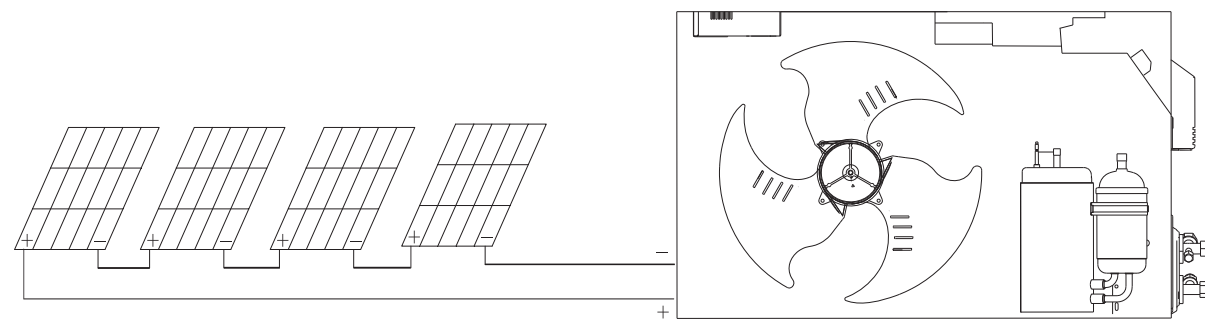
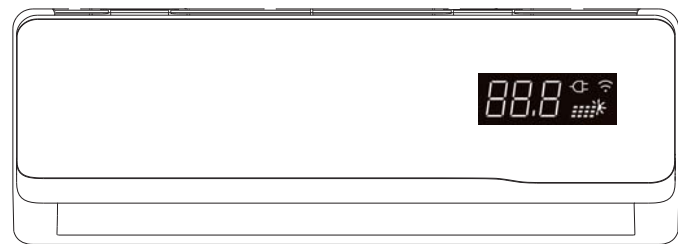




## Deye Solar Air Conditioner



## ABOUT OUR COMPANY



1990, Deye Technology Group was established by group president Mr Zhang Hejun, located in Ningbo China.

2007, Deye technology Group developed 180°sine wave DC inverter controller for air conditioning, and mastered the core algorithm, Developed "SVPWM" which makes the compressor ran at low frequency below 0.1Hz, improve the utilization of the DC voltage of the compressor rate up to 13%, Thus laid the company's overwhelming dominance in the field.

