



# Solar Inverter Air Conditioner ACDC Hybrid Type



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Sunpal Power Co., Ltd.





# Solar Inverter Air Conditioner ACDC Hybrid Type

## Solar aircon Include:

- A/C outdoor & indoor Unit ;
- Solar modules ;
- Custom Roof mounting system ;
- PV cable ;
- Fuse Protection, DC Breaker ;
- Lightening Arrester ;

## Products discrimination:

Sunpal Recreate Series Hybrid Solar Air Conditioner is engineered from the ground up for use with solar. All electrical components are DC powered including DC Compressor, high-efficiency DC Fan Motors, DC Valves & Solenoids, etc.

The Air Conditioner System uses VRF (Variable Refrigerant Flow ) controller and frequency driver in conjunction with multiple sensors and an algorithmic control circuit to raise and lower the unit's capacity in real-time based on conditions as they change.

Hybrid Solar Air Conditioner uses Solar Direct Drive Technology (SDDA), so the A/C Unit can use AC DC power in the same time or independently. The SDDA uses solar energy as the priority power instead of the grid energy to run the air conditioner. In the sunshine day, the Recreate Hybrid Solar Air Conditioner can be operated by 100% solar energy without AC power.

The whole system just contains an A/C Unit and a few PV panels, NO BATTERY, NO INVERTER, NO CONTROLLER. Compare with the regular air conditioner, the investment increases 50%-80%, but the electricity bill will reduce 60-80% yearly.

## Products Benefits:

- Help you to reduce the 40-80% electricity bill.
- SEER up to 36 with solar, 22 without solar.
- Enjoy cooling summer without grid in sunshine day
- Lower investment than off-grid& on-grid solar energy system
- Increase the value of your home.
- Reduce your carbon footprint.

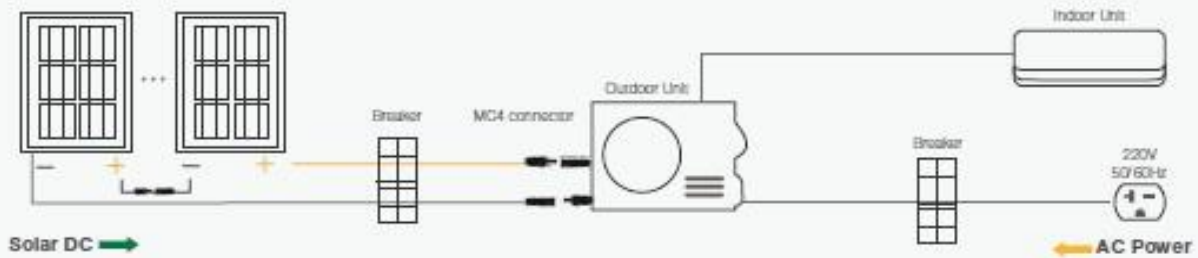
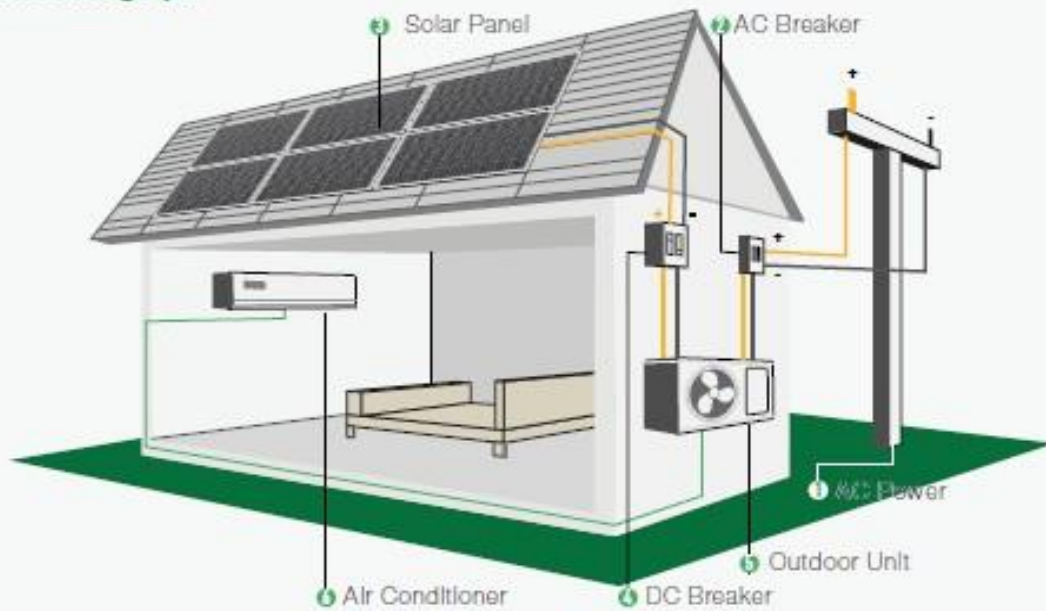
## Common Application

