

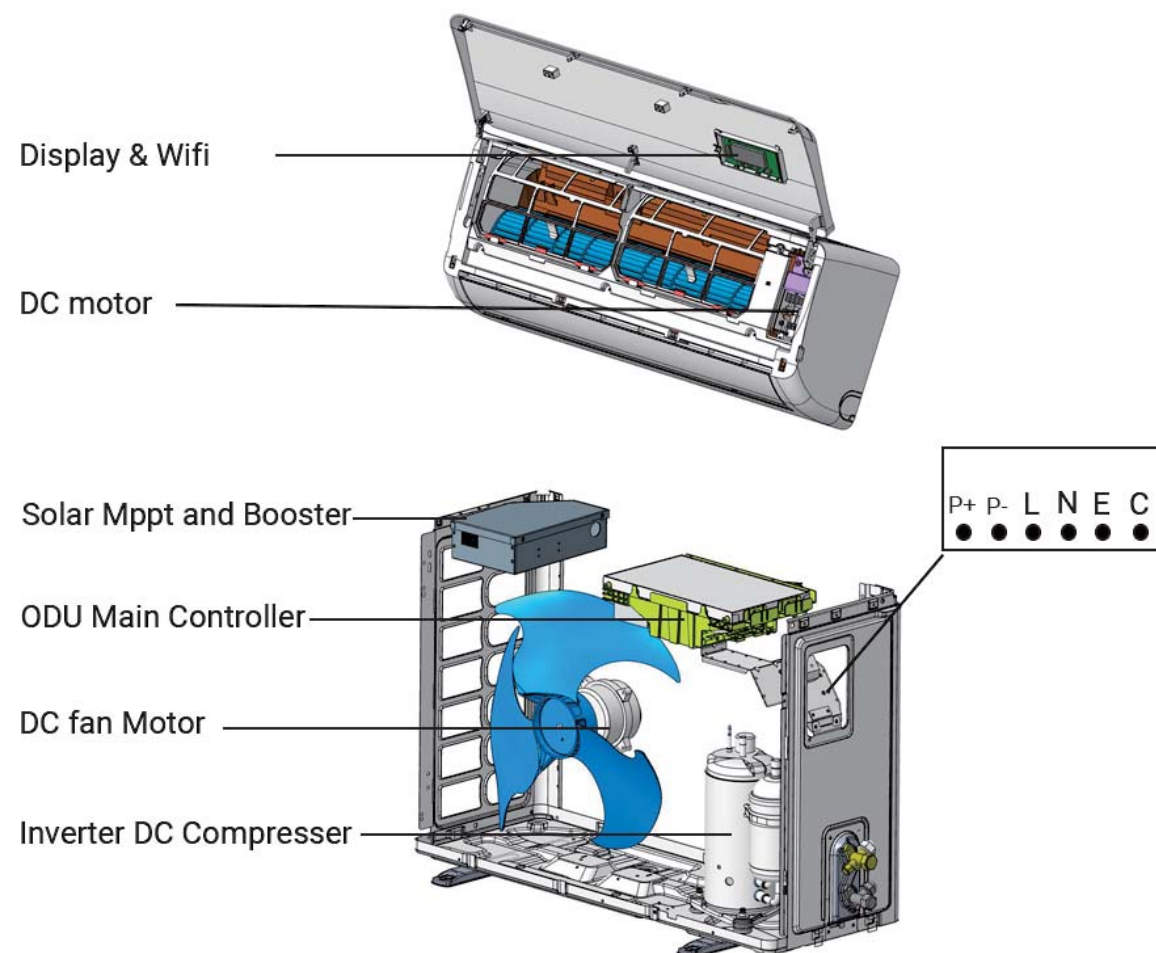
Solar Air Conditioner Catalog



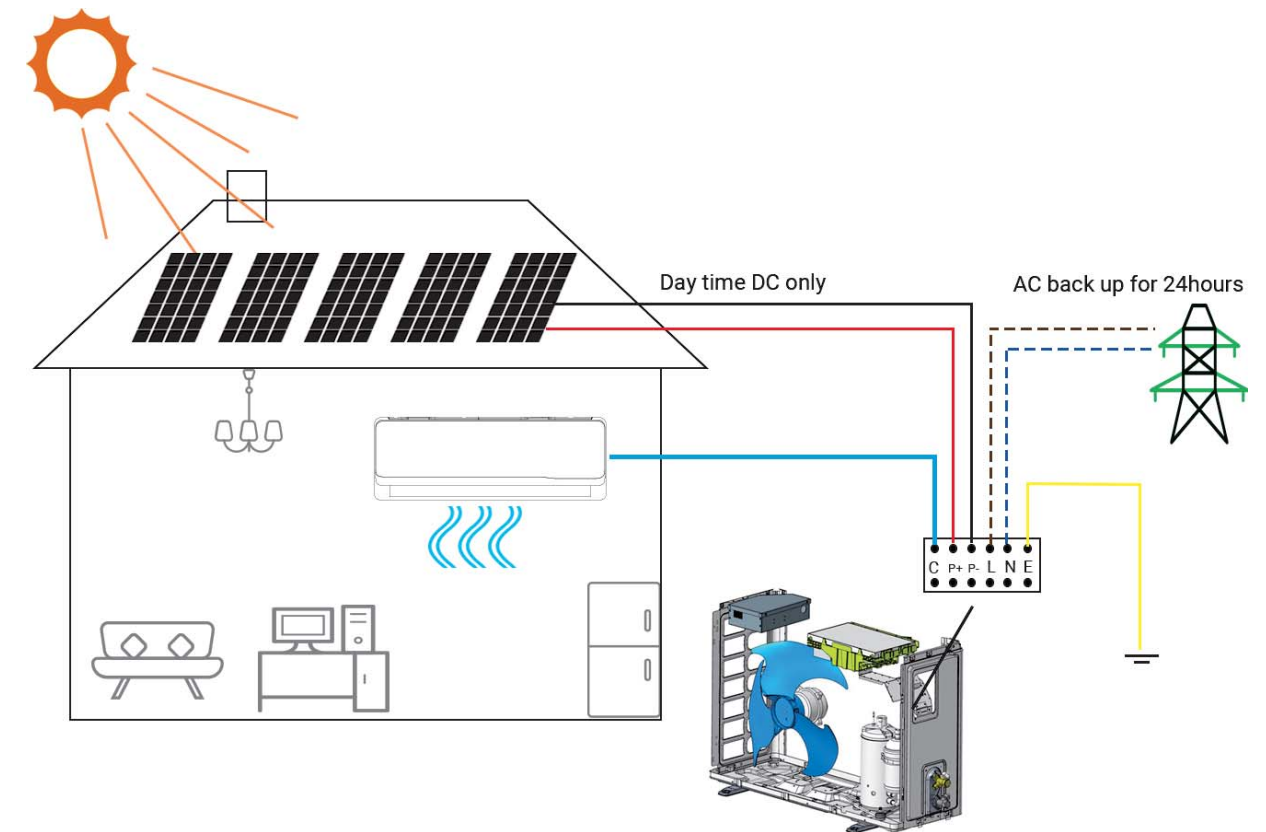
Hybrid AC/DC

hybrid ACDC solar air conditioner is based on full DC inverter air conditioner VRF technology. The main components of our unit is DC inverter compressor, DC fan motor, solar MPPT booster and inverter air conditioner controller.

The hybrid ACDC unit power supply from outdoor unit, it has MC4 connector P+/P- for DC solar panel directly power supply, it has (L/N/E for AC grid power supply. And indoor unit connect with outdoor unit by connection cable. Please check below structure design.