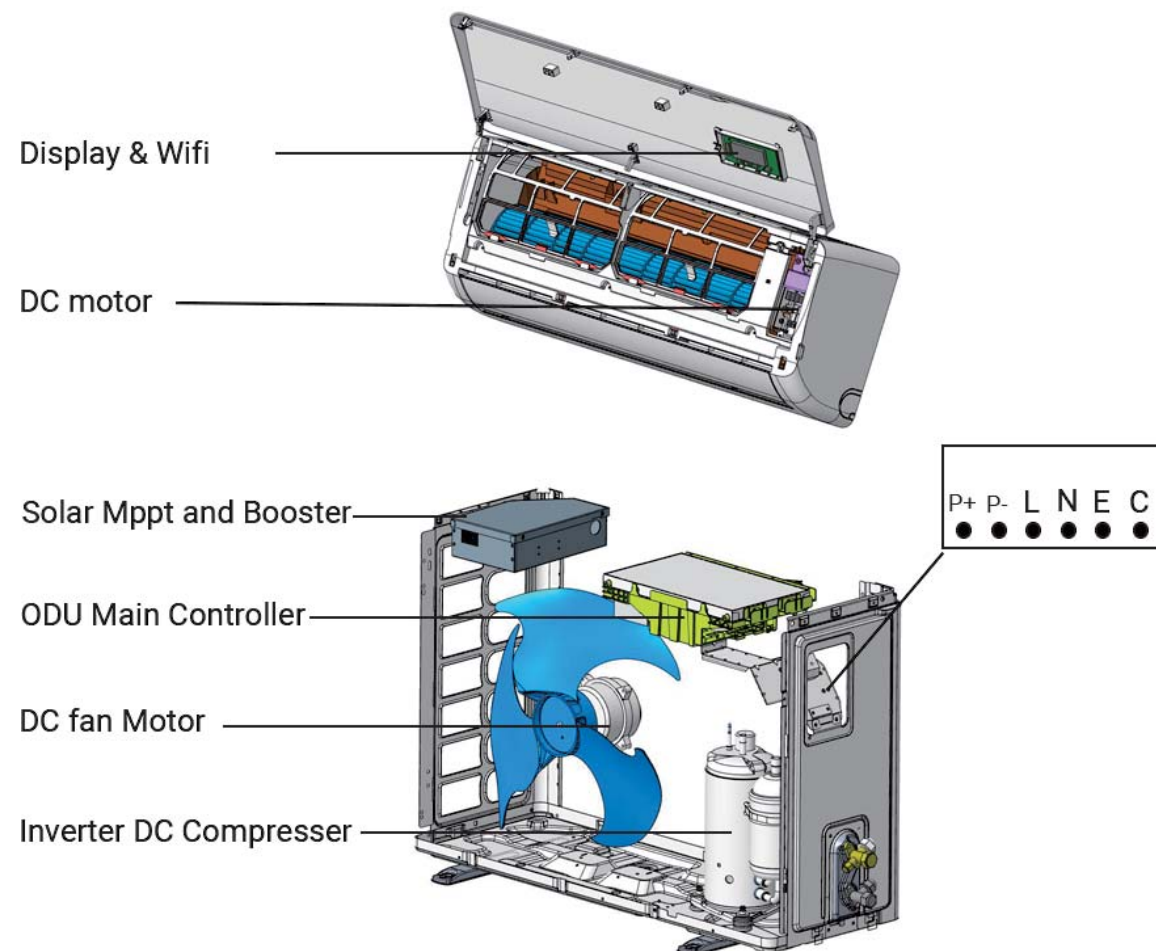
2015, Group branch company, Ningbo Deye Inverter Technology Co., Ltd successfully listed on the new three-board, becoming a core enterprise of the inverter technology industry. Covering solar inverter, inverter air conditioner controller, DC solar water pump controller and heat pump air conditioner products.

After 20 years development, the group has become Midea, Haier, TCL, AUX, and other domestic appliances trusted strategic partner. Owns the technology of variable frequency control system, 600W-80KW solar inverter, household appliances, heat exchanger products four core industrial chain, with Ningbo headquarters Guangdong and Shunde production bases, covering 130000 , 1700 employee.

