



ZTS SOLAR SYSTEM

WWW. ZTS-SOLAR. COM. CN



ZTS TECHNOLOGIES CO., LTD



## POLY SOLAR PANEL



## MONO SOLAR PANEL

Power (W)	Current at Max. power/Imp	Open circuit voltage/Voc	Short circuit current/Isc	Weight (kg)	Size(mm)
10	0.57	22.28	0.61	0.89	340×285×17
20	1.04	22.90	1.10	1.61	420×340×25
30	1.60	22.39	1.42	2.04	540×340×25
40	2.08	22.90	2.19	3.03	420×670×25
50	2.67	22.39	2.85	3.76	530×670×25
60	3.21	22.39	3.42	4.42	630×670×25
75	3.99	22.39	4.27	5.82	770×670×30
80	4.12	22.90	4.39	7.06	770×670×30
100	5.35	22.39	5.69	7.06	1015×670×35
120	6.42	22.39	6.83	8.23	1200×670×30
150	8.02	22.39	8.54	10.52	1480×670×30
200	5.35	44.78	5.71	13.67	1330×992×35
210	5.47	45.43	5.79	13.67	1330×992×35
260	8.49	37.97	9.05	17.6	1640×992×35
265	8.56	38.13	9.10	17.6	1640×992×35
270	8.65	38.23	9.13	17.6	1640×992×35
320	8.52	45.82	9.03	21.6	1956×992×40
325	8.60	46.08	9.08	21.6	1956×992×40
330	8.67	46.41	9.13	21.6	1956×992×40

Power (W)	Voltage of Max power/Vmp	Current at Max. power/Imp	Open circuit voltage/Voc	Short circuit current/Isc	Weight (kg)	Size(mm)
10	19.30	0.54	23.00	0.57	0.89	240×340×17
20	19.19	1.05	22.97	1.12	1.61	420×340×25
30	18.83	1.65	22.82	1.77	2.39	640×340×25
40	19.15	2.10	22.97	2.24	3.03	420×670×25
55	19.76	2.96	23.22	3.13	3.76	530×670×25
60	18.79	3.21	22.39	3.42	4.42	630×670×25
80	19.15	4.20	22.97	4.47	5.42	770×670×30
105	19.01	5.56	45.79	5.93	7.06	1015×670×30
115	19.66	5.88	46.37	6.21	7.06	1015×670×30
160	19.15	8.40	22.97	8.94	10.16	1480×670×30
170	19.51	8.74	23.11	9.25	10.16	1480×670×30
270	32.10	8.45	38.34	8.97	17.20	1640×992×40
285	32.58	8.77	38.58	9.27	17.20	1640×992×40
290	32.88	8.83	38.64	9.33	17.20	1640×992×40
310	35.64	8.72	42.37	9.23	18.71	1790×992×40
320	36.23	8.85	42.57	9.35	18.71	1790×992×40
330	38.88	8.50	46.22	9.01	20.36	1956×992×40
350	39.53	8.89	46.44	9.38	20.36	1956×992×40

## 300W-600W SYSTEM

Off-Grid Solar Power System(Hybrid)



### Features

Pure sine wave output (THD < 3%)  
Input & output fully isolation design  
High efficiency 89~91%  
Capable of driving highly reactive & capacitive loads at start moment.  
Protection : Input low voltage/Overload/ Short circuit/ Low battery alarm/Input over voltage/ Over temperature Advanced microprocessor Level of protection: IP20

## 1000W-5000W SYSTEM

Off-Grid Solar Power System (Hybird)