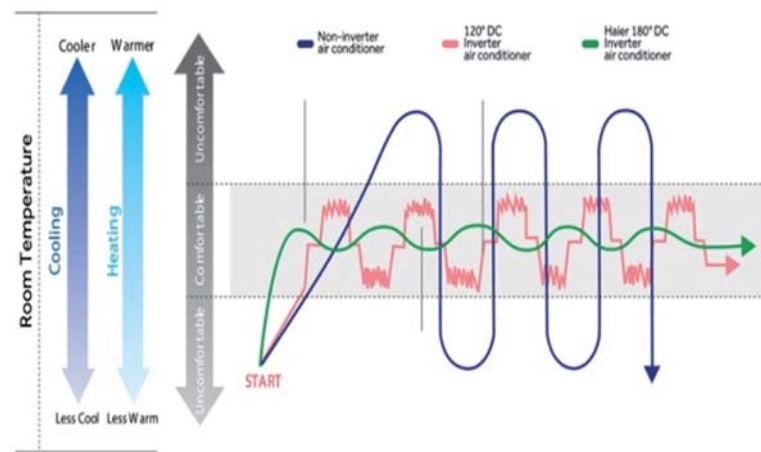


Hybrid AC/DC



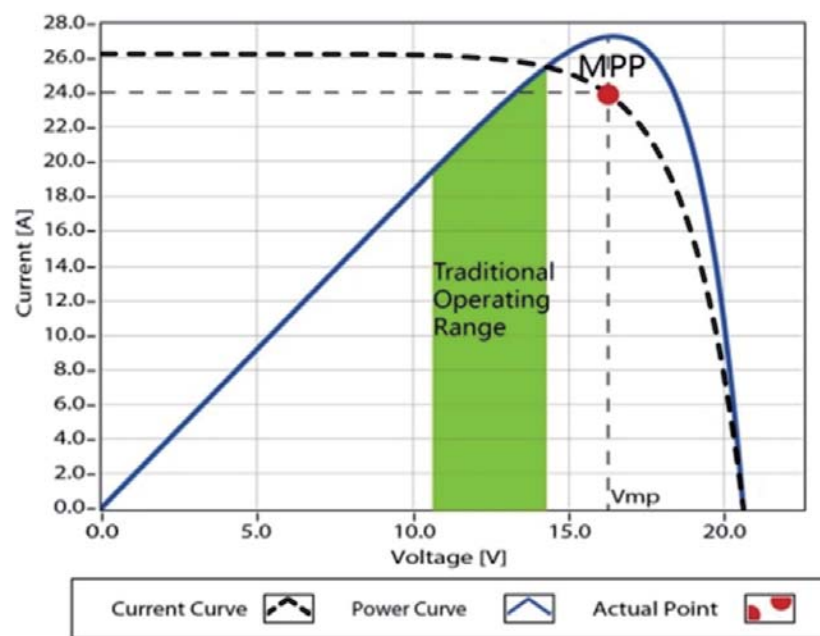
hybrid ACDC solar air conditioner works with solar panel unstable DC power directly from 7am to 17pm day time with power minimum 300w, no need solar inverter, no need grid power, no need battery. Rainy day, it will works mix power AC+DC and priority from solar power. At night, it automatically get grid AC power same as high efficiency normal inverter air conditioner. The unit with WiFi function can be controlled anywhere through WiFi or Bluetooth, and App with DC power meter and AC power meter, you can fully check how much energy saving or using energy through APP smart power meter function.

Hybrid AC/DC



Twin Rotary Compressor

has own 180° sine wave DC inverter controller technology for inverter air conditioner, “SVPWM” which makes the compressor ran at low frequency below 0.1Hz, improve the utilization of the DC compressor by 13% compared with 120 DC inverter controller technology. By 32% compared with Non-inverter air conditioner.

