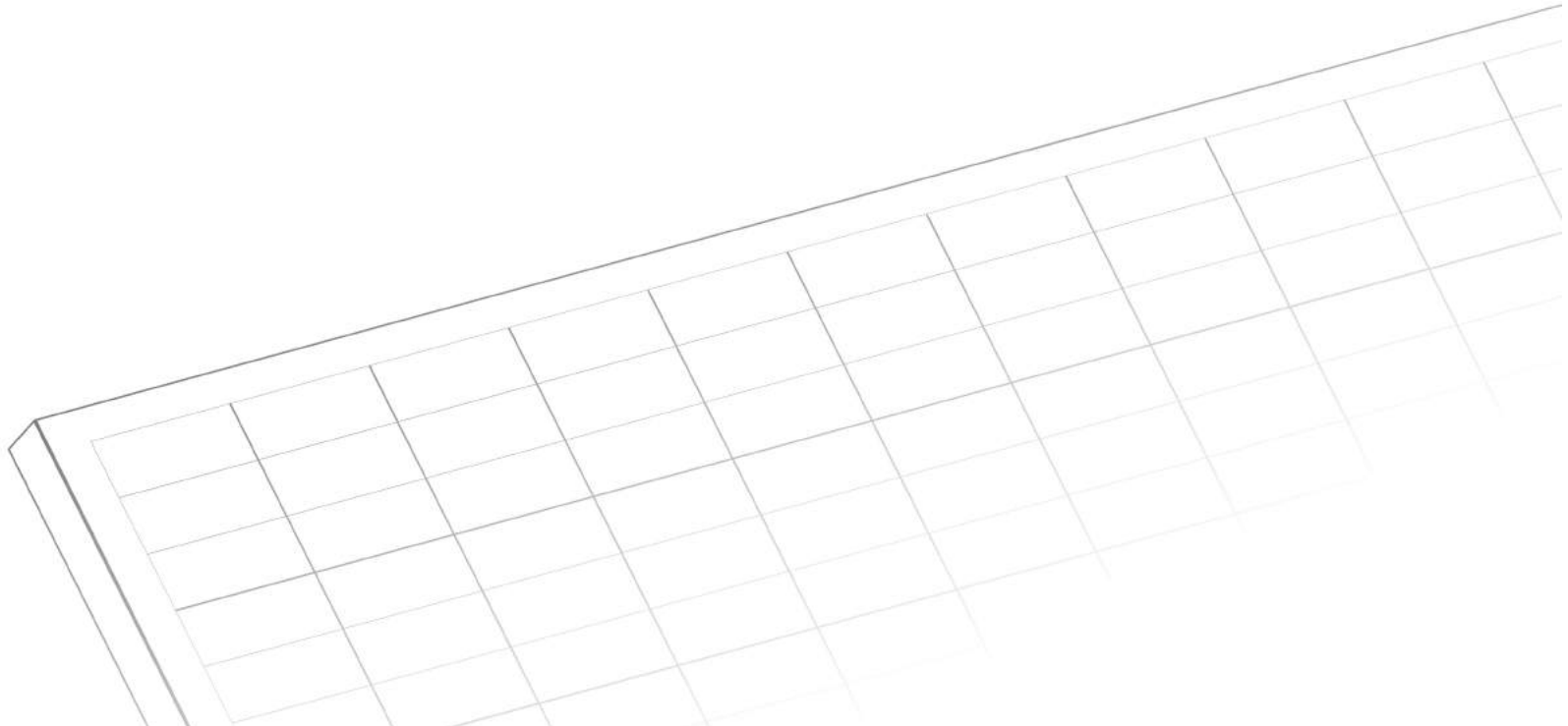
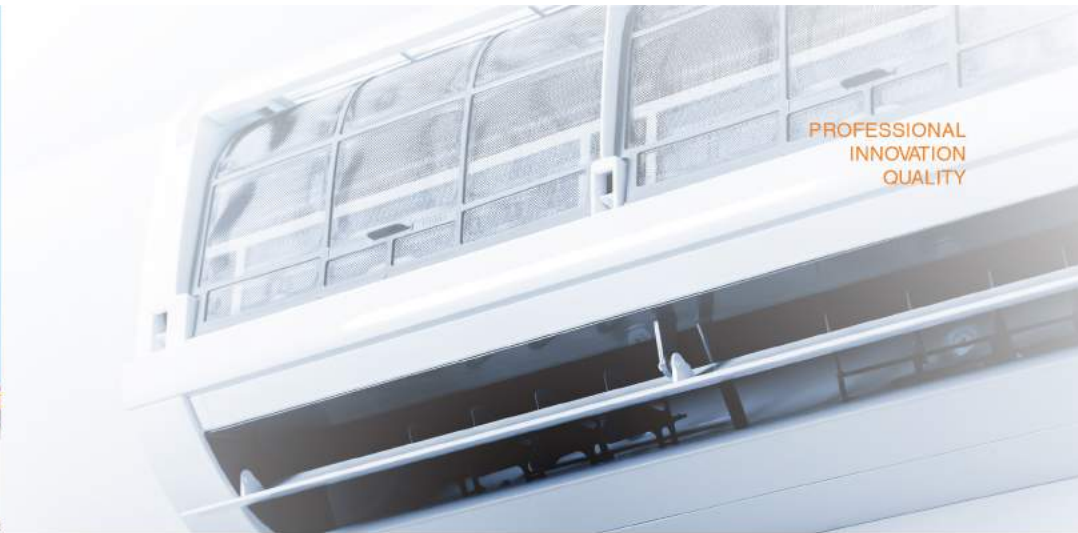