	Model	ZSL300-112	ZSL300-124	ZSL300-212	ZSL300-224	ZSL600-112	ZSL600-124	ZSL600-212	ZSL600-224				
PV	Input power	360W	720W	360W	720W	720W	1440W	720W	1440W				
	Max. open voltage	30V	50V	30V	50V	30V	50V	30V	50V				
	Working voltage	15-18VDC	30-36VDC	15-18VDC	30-36VDC	15-18VDC	30-36VDC	15-18VDC	30-36VDC				
Input	DC voltage	12V	24V	12V	24V	12V	24V	12V	24V				
	Voltage range	11-16VDC	22-32VDC	11-16VDC	22-32VDC	11-16VDC	22-32VDC	12-16VDC	22-32VDC				
AC output	AC voltage	100/110/120VAC		220/230/240VAC		100/110/120VAC		220/230/240VAC					
	Continuous power	240W				480W							
	Surge power	480W				960W							
	Waveform	Pure sine wave				Pure sine wave							
	Frequency	50Hz or 60Hz				50Hz or 60Hz							
	AC regulation	±5%				±5%							
DC output	DC voltage	12V	24V	12V	24V	12V	24V	12V	24V				
	Output power	150W				300W							
Protection	Low voltage alarm	11.5±0.3V	22.5±0.5V	11.5±0.3V	22.5±0.5V	11.5±0.3V	22.5±0.5V	11.5±0.3V	22.5±0.5V				
	Low voltage shutdown	11±0.3V	22±0.5V	11±0.3V	22±0.5V	11±0.3V	22±0.5V	11±0.3V	22±0.5V				
	Over voltage shutdown	16.5V	32V	16.5V	32V	16.5V	32V	16.5V	32V				
	Overload	Shutdown				Shutdown							
Other	Start	Soft start			Soft start								
	Protection level	IP20				IP20							
	Cooling	Fan			Fan								

### Off Grid Solar Power System Connection



## **1000W-5000W SYSTEM**

# Off-Grid Solar Power System (Hybird)

## Features

Pure sine wave output, THD<3%  
High Frequency Transformer design  
With resistance, inductive, capacitive, mixed load  
Controller: MPPT/PWM, LCD DisplayParallel  
Function  
RS-232 communiation interface (Optional)  
AC Utility Bypass ,Power saving and Desel start  
dry(Optional)  
Multiple protection function  
Easy installation, simple controls.

Specification	Model	ZCH1K-1250	ZCH3K-2425/2426	ZCH5K-4860/4880
AC output	Rated output power	1KVA	3KVA	5KVA
	Output waveform	Pure Sine Wave		
	Output voltage	230VAC±5%		
	Output frequency	50/60Hz		
	Output waveform distortion	≤3%		
	Inverter frequency	≥90%		
	Current peak factor	03:01		
	Overload capacity	5s@≥150% load; 10s@110-150% load		
Battery	Rated voltage(VDC)	12	24	48
	Float voltage(VDC)	24	28	54
	Charge voltage(VDC)	14.4	28.4	56.8
PV input	Controller type	PWM	MPPT	MPPT
	Maximum input power(kW)	0.6	0.6/1.5	3/4
	Start voltage(VDC)	50	30	60
	Max input voltage(VDC)	50	75	145
	MPPT voltage range(V)	15-18	30-66	60-115
	Recommended voltage(VDC)	18	60	90
AC bypass	Input voltage range(VAC)	230VAC±15%		
	Input frequency(Hz)	50/60 ±3%		
	Transfer time	10-20ms		
	Diesel trigger signal	Dry port (optional)		
	AC Bypass charger(Optional)	10/20A(optional)	20/30A(optional)	20/60A(optional)
Display & communication	Display mode	LED+LCD		
	Communication	Rs232 optional		

# **6000W-30KW SYSTEM**

# Off-Grid Solar Power System (Hybird)

## Features

- Pure sine wave output, THD<3%
- Low Frequency Transformer design
- With resistance, inductive, capacitive, mixed load
- Controller: MPPT, LCD Display Parallel Function
- RS-485 communication interface (Optional)
- AC Utility Bypass ,Power saving and Desel start dry(Optional)
- Multiple protection function
- Easy installation, simple controls.



# 50KW-250KW SYSTEM

Off-Grid Solar Power System  
(Hybird)