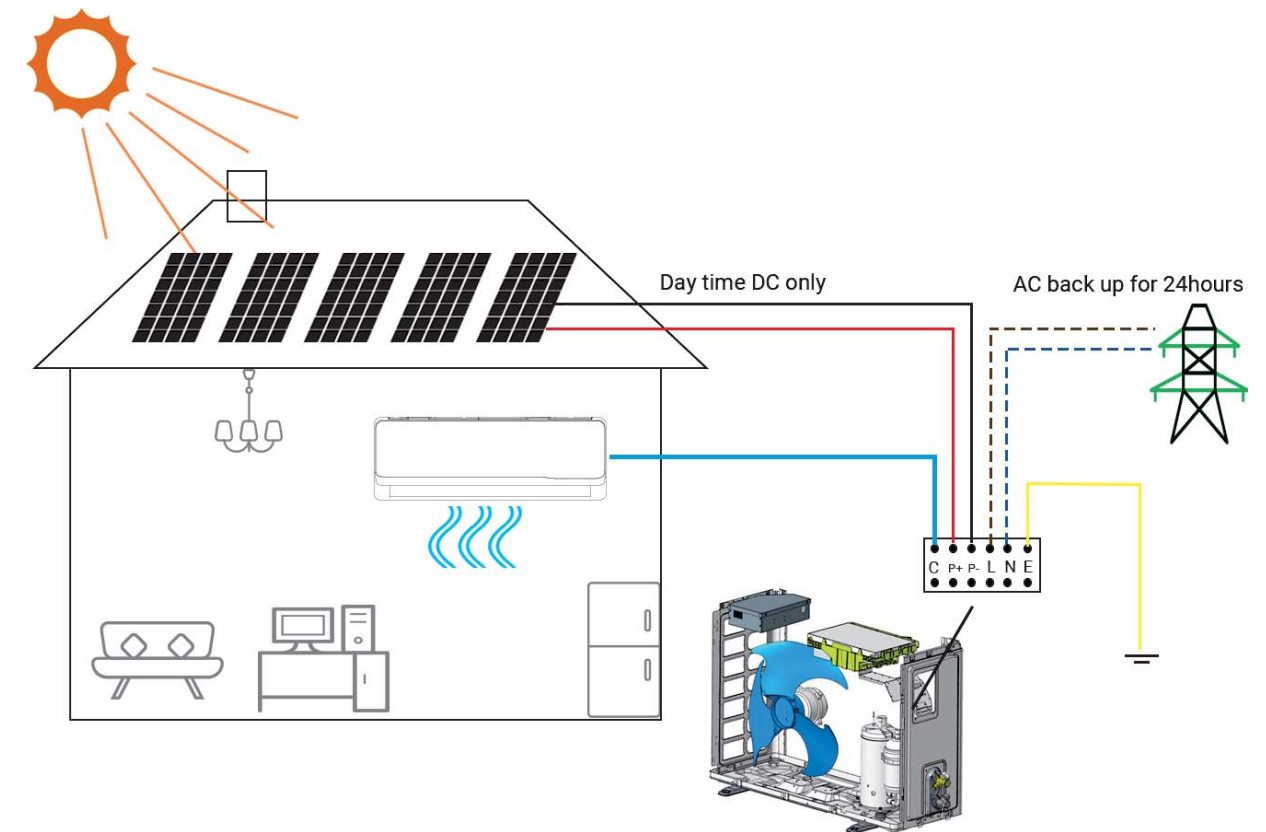
## Hybrid AC/DC

Deye 4<sup>th</sup> generation 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.

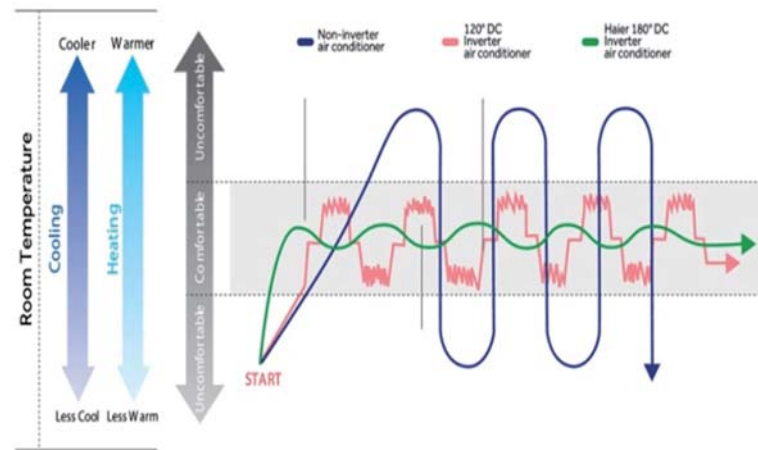


## Hybrid AC/DC



Deye 4<sup>th</sup> generation 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 DAIKIN 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.