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# COMPANY PROFILE



Stay Cool  
24 X 7

\*Test with FADI solar:  
24/7 fresh air enjoyment!



Reduced Electricity Bills  
Let the sun pay your electricity bill!



Go Green

For a low-carbon future,  
it's time to get started!



Prime Quality

CE Certified, Brand Assurance



Save Money

Saving over \$1280 US dollars per year!



Increased  
Business Efficiency

Prime efficiency Durable and Affordable,  
we made it!

## CERTIFICATE



BAC



DIN



ISO



CE



SRCC



SRCC



SRCC



SRCC



SRCC



SRCC

# HIGH-QUALITY COMPONENTS EFFECTIVELY IMPROVE THE EFFICIENCY

## 02 High Efficiency Heat Exchanger

Adopting multi-fold heat exchanger about 20%~40% more exchange area than the general one which to improve the high energy efficient ratio of performance, meanwhile, equipped with inner-groove copper tube and hydrophilic aluminum foil to achieve the high performance of cooling and heating.

## 01 Leading International New Refrigerant R410A

New refrigerant R410A has stabilization, innocuity and more efficient characteristic due to not including chlorine element, will not destroy the ozone sphere. In addition, use new refrigerant will take advantage on air conditioners performance.



## 03 GMCC (Toshiba & Media) Permanent Magnet Synchronous Compressor

The use of permanent magnet rotor produce the magnetic field without the power turn on, it can save the energy, take the whole system more efficient, and would be more steady during working!

### Key Strength Of FADI Solar AC Component (SIX)

## 04 High Grade Inner-Groove Copper Pipe

Adopting the high-grade inner-groove copper pipe to improve the heating and anti-defrosting efficiency of the heat exchanger.