Specification	Model	ZPS50K-340	ZPS100K-360	ZPS150K-360	ZPS200K-360	ZPS250K-360
AC output	Rated output power	50KVA	100KVA	150KVA	200KVA	250KVA
	Output waveform	Pure Sine Wave				
	Output voltage	380VAC±5% 3P4W(400V, 415V)				
	Output frequency	50/60Hz				
	Output waveform distortion	≤3%				
	Inverter efficiency	≥90%				
	Current peak factor	03:01				
	Overload capacity	105-110%, 600s; 110-125%, 60s; >125%, 1s				
Battery	Rated voltage(VDC)	220V	360V	360V	360V	360V
	Float voltage(VDC)	243	398	398	398	398
	Charge voltage(VDC)	255.6	418	418	418	418
PV input	Controller type	MPPT	PMW	PMW	PMW	PMW
	Max. input power	44(240V)	200A(80kW)	200×2(160kW)	200×2(160kW)	200×3(240kW)
	Start voltage(VDC)	330	420	420	420	420
	Max. input Voltage	480	720	720	720	720
	MPPT voltage range	320-450	420	420	420	420
	Recommended working voltage	390	480	480	480	480
	Input voltage range	380VAC±15% (400V, 415V)				
AC bypass	Input frequency(Hz)	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
	Transfer time	10ms	10ms	10ms	10ms	10ms
	Diesel trigger signal	Dry port / optional				
Display communication	AC bypass	Standard: 10A (optional)				
	Display code	LCD+LED				
	Communication	Rs485 (optional)				

# SOLAR COMBINER BOX



Model	ZCB4-1	ZCB6-1	ZCB8-1	ZCB10-1	ZCB12-1	ZCB16-1
In & Out	4 in 1 out	6 in 1 out	8 in 1 out	10 in 1 out	12 in 1 out	16 in 1 out
Max. current of each string	15A					
Max. input voltage	1000V					
Max. output current	63A	80A	100A	125A	160A	200A
IP	Ip65					
Anti reverse funtion	Modular anti reverse diode (25A 1600V) with cooling fin					
Dimension (cm)	35×35×15	18×40×50	18×35×53	18×45×50	18×45×50	18×45×55
Housing material	Galvanized steel					

- Rated current of each line can reach 10A, I.Max 15A, which can meet the requirements of different clients
- Equipped with DC fuse cutout in each input line to avoid system damage from over-current, ensure the system can operate steadily
- Equipped with DC high voltage lighting protection module in the output terminal, which can tolerate max. 40kA lightning current
- Adopt high voltage breaker, the DC withstand voltage is not lower than DC1000V, safe and reliable
- With high power anti-reflection device, which can avoid the countercurrent flowing backward due to the malfunction
- Protection level is IP65, which meets the using requirement of outdoor installation

## SOLAR GARDEN LIGHT

The way you live everyday, which is how we define and design our lights.  
Remote control for LED color changing PIR motion sensor