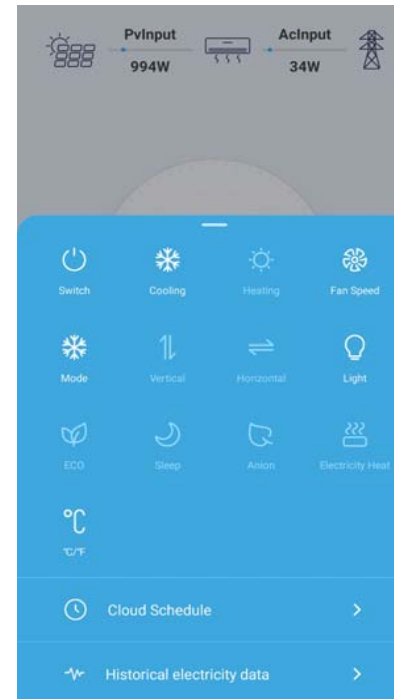


80V-380V Mppt

MPPT efficiency:99.9%
 DC to DC
 0 convert lose
 10+ years life design

Hybrid AC/DC

WiFi Smart Control



App power meter



Solar & Grid Indicator



Use WiFi or Bluetooth to control solar air conditioner anywhere.

Share device to your family member

Timer setting On & Off

Control multi devices in one APP

Check below data from App power meter:

DC power input

AC power input

Total saving by solar

Total power using

Daily/Months/yearly power data

Hybrid AC/DC



Model	Solar panel In Series connection	QTY
		(280-400W) 4pcs (400-500W) 3pcs
		(280-400W) 6pcs (400-500W) 5pcs
		(280-400W) 8pcs (400-500W) 7pcs

Packing list		
Carton	Name	QTY
Indoor package	Indoor unit	1
	Remote controller	1
	Drain Pipe	1
	Installation manual	1
	user manual	1
	Hanger plate	1
	Indoor & Outdoor Cable	1
	Mc4 connector	2
	Accessory Bag	1
Outdoor package	Outdoor unit	1
	Copper connection Pipe	2
	Scotch tape	1

Hybrid AC/DC

12000btu 18000btu 24000btu

Hybrid ACDC Solar Air Conditioner					
Model	Unit		12000BTU	18000BTU	24000BTU
Power Supply	AC Power	Ph-V-Hz	1Ph 208V-240V/50-60HZ	1Ph 208V-240V/50-60HZ	1Ph 208V-240V/50-60HZ
	DC Power (PV in Series)	V	80-380V	80-380V	80-380V
	DC Power Current	A	<=12A	<=12A	<=12A
Advised Solar Panel		Pcs	(3-4)*330W in series	(3-6)*330W in series	(3-8)*330W in series
Rated Cooling	Capacity	W	3510(900-3900)	5070(1200-6000)	6450(1800-7900)
		BTU	12000(3000-13300)	17300(4100-20400)	22000(6100-27000)
Rated Heating	Power input	W	940(190-1270)	1400(220-2100)	1790(300-3200)
	Capacity	W	4100(1000-4500)	6100(1200-6800)	7800(1800-9100)
	Power input	W	1170(190-1700)	1770(220-2500)	2290(300-3500)
T1 EER (W/W)/(BTU/W)		/	3.75/12.75	3.60/12.35	3.60/12.30
COP (W/W)/(BTU/W)		/	3.50/11.95	3.45/11.75	3.40/11.60
Dehumidification capacity		L/h	1.3	1.7	2.5
Compressor	Model	/			
	Type	/	2xRotary Inverter	2xRotary Inverter	2xRotary Inverter
	Brand	/	Highly	Highly	Panasonic
Indoor fan motor	Model				
Indoor noise level (Turbo)		dB(A)	42.5	46	50
Indoor unit	Dimension(W×H×D)	mm	840×205×295	1080×330×237	1080×330×237
	Packing (W×H×D)	mm	920×290×360	1140×300×382	1140×300×382
	Net weight/Gross weight	Kg	9.0/12.5	15.0/18.5	15.0/18.5
Outdoor fan motor	Model	/			
Outdoor noise level		dB(A)	752	755	758
Outdoor unit	Dimension(W×H×D)	mm	802×564×323	802×564×323	900×700×337
	Packing (W×H×D)	mm	910×622×405	910×622×405	1006×755×418
	Net/Gross weight	Kg	33.5/37.5	37/42.0	50/54.5
Refrigerant type		/	R410A	R410A	R410A
Max Design pressure		MPa	4.3/1.5	4.3/1.5	4.3/1.5
Refrigerant copper pipe	Gas side/Liquid side (inch)	inch	3/8 1/4	1/2 1/4	1/2 1/4
	Max. refrigerant pipe length	m	15	20	25
	Max. difference in level	m	8	10	10
Refrigerant connction copper pipe length		m	3	4	4
Connection wire length		m	4	5	5
Electronic Expansion Valve		/	Yes	Yes	Yes
Loading QTY 40" Hq/ 20"GP		Sets	200/85	160/75	115/50