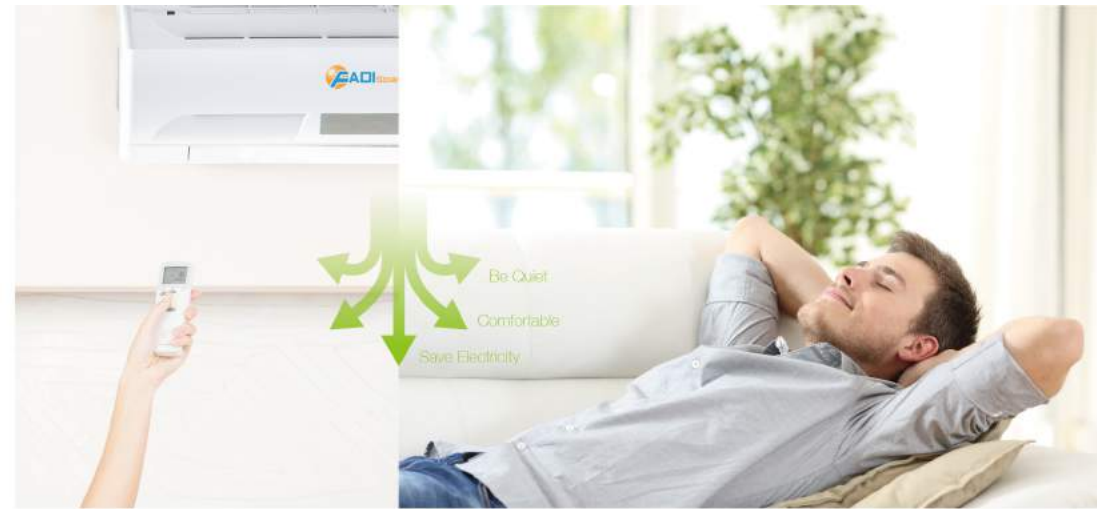
## 06 Inner Groove Copper Pipe

Compared with general aluminum foil, hydrophilic aluminum foil does not frost up like other conventional type A/C units, this also means that corrosion will no longer be a factor.

## 05 Brushless DC Remarkable Motor

Keep the system stable and powerful but quiet with longer life span.

HAINING FADI SOLAR ENERGY CO.,LTD



## WORKING AS LOW AS 26dB MAKING YOUR DREAM SWEETER!



20dB

Silent night at rural areas



30dB

Quiet night at desert



40dB

In the noisy library



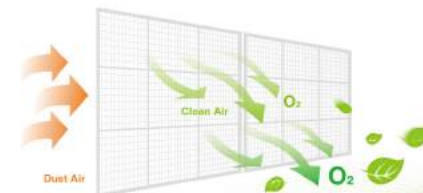
50dB

In a busy office

26dB

### Noise Advantages of FADI products

Give you a comfortable rest environment, so that you enjoy a noise-free space after work.



### STRONG FILTER GRID

Combines antibiosis with purifying the air. Purifies every breath in your room.

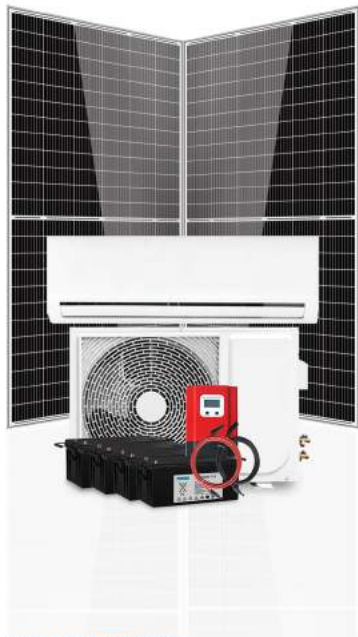
IT WORKS DC Inverter Technology

# INVERTER TYPE AIR CONDITIONER ION+OFF FULL FUNCTION

This is the 4th generation solar air conditioner we've all been waiting for - designed for low cost, easy installation and a fast payback.

This unique solar air conditioning technology can work without batteries, no inverter, no controller - just plug in the solar panels and start saving up to more than 90% on daytime cooling or heating costs.

If you region without AC power supplier, we can inbuilt BATTERY, INVERTER, SOLAR CHARGE CONTROLLER too. Namely, can meet your requirement of BOTH on grid installation or PURE SOLAR 100% OFF GRID installation!



### Solar Panel

We suggest you to connect 4 or 6 pcs 260W-440W solar panels to drive each solar air conditioner. Both mono-crystalline and poly-crystalline solar panels can be accepted.



### COMPRESSOR

Brand: GMCC (Toshiba & Media)  
Original: Japan  
Sino-Japan joint venture by TOSHIBA with Media.

### MPPT Solar Charge Controller

A Solar charge controller protects the whole system and provides stable power supply.