DR-0060



YF0087W

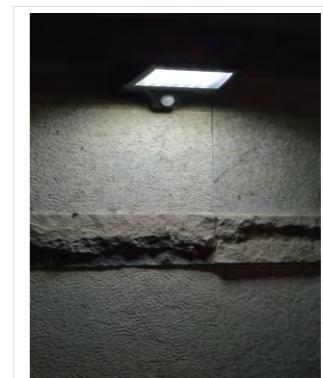


YF0168B



YF0103-W

## SOLAR GARDEN LIGHT



YF0108



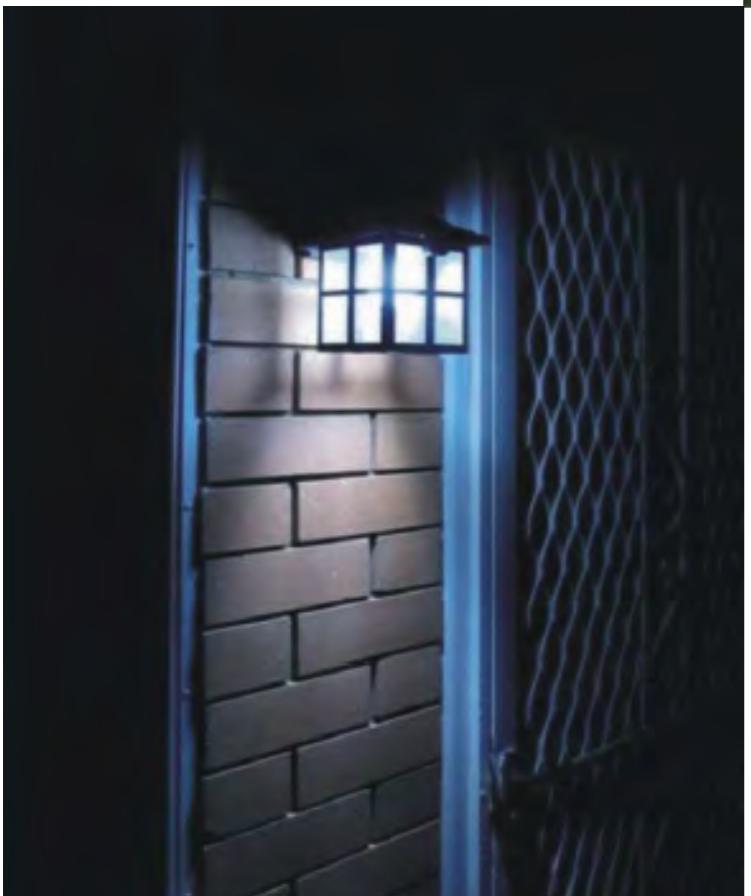
YF0152-SBK



YF-0101-BSW-1



YF0168-W



YF0106-1



YF0106-3



YF0106-hi



YF0108



YF0060



YF0105-W



YF0127C



YF0170



## 10W Solar Lighting System PSA1-10W



Solar panel	10W solar panel with 5m cable
Lead acid battery	12V/7Ah
Lamp	2 pcs of 3W with E27 socket and 5m cable
USB kits	USB rechargeable cable 30cm with 4pcs of Mobile tips; Nokia small tip micro USB, mini USB, Iphone tip
Socket: 1pc on-off switch; 1pc solar adapter(16.8-24V) input; 2pcs USB 5V 2A; 3pcs DC 12V 5A output; 1pc Fuse input	

## 60W Solar Lighting System SPS-PLA1-60W



Solar panel	60W solar panel with 5m cable(can be 2pcs of 30W foldable solar panel)
Lead acid battery	12V/26Ah
Lamp	2 pcs of 3W with E27 socket and 5m cable
USB kits	USB rechargeable cable 30cm with 4pcs of Mobile tips; Nokia small tip micro USB, mini USB, Iphone tip
Socket: 1pc on-off switch; 1pc solar adapter(16.8-24V) input; 3pcs USB 5V 2A; 4pcs DC 12V 4A output; 1pc DC 12V 6A cigar lighter output(can connect AC inverter output); 1pc Fuse input	

## 20W Solar Lighting System PMA1-20W



Solar panel	20W solar panel with 5m cable
Lead acid battery	12V/12Ah
Lamp	2 pcs of 3W with E27 socket and 5m cable
USB kits	USB rechargeable cable 30cm with 4pcs of Mobile tips; Nokia small tip micro USB, mini USB, Iphone tip
Socket: 1pc on-off switch; 1pc solar adapter(16.8-24V) input; 3pcs USB 5V 2A/1A; 4pcs DC 12V 2A output; 1pc external battery input(can connect another battery outside); 1pc DC 12V 6A cigar lighter output(can connect AC inverter output); 1pc Fuse input	

## 20W Solar Lighting System with Radio SP1220W



Solar panel	20W solar panel with 5m cable
Lead acid battery	12V/12Ah
Lamp	2pcs of 3W 12V, 2pcs of 5W 12V, 4m cable with Switch
USB kits	USB rechargeable cable 30cm with 4pcs of Mobile tips; Nokia small tip micro USB, mini USB, Iphone tip
Radio play	Mp3 & radio

## 120W Solar Lighting System SPS-PLA1-120W



Solar panel	120W solar panel with 5m cable(can be 2pcs of 60W foldable solar panel)
Lead acid battery	12V/40Ah
Lamp	2 pcs of 3W with E27 socket and 5m cable
USB kits	USB rechargeable cable 30cm with 4pcs of Mobile tips; Nokia small tip micro USB, mini USB, Iphone tip
Socket: 1pc on-off switch; 1pc solar adapter(16.8-24V) input; 3pcs USB 5V 2A; 4pcs DC 12V 4A output; 1pc DC 12V 6A cigar lighter output(can connect AC inverter output); 1pc Fuse input	

## 1W Simple Style Solar Powered Lantern PB7002A



- \* Battery: 4V 1200mAh lithium
- \* 1W super bright LED
- \* 2 brightness settings:  
90 lumens (high)-----5 hours (high)  
35 lumens (low)-----12 hours (low)
- \* With strip for easily hanging 3 ways  
rechargeable : 6V 1W solar panel  
(included), AC/DC charger (optional),  
USB power (micro USB cable included)