- Home
- Office and School
- Remote Telecom Station
- Desert Location
- Island Location;
- Bus Station

## ● Products parameters

Model No.		RC-ADC09GW-XA-R32	RC-ADC12GW-XA-R32	RC-ADC18GW-XA-R32	RC-ADC24GW-XA-R32
<b>Power Supply</b>					
Solar System	V	DC90-380V			
Maximum Solar Charging Current	A	MAX. 15A			
AC Power Connected	V	180-240V(50/60Hz)			
<b>Cooling Capacity</b>					
Capacity	Btu/h	9000	12000	18000	24000
Inverter Capacity Range	Btu/h	2866-9868	3482-13561	3681-18846	4294-25280
Power Input	KW	0.82	1.06	1.42	1.87
Rated Current (AC)	A	3.82	4.26	5.96	8
SEER	Btu/W	26	25	24	20
Refrigerant		R32			
<b>Heating Capacity</b>					
Capacity	Btu/h	9,000	12,000	17,150	23,800
Inverter Capacity Range	Btu/h	2953-9785	3853-13780	4637-19875	5100-23542
Power Input	KW	0.84	1.22	1.43	1.82
Rated Current	A	4.3	5.87	6.1	8.08
HSPF	Btu/W	14	13	13	11
COP	Btu/W	15.3	14.6	13.2	12.31
<b>A/C unit configuration</b>					
Dehumidification	pv/h	1.1L/h	1.3L/h	1.9L/h	2.3L/h
Indoor Air Flow - (Hifan)	cfm	660	690	1080	1210
Indoor Noise dB(A) (Hifan)	dB(A)	38	38	42	45
Max Refrigeration Pipe Length	ft/m	15	15	15	15
Max Refrigeration Pipe Rise/Fall	ft/m	5	5	5	5
Max Elevation Difference		15	15	15	15
Design Pressure	psig	600 / 345	600 / 345	600 / 345	550 / 340
Connection	Type	flare	flare	flare	flare
Connection Wiring	AWG	4*18AWG	4*18AWG	4*18AWG	4*18AWG
Compressor		GMCC DC Drive Mode Rolling Rotor Type			
<b>Operation temperature</b>					
Indoor (Cooling/Heating)	°F	60.8-89.6 / 60.8-89.6	60.8-89.6 / 60.8-89.6	60.8-89.6 / 60.8-89.6	60.8-89.6 / 60.8-89.6
Outdoor (Cooling/Heating)	°F	50-125.6 / 5-104	50-125.6 / 5-104	50-125.6 / 5-104	50-125.6 / 5-104
<b>Shipping</b>					
Dimension(W*D*H)	mm	850x190x292	850x190x292	960x215x300	1130*320*245
Packing(W*D*H)	mm	910*265*350	910*265*350	1015x265x360	1195*310*390
Net/Gross Weight	kg	9.2/12	9.2/12	12.5/14.5	15.5/17.5
Dimension(W*D*H)	mm	795x290x555	795x290x555	795x290x555	860x304x733
Packing(W*D*H)	mm	910x400x630	910x400x630	910x400x630	1005x450x820
Net/Gross Weight	kg	31/35	31/35	35/39	51/55
20GP / 40GP / 40HQ Container		84/174/216	84/174/216	78/171/212	54/115/128
CB/CE/GCC/SOAO/ETL Performance Certified					

## ● Connection graph



## ● System Component



### ACDC Hybrid Indoor Unit

Capacity heating & cooling 9000Btu-24000Btu available; Digital display Low Noise [H/M/La]41/39/32dB



### ACDC Hybrid Outdoor Unit

Solar Input DC70-380V MAX15A;  
AC Input 208-240V 50/60HZ;R32;  
Low Noise 53-60dB



### Solar Panels

Against Salt mist corrosion/amonila corrosion /fire risk; 10 years Warranty;  
DC31.6V 275W



### DC Solar Wires

1\*4sqmm black and red;  
TUV certified  
15mm each other per unit



### Remote Control

Digital wireless remote;



### Lightening Arrester

PC40-85V DC  
Operation Temp:-40-+85°C



### Fuse Protection

RT28N-32X 1P



### DC Breaker

DC800V 2P 20