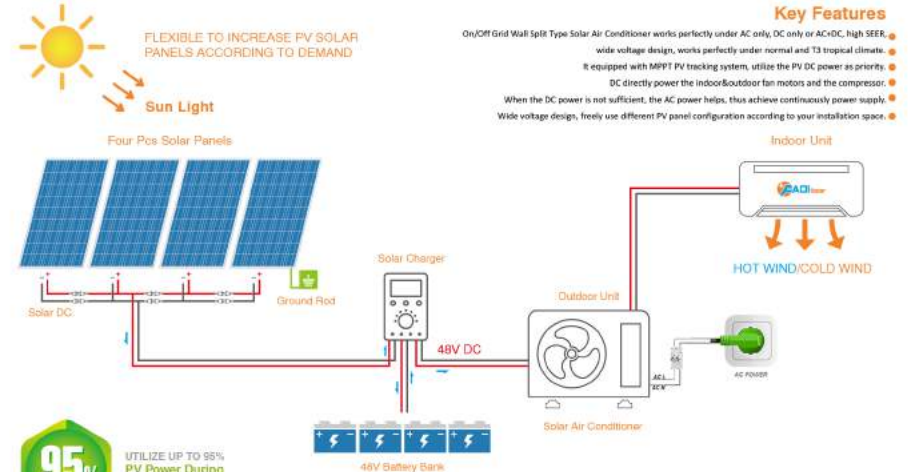
### Battery

Batteries are the energy bank to reserve energy. We recommend you use 4 x 12V deep cycle gel solar batteries. Depending on the system selected and the hours of battery operation you require, you can select the AH of your batteries.

### Brushless DC Motor



- The DC motor allows fine rotation control, which reduces energy consumption.
- The DC motor also provides improvements in operational efficiency of up to 35%, compared to an AC motor.



**95%** UTILIZE UP TO 95% PV Power During Peak Sun Hours

### Working Principle

On/Off Grid Solar Air Conditioner, equipped MPPT PV tracking system and the smart controller, utilize the DC power as priority. Energy delivered from solar PV directly and if not sufficient, will aggregates with the grid (or battery optional), if the grid cut (or battery runs out), then the battery (or grid power) comes as back up to continually run the air conditioner. This solution is perfect for the places where the grid power is not steady or grid power often cut.

- ### Key Features
- On/Off Grid Wall Split Type Solar Air Conditioner works perfectly under AC only, DC only or AC+DC, high SEER.
  - wide voltage design, works perfectly under normal and T3 tropical climate.
  - It equipped with MPPT PV tracking system, utilize the PV DC power as priority.
  - DC directly power the indoor/outdoor fan motors and the compressor.
  - When the DC power is not sufficient, the AC power helps, thus achieve continuously power supply.
  - Wide voltage design, freely use different PV panel configuration according to your installation space.



- R410A Environment Protection Refrigerant
- High Efficiency Brushless Inverter Permanent-magnet Compressor
- Super Wide Operating Temp. Range: -10~55°C
- 30s Fast Cooling 1 Min Powerful Heating

### APPLICATION



## INVERTER SOLAR AC KEY STRENGTH

Complete DC Inverter Air conditioner Compared with ordinary air conditioner, complete DC inverter technology, the new 360°Sine wave driving technology has considerable.



### 4-Ways Air Outlet

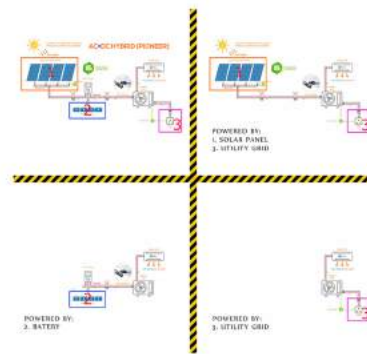
The louver can be vertically or horizontally adjusted so as to maximize comfort in the room.



### Turbo Cooling

Press Turbo button on remote controller to enjoy a larger air flow, which enables the indoor temperature to reach the set temp in a shorter time.

## ENERGY SAVING & COMFORTABLE



## ADVANTAGES

- Much wider range of frequency and DC voltage, quickly cooling and more energy saving.
- Higher energy efficiency.
- Smoother running and lower noise.
- More reliable & smooth operation.