## Newest Solar Powered Lantern SL1580A



- \* Battery: 800mAh lead acid battery
- \* 9pcs super bright LED, two level light choice
- \* Direct use on AC(100-240V 50/60Hz)
- \* Lasting time : Around 6hours when fully charged
- \* With hook for easily hanging
- \* USB output 5V 500mAh for charging mobile phones
- \* 3 ways rechargeable : 6V 1.5W solar panel (included),  
AC/DC charger (optional) , USB power (micro USB  
cable included)

## Solar Rechargeable 3W LED Spotlight with Multimedia Speaker PB2181A-SP

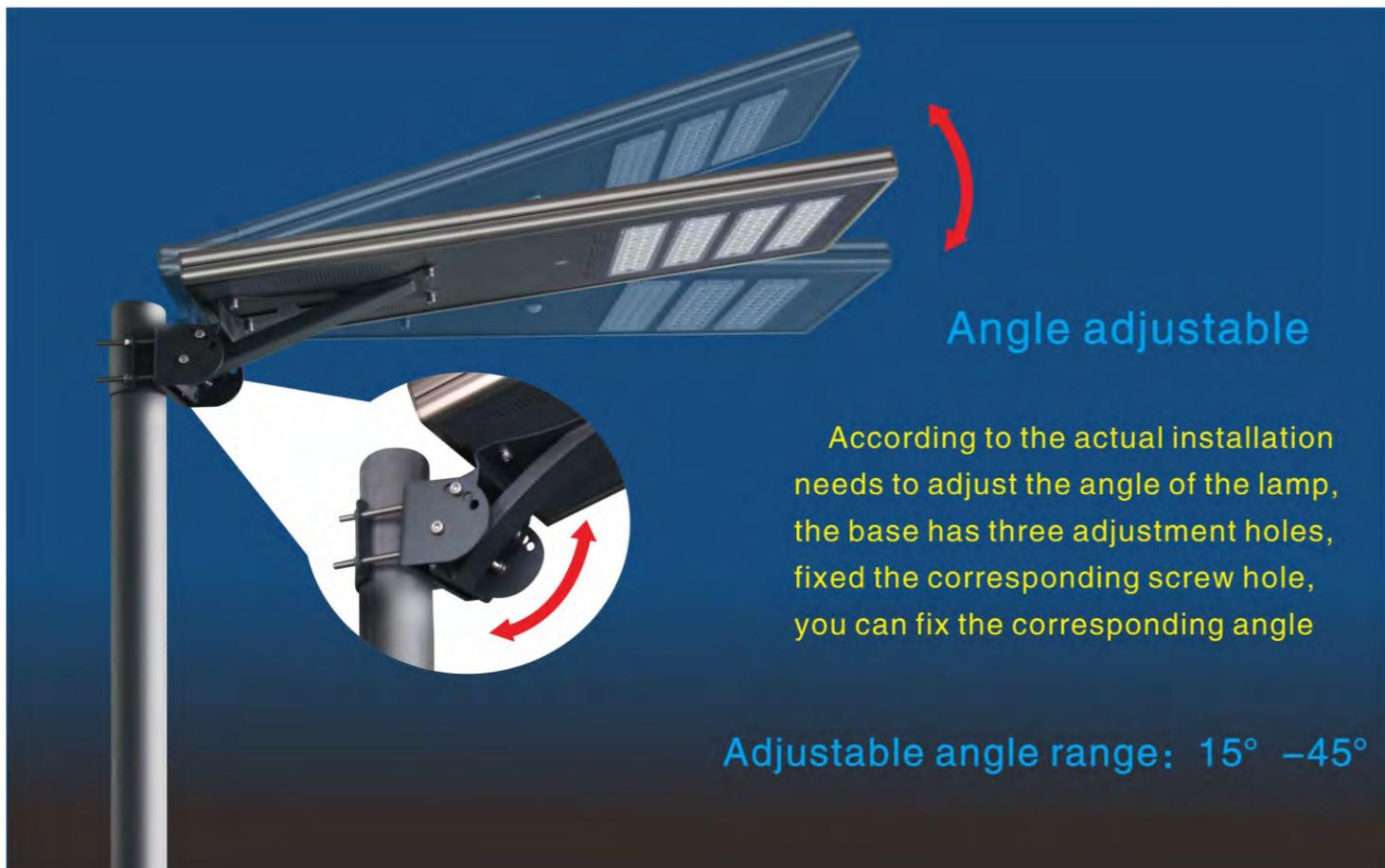


- \* 2 brightness settings for 3W spotlight
- \* High quality FM radio (external antenna)
- \* Music player (with micro SD card slot and USB jack)
- \* With earphone jack
- \* Built-in USB output for mobile phone(5V 200mAh)
- \* 3pcs of 6V DC output for LED bulb
- \* 2pcs 1W LED bulb included
- \* Battery 6V 4Ah Lead-acid
- \* 3 ways rechargeable : 9V 3W polycrystal solar panel, AC/DC charger, 12V DC car plug  
charger (all included)

## SOLAR STREET LIGHT SYSTEM



# SOLAR STREET LIGHT SYSTEM



## Angle adjustable

According to the actual installation needs to adjust the angle of the lamp, the base has three adjustment holes, fixed the corresponding screw hole, you can fix the corresponding angle

Adjustable angle range:  $15^{\circ} - 45^{\circ}$

# SOLAR STREET LIGHT SYSTEM



( $150^{\circ} \times 70^{\circ}$ ) Meet the road lighting standards



## Independent battery box design

- IP65 waterproof for all the light body
- Independent IP65 design for the battery box
- Raised the waterproofing grade
- Increased the using life of the product



