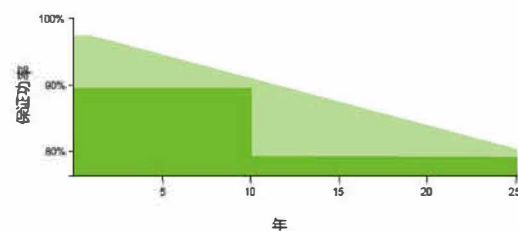
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Quality service / Genuine Guarantee / After sale in place

ACTUAL CASE



Scope of application



Blackout



Home lighting



Solar RV



Shepherd's life



backcountry camping



Factory electricity

PACK AND SHIP

