



### **Special Features**

- All DC design with less power loss and more specific control
- Hybrid power by solar and electricity power
- Automatically adjust the power supply of solar power and electricity power to reach the needed input power
- Energy saving inverter air conditioner
- Heating and cooling mode for indoor temperature control
- Easy installation and reliable system
- Solar panel can be direct connected with an air conditioner without any converter.
- Free hot water by installed with PAC Frenergy: Heat Recovery Water Heater (Optional)

## **PAC SolarAire**

*Solar Hybrid Power Air Conditioner*

Energy Saving •

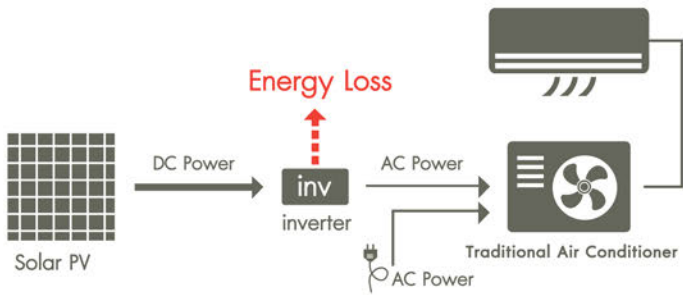
Eco Friendly •

High Efficiency •

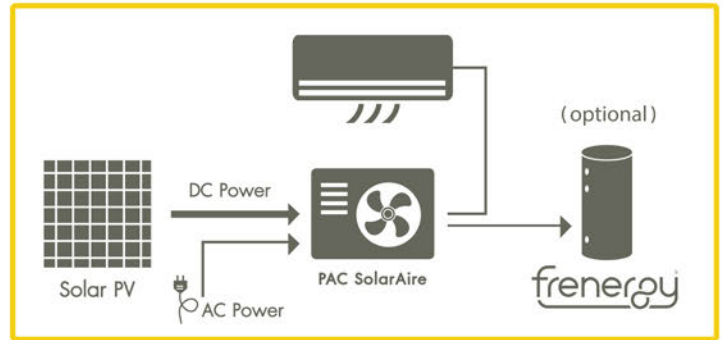


<http://www.pac.co.th/solaraire>

# PAC SolarAire



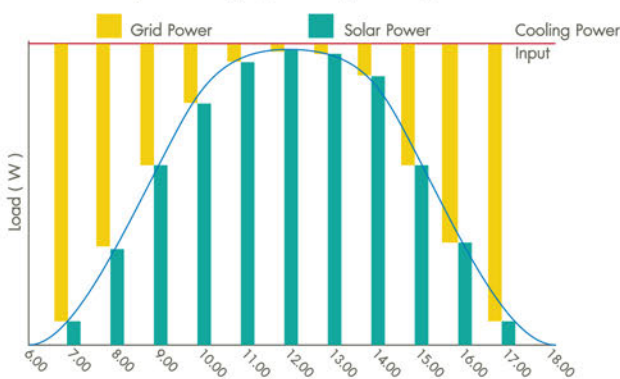
Traditional Air Conditioner



PAC SolarAire Air Conditioner

In traditional solar air conditioner while Solar PV generates DC solar power, the inverter will change the input DC power to be AC power. Then supplied to the air conditioner unit. It would bring a lot of energy loss while the conversion. In the other hand, PAC SolarAire is all DC designed. The DC solar power can be used directly into the unit without any converter for a AC power input, PAC SolarAire inverter will change the input AC into DC then can be merged into the current during the process.

Chart of solar power and grid power usage in a day



Comparison table of air conditioner power consumption

Parameter	Traditional Air Con	PAC SolarAire	PAC SolarAire
	AC Power	AC Power	DC Solar Power
Cooling capacity (BTU/hr)	12,000	12,000	12,000
Power input (W)	1,028.30	880	88
EER (BTU/hr/W)	11.67	13.64	136.36
Power consumption	100%	85.58%	8.58%

## PAC SolarAire Specification

Model	PKSU12/PKSM12		
Capacity	Cooling	BTU/Hr.	12,000 (1,024~13,477)
	Heating	Watt	3,500 (300~3,950)
Power Input	Cooling	Watt	880 (110-1,260)
	Heating	Watt	950 (140-1,350)
Power Supply	V-Ph-Hz.	220-1- 50	
EER	Cooling	BTU/W	13.64
	Heating	BTU/W	13.65
COP	Cooling	W/W	3.97
	Heating	W/W	4
Airflow	Indoor Unit	m3/h	670
Indoor Unit Noise	(L/M/H)	dB(A)	30/36/42
Outdoor Unit Noise		dB(A)	36-55
Refrigerant			R410a
Dimension (WxDxH)	Indoor Unit	mm	866x206x292
	Outdoor Unit	mm	899x378x596
Net Weight	Indoor Unit	kg	11
	Outdoor Unit	kg	43

### Recommended Solar Panel Parameters

Solar cell	Multicrystalline	
Open Circuit Voltage	V	30.7
Optimum Operating Voltage	V	24.2
Short Circuit Current	A	8.85
Optimum Operating Current	A	8.25
Maximum Power at STC	W	200

### Solar Power Data

Maximum Number of Solar Panels	Pcs	5
Connection Mode	In Series	
Maximum Solar Power	W	1,000

Remark : The rated voltage of solar power should be less than 165V and the rated current of solar power should be less than 10A.



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