## Using new high-tech electronic switch

Multi-mode of lighting, controlled by a remote control

Using new high-tech electronic switch to decrease the failure that brought by traditional switch

Timer control

Sensing Mode

Mixed mode

## SOLAR STREET LIGHT SYSTEM

Model	ZPSL-A-20	ZPSL-A-30	ZPSL-A-40	ZPSL-A-50	ZPSL-A-60	ZPSL-A-70	ZPSL-A-80
Lamp material	Aluminium Alloy						
Solar panel	18V/25W	18V/30W	18V/36W	18V/40W	18V/45W	18V/55W	18V/60W
Lithium battery	12V/10AH	12V/18AH	12V/20AH	12V/25AH	12V/25AH	15V/20AH	12V/25AH
LED chip	Philips						
LED lumen/LM	2000-2200LM 20W	3000-3300LM 30W	4000-4400LM 40W	5000-5500LM 50W	6000-6600LM 60W	7000-7700LM 70W	8000-8800LM 80W
CCT (K)	6000-6500K						
Life time	50000 hours						
Beam angle	150°×70°						
Working temperature	-20° ~ +60°						
Working mode	1. Time control	2. Sensoring	3. Time control + sensing	(Switched by smart remote control)			
Sun charge time	8-10 hours (with strong enough shine)						
Discharge time	10-12 hours per night			5-7 rainy days			



## SOLAR REFRIGERATOR







Model	ZCD-50S	ZCD-100S	ZCD-110S	
Energy class	A	A	A	
Climate type	N~ST	N~ST	N~ST	
Voltage	12V	12V	12V	
Power	60W	60W	60W	
Capacity (L)	Total	50L	100L	110L
	Fridge	46L	88L	98L
	Freezer	4L	12L	12L
General feature	Temperature control	Mechanical	Mechanical	Mechanical
	Defrosting	Manual	Manual	Manual
	Handle(Recessed/Grid)	Recessed	Recessed	Recessed
	Refrigerant	R134a	R134a	R134a
	Foaming	Cyclopentane	Cyclopentane	Cyclopentane
Solar panel	18V	150W	150W	150W
Controller	12V	10A	10A	10A
Battery	12V	100AH	100AH	100AH
Adapter	12V	10A 100-240V	10A 100-240V	10A 100-240V