OFF GRID DC 48V



DC 48V Solar Air Conditioner			Suggested Accessories		
Model	Power input (w) Average	Work Time (h)	Solar Panel	Battery	Charger
9000BTU	500	8+8	330W*4	12V 100ah*4	48V 60A
12000BTU	800	8+8	330W*6	12V 150ah*4	48V 60A
18000BTU	1300	8+8	330W*12	12V 200ah*8	48V 60A
24000BTU	1700	8+8	330W*18	12V 250ah*8	48V 60A*2

DC48V solar air conditioner works with DC battery power 46V to 58V directly.

The air conditioner part installation is same with normal inverter air conditioner installation. For off grid solar part installation with charge controller please get solar engineer finish with right calculation.

OFF GRID DC 48V

DC48V off grid Solar Air Conditioner						
Model						
Climate Type	Tropical<= 58		T1/T3	T1/T3	T1/T3	T1/T3
Power supply	Battery	DC	DC48V(46~58V)	DC48V(46~58V)	DC48V(46~58V)	DC48V(46~58V)
Rated Cooling	Capacity(T1)	W	2600(1000-3400)	3510(1000-3700)	5070(1200-5250)	6450(2500-7000)
		BTU	9000(3400-11600)	12000(3400-12600)	17300(4100-18000)	22000(8500-23900)
	Power input(T1)	W	680(180-1060)	980(200-1200)	1450(220-1780)	1840(450-2230)
Rated Heating	Capacity	W	2900(800-3050)	3900(1000-4100)	5250(1200-5500)	7000(2000-7350)
	Power input	W	830(160-950)	1130(180-1280)	1400(220-1830)	2050(390-2350)
T1 EER (W/W)/(BTU/W)	/		3.90/13.20	3.60/12.25	3.50/11.8	3.50/11.85
COP (W/W)/(BTU/W)	/		3.50/11.90	3.45/11.75	3.75/12.80	3.40/11.70
Dehumidification capacity	L/h		1.0	1.3	1.7	2.5
Compressor	Model	/				
	Type	/	Rotary Inverter	Rotary Inverter	2xRotary Inverter	2xRotary Inverter
	Brand	/	GMCC	GMCC	HIGHLY	Panasonic
Indoor fan motor	Model	/				
Indoor noise level (Turbo)	dB(A)		40	42.5	46	50
Indoor unit	Dimension(W×H×D)	mm	840×205×295	840×205×295	1080×330×237	1080×330×237
	Packing (W×H×D)	mm	920×290×360	920×290×360	1140×300×382	1140×300×382
	Net/Gross weight	Kg	9.0/12.5	9.0/12.5	15.0/18.5	15.0/18.5
Outdoor fan motor	Model	/				
Outdoor coil	a.Number of rows	/	1	2	2	2
Outdoor noise level	dB(A)		51	52	55	58
Outdoor unit	Dimension(W×H×D)	mm	802×564×323	802×564×323	802×564×323	900×700×337
	Packing (W×H×D)	mm	910×622×405	910×622×405	910×622×405	1006×755×418
	Net/Gross weight	Kg	28.0/32.0	32.0/36.0	36.0/40.0	51/56
Refrigerant type	/		R410a	R410a	R410a	R410a
Max Design pressure (Discharge/Suction)	MPa		4.3/1.5	4.3/1.5	4.3/1.5	4.3/1.1
Refrigerant pipinglength	m		3	3	4	4