## Inverter Type Solar Air Conditioner (ON+OFF FULL FUNCTION)

MODEL	FD-35GW-PRO-3IN1	FD-50GW-PRO-3IN1	FD-70GW-PRO-3IN1
	1.5HP 1TON 12000 BTU	2HP 1.5TON 18000 BTU	3HP 2TON 24000 BTU
<b>4(FOUR) HOURS BACKING UP TIME</b>			
Solar Panel	320W*3 Pcs	320W*4 Pcs	320W*6 Pcs
Controller	48V/20A	48V/30A	48V/40A
Battery	12V/100Ah*4 Pcs	12V/150Ah*4 Pcs	12V/200Ah*4 Pcs
<b>8(EIGHT) HOURS BACKING UP TIME</b>			
Solar Panel	320W*6 Pcs	320W*8 Pcs	320W*12 Pcs
Controller	48V/40A	48V/60A	48V/80A
Battery	12V/200Ah*4 Pcs	12V/300Ah*4 Pcs	12V/200Ah*8 Pcs
<b>12(TWELVE) HOURS BACKING UP TIME</b>			
Solar Panel	320W*9 Pcs	320W*12 Pcs	320W*18 Pcs
Controller	48V/60A	48V/90A	48V/120A
Battery	12V/100Ah*12 Pcs	12V/150Ah*12 Pcs	12V/200Ah*12 Pcs



# SOLAR AIR CONDITIONER

## Application Scenes



Not limited by power supply and climate, apply for world wild use.

When you are at these places with fierce weather, how do you go through summer or winter?

**Your Best Choice!**

## DC 48V SMART PORTABLE SOLAR AIR CONDITIONER OFF GRID



- Use effective evaporative cooling technology
- Rapid cooling dehumidification effect is good
- Exquisite and small easy to move, arbitrary
- Ultra-quiet operation quiet and low-pitched
- Lower energy consumption

Freedom from the installation of the machine, easy to move, want to place where to put, arbitrary.

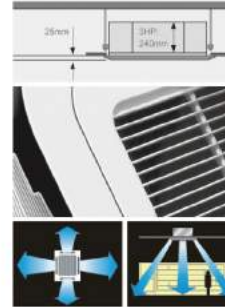


### PARAMETER TABLE

MODEL		FD-SP-26/DC	FD-SP-35/DC
<b>PERFORMANCE</b>			
Capacity	Cooling	Btu/h W	9000 2600
	Heating	Btu/h W	12000 3500
Noise	Indoor	dB(A)	≤44
	Outdoor	dB(A)	≤46
Air Circulation		m <sup>3</sup> /h	400
Suitable Area		m <sup>2</sup>	8-10
EER	W/W		5.20
	Btu/h/w		5.00
Refrigerant		R-134A	R-134A
Compressor		Panasonic DC 48V	
<b>POWER CONSUMPTION</b>			
Rated Power Input		W	500
Rated Current		A	11
Input Power range		V	DC 42-60
<b>DIMENSION</b>			
Unit	Shipping NET	mm	350x350x750
		mm	550x308x788
		kg	18.22
<b>WEIGHT</b>			
Indoor Unit(NET,GROSS)			
<b>SOLAR PANEL + CONTROLLER + BATTERY</b>			
Working Time: 12 hours at day Time, 4(FOUR) Hours at Night			
4(FOUR) Hours Back Up Solution	Flexible Solar Panel 300W	300W * 2 PCS	320W * 3 PCS
	Solar Controller	48V/20A	48V/20A
	Battery	12V/65Ah*4 PCS	12V/100Ah*4 PCS
Working Time: 12 hours at day Time, 8(EIGHT) Hours at Night			
8(EIGHT) Hours Back Up Solution	Solar Panel	320W * 4 PCS	320W * 8 PCS
	Solar Controller	48V/40A	48V/40A
	Battery	12V/120Ah*4 PCS	12V/200Ah*4 PCS