# SOLAR REFRIGERATOR



Model		ZCD-102T	ZCD-115T	ZCD-145T	ZCD-220T
Energy class		A	A	A	A
Climate type		N~ST	N~ST	N~ST	N~ST
Voltage		12V	12V	12V	12V
Power		70W	72W	72W	75W
Capacity (L)	Total	102L	115L	145L	220L
	Fridge	82L	75L	98L	180L
	Freezer	20L	40L	47L	40L
General feature	Temperature control	Mechanical	Mechanical	Mechanical	Mechanical
	Deforsting	Manual	Manual	Manual	Manual
	Handle(Recessed/Grid)	Recessed	Recessed	Recessed	Recessed
	Refrigerant	R134a	R134a	R134a	R134a
	Foaming	Cyclopentane	Cyclopentane	Cyclopentane	Cyclopentane
Solar panel	18V	200W	200W	200W	250W
Controller	12V	20A	20A	20A	20A
Battery	12V	150AH	150AH	150AH	150AH
Adapter	12V	10A 100-240V	10A 100-240V	10A 100-240V	10A 100-240V

# SOLAR REFRIGERATOR



# SOLAR AIR CONDITIONER



# SOLAR AIR CONDITIONER

Model	DC-26GW	DC-35GW	DC-50GW
Voltage/Power	48V/650W	48V/1000W	48V/1600W
Capacity	2600W/9000Btu/h/0.75Ton/1HP	3500W/12000Btu/h/1Ton/1.5HP	5000W/18000Btu/h/1.5Ton/2HP
Noise level	35/50dB	38/52dB	39/55dB
Ambient temperature	18-30°C	18-30°C	18-30°C
Air circulation(m³/h)	500	580	850
Indoor/outdoor dimension	800×290×193mm 720×540×260mm	770×240×180mm 780×540×260mm	900×290×202mm 720×540×260mm
Indoor/outdoor weight	11/30KG	11/35KG	14/48KG
Indoor/outdoor package size	890×380×290mm 840×360×605mm	890×380×290mm 880×375×635mm	1010×390×335mm 880×375×635mm
Working hours	8h 12h 18h 24h	8h 12h 18h 24h	8h 12h 18h 24h
Battery 12V in series	4×100AH 4×120AH 4×200AH 4×250AH 4×120AH 4×150AH 4×200AH 4×250AH 4×150AH 4×250AH 8×150AH 8×200AH		
Solar panel Qty	4×200W 4×250W 4×300W 6×300W 4×250W 4×300W 6×250W 8×250W 4×300W 6×300W 8×250W 10×300W		
Controller	48V/25A 48V/30A 48V/40A 48V/60A 48V/25A 48V/40A 48V/60A 48V/40A 48V/40A 48V/75A 48V/95A		
Adapter	48V 200-240V 50/60Hz 1000W	48V 200-240V 50/60Hz 1000W	48V 200-240V 50/60Hz 1000W

## How Solar DC Air Conditioner Works



## SOLAR ATTIC FAN

### Solar Powered Roof Exhaust Fan

- Strengthen air circulation
- Extend roofing lifespan
- Remove heat, moisture & dust
- Deduct harmful mildews
- Prevent ice-dam
- Reduce the heat load on air-conditioning ducting to help you save money



Once Pay, Benefit Long. Installed Easy, Operating Clean & Free...



The fan starts rotating instantly when the sun shines!

### Solar Powered Wall Fan for Ventilation

SERVES WELL EVERYWHERE AND SUITS ALL KINDS OF BUILDING INSTALLATION

- Strengthen air circulation
- Remove heat, moisture & dust
- Deduct harmful mildews
- Solar powered, environmental friendly
- Once Pay, Benefit Long



## SOLAR ATTIC FAN

### Solar Roof Exhaust Fan, Round Housing Cap

SN2013009	<b>12W 12 Inch</b> 12W poly solar panel 12 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013010	<b>15W 14 Inch</b> 15W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013006	<b>12W 12 Inch</b> 12W poly solar panel 12 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013007	<b>15W 14 Inch</b> 15W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013008	<b>20W 14 Inch</b> 20W poly solar panel 14inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2014008	<b>30W 14 Inch</b> 30W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2014004	<b>30W 14 Inch</b> 30W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ

### Solar Roof Exhaust Fan, Square Housing Cap

SN2013004	<b>12W 12 Inch</b> 12W poly solar panel 12 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013005	<b>15W 14 Inch</b> 15W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013001	<b>12W 12 Inch</b> 12W poly solar panel 12 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ
SN2013002	<b>15W 14 Inch</b> 15W poly solar panel 14 inch Aluminum fan blade Brushless DC motor	1pc/carton/0.148cbm 216pcs/20GP, 516pcs/40HQ