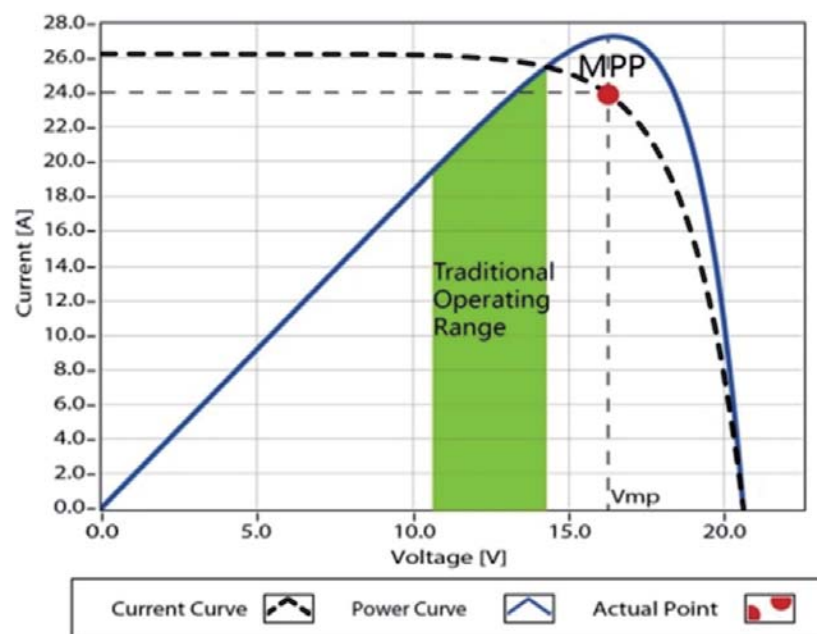
# Hybrid AC/DC



Twin Rotary Compressor

Deye 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.

(Patent Number: ZL 2009 1 0127633.8)

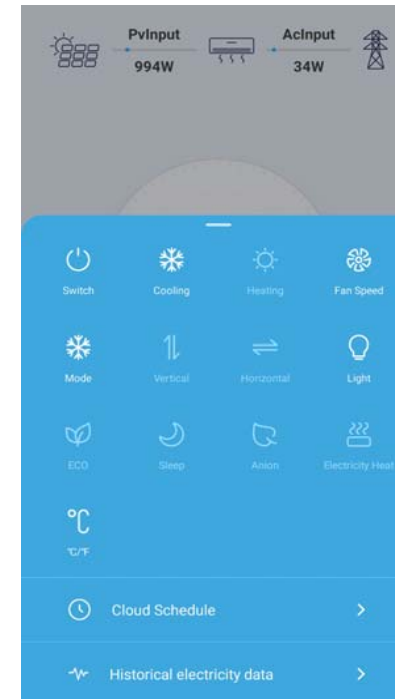


80V-380V Mppt

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

## Solar Aircon



Scan QRCode for App smart control

# Hybrid AC/DC



Model	Solar panel In Series connection	QTY
DGWA1-ACDCBLW-12K WiFi 12000BTU/ 1.5P/ 1 Ton		(280-400W) 4pcs
		(400-500W) 3pcs
DGWA1-ACDCBLW-18K WiFi 18000BTU/ 2P/ 1.5 Ton		(280-400W) 6pcs
		(400-500W) 5pcs
DGWA1-ACDCBLW-24K WiFi 24000BTU/ 3P / 2 Ton		(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

T1/T3 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	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)
Rated Heating	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	/	WHP04200	WHP05600	5RD198
	Type	/	2xRotary Inverter	2xRotary Inverter	2xRotary Inverter
	Brand	/	Highly	Highly	Panasonic
Indoor fan motor	Model		BLDC-15W	BLDC-45W	BLDC-45W
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	/	BLDC-40W	BLDC-55W	BLDC-75W
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

Deye 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		DGWA1-DC48V-09K	DGWA1-DC48V-12K	DGWA1-DC48V-18K	DGWA1-DC48V-24K	
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)
Rated Heating	Power input(T1)	W	680(180-1060)	980(200-1200)	1450(220-1780)	1840(450-2230)
		W	2900(800-3050)	3900(1000-4100)	5250(1200-5500)	7000(2000-7350)
Rated Heating	Power input	W	830(160-950)	1130(180-1280)	1400(220-1830)	2050(390-2350)
		W	3.90/13.20	3.60/12.25	3.50/11.8	3.50/11.85
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	/	ASK89D53UEZ	ASN98D22UFZ	WHP05600	5RD198
	Type	/	Rotary Inverter	Rotary Inverter	2xRotary Inverter	2xRotary Inverter
	Brand	/	GMCC	GMCC	HIGHLY	Panasonic
Indoor fan motor	Model	/	BLDC 15W	BLDC 15W	BLDC 45W	BLDC 45W
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	/	BLDC 40W	BLDC 40W	BLDC 55W	BLDC 75W
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