## ON GRID PV CASSETTE TYPE SOLAR AIR CONDITIONER

MODEL	FD-ON/CASS-100	FD-ON/CASS-120	FD-ON/CASS-140	FD-ON/CASS-180		
		3 TON 4 HP	4 TON 5 HP	4 TON 8 HP	5 TON 8 HP	
Power Supply: 208-240V,50/60HZ						
<b>PERFORMANCE</b>						
Capacity	Cooling	Btu/h W	36000 10000	41000 12000	48000 14000	60000 18000
	Heating	Btu/h W	40000 11000	45000 13000	52000 15000	60000 20000
Noise	Indoor	dB(A)	≤48	≤50	≤50	≤52
	Outdoor	dB(A)	≤62	≤63	≤65	≤68
Air Circulation		m <sup>3</sup> /h	1350	1450	1550	1750
Suitable Area		m <sup>2</sup>	50-65	60-70	60-80	100-130
EER		W/W	4.6	4.5	4.4	4.3
SEER		Btu/h/w	35	33	33	32
Cop		W/W	4.9	4.8	4.8	4.7
Scop		Btu/h/w	38	38	36	38
HSPF		Btu/h/w	18	14	14	15
Operating Range	C/F		18-30	18-30	18-30	18-30
Design Pressure	PSI		450	450	450	450
Refrigerant Oil			VG47	VG47	VG47	VG47
Refrigerant			R410A	R410A	R410A	R410A
Compressor			TOSHIBA (ROTARY)	TOSHIBA	TOSHIBA	PANASONIC
Liquid Side/ Gas Side			1/4" / 1/2"	3/8" / 3/4"	3/8" / 3/4"	3/8" / 3/4"
DC Connection Wire			MC4/AWG 10/12	MC4/AWG 10/12	MC4/AWG 10/12	MC4/AWG 10/12
<b>POWER CONSUMPTION</b>						
Rated Power Input		W	1700	2100	3500	3000
Rated Current		A	8.8	9.4	11.55	13.6
Max Solar Panel			4x320W/36V	8x320W/36V	8x320W/36V	10x320W/36V



## ON GRID PV DUCT TYPE SOLAR AIR CONDITIONER

MODEL	FD-ON/DUCT-100	FD-ON/DUCT-120	FD-ON/DUCT-140	FD-ON/DUCT-180		
		3ton 4HP	4ton 5HP	4ton 8HP	5ton 8HP	
Power Supply: 208-240V,50/60HZ						
<b>PERFORMANCE</b>						
Capacity	Cooling	Btu/h W	36000 10000	41000 12000	48000 14000	60000 18000
	Heating	Btu/h W	40000 11000	45000 13000	52000 15000	60000 20000
Noise	Indoor	dB(A)	≤48	≤50	≤50	≤50
	Outdoor	dB(A)	≤62	≤63	≤65	≤65
Air Circulation		m <sup>3</sup> /h	1350	1450	1550	1550
Suitable Area		m <sup>2</sup>	50-65	60-70	60-80	60-60
EER		W/W	4.6	4.5	4.4	4.4
SEER		Btu/h/w	35	33	33	33
Cop		W/W	4.9	4.8	4.8	4.6
Scop		Btu/h/w	38	38	36	38
HSPF		Btu/h/w	18	14	14	14
Operating Range	C/F		18-30	18-30	18-30	18-30
Design Pressure	PSI		450	450	450	450
Refrigerant Oil			VG47	VG47	VG47	VG47
Refrigerant			R410A	R410A	R410A	R410A
Compressor			TOSHIBA (ROTARY)	TOSHIBA	TOSHIBA	TOSHIBA
Liquid Side/ Gas Side			1/4" / 1/2"	3/8" / 3/4"	3/8" / 3/4"	1/4" / 1/2"
DC Connection Wire			MC4/AWG 10/12	MC4/AWG 10/12	MC4/AWG 10/12	MC4/AWG 10/12
<b>POWER CONSUMPTION</b>						
Rated Power Input		W	1700	2100	2500	2500
Rated Current		A	8.8	9.4	11.55	11.55
Max Solar Panel			4x320W/36V	8x320W/36V	8x320W/36V	8x320W/36V

