

# Solar Air Conditioner



## ACDC HYBRID

### APPLICATION

Solar ACDC hybrid solar air conditioners require no batteries, and only a few PV panels to deliver huge savings. During the day, when air conditioning is needed the most, you can operate this unit partly or up to 100% by its independent solar panels to achieve maximum efficiency. At night, you can continue to save due to its high efficiency.

The WIFI functionality allows full control, daily and weekly timers, complete visibility with AC and DC consumption and the history of all power consumption.



### YOUR BENEFITS

- Efficient brushless DC permanent magnet variable frequency twin rotary compressors.
- AC Limiter will limit the AC consumption to 100w when DC power is available and slightly more when there is no DC.
- Anti-Corrosion Technology giving greater corrosion resistance for both outdoor and indoor units.
- Can run directly on 100% solar power during the daytime.
- Wide ambient operating temperature range: -10 °C to +58° C.
- Mc4 Solar connector terminals - Easy plug and play connection and maintenance.
- Eco-Friendly R32 Refrigerant.
- Quiet Indoor Unit (As low as 26dB).
- Low energy consumption.

### TECHNICAL SPECIFICATION

	HYBRID	AC/DC	WIFI
<b>Model</b>	<b>3.5kw</b>	<b>5.0kw</b>	<b>7.0kw</b>
Solar Input Voltage (V dc)	80-380	80-380	80-380
Capacity Cooling (kw)	3.5(0.80-3.9)	5.01 (1.30-5.85)	6.40(1.80-7.8)
Capacity Heating (kw)	3.5(0.90-4.2)	5.01(1.30-5.20)	7.03(1.80-7.8)
Power Input Cooling(w)	860(150-1100)	1250(220-1670)	1690(340-2550)
Power Input Heating(w)	870(150-1200)	1200(220-1420)	1780(320-2190)
EER Without Solar	4.07	4.01	3.79
COP Without Solar	4.02	4.18	3.95
Min DC required DC operation	150	220	320
Max AC when on AC Limiting	300	400	600
Net Weight Indoor/Outdoor(Kg)	9.0/33.5	15/37	15/48.5
Net Size Indoor(mm)w*h*d	845*295*205	1085*330*239	1085*330*239
Net Size Outdoor(mm)l*h*w	802*564 *323	802*564 *323	700*900*337

### SYSTEM COMPONENTS

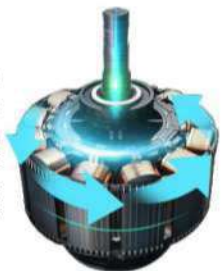
#### DC Powered Indoor unit

Our DC Powered Indoor units use direct DC solar power so there is no loss associated with converting DC power into AC power like standard air conditioners.



#### DC Brushless fan motor

DC brushless fan motors are used for both indoor and outdoor units. Energy consumption is greatly reduced and run with very low noise. The use of a brushless permanent magnet motor driver provides a variable frequency drive that allows the system to dynamically adjust its capacity based on conditions.



#### ACDC Hybrid Outdoor unit

During the day they run solely or primarily on solar power and only use small amounts of power from the utility company as needed. When it comes to night time, they will automatically mix power and eventually switch to 240V AC power.

#### Solar Panels

Any solar panels can be connected to our Hybrid solar air conditioners. They are simply connected in series with a maximum of 380VOC. Today's improved solar technology provides stable, efficient and reliable power without any maintenance required.



## CONTACT US

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## ACDC HYBRID



A purpose built DC Hybrid solar air conditioner built from the ground up 100% DC - No electronic inverter.

They can operate independent of the AC Grid (Off Grid) turning itself on when there is sufficient solar power and back off when there is no longer enough power from the sun. No solar grid connection for installation, no utility company authority required.

Plug and play installation — solar panels connect directly to MC4 solar terminals.

STC's are claimable on solar panels installed on a unit — essentially covering the cost of the panels.

Uses eco-friendly R32 refrigerant - helping to save the planet.

Brushless DC motors in both indoor and outdoor units ensures extremely quiet operating levels.

Can be set to limit the AC power input if power consumption is a concern due to maximum power demand or simply to minimize the power consumption for economic savings.

Using solar power for one of our highest energy consuming appliances. Just common sense!



### 100% Eco

Up to 100% Savings during the day time

### Grid AC Power Limiter

Limit AC power from 0-300W



### Savings

No Inverter, Battery, or Charge controller needed

### Wide Operating Temperature

Temperature Range between -10°C to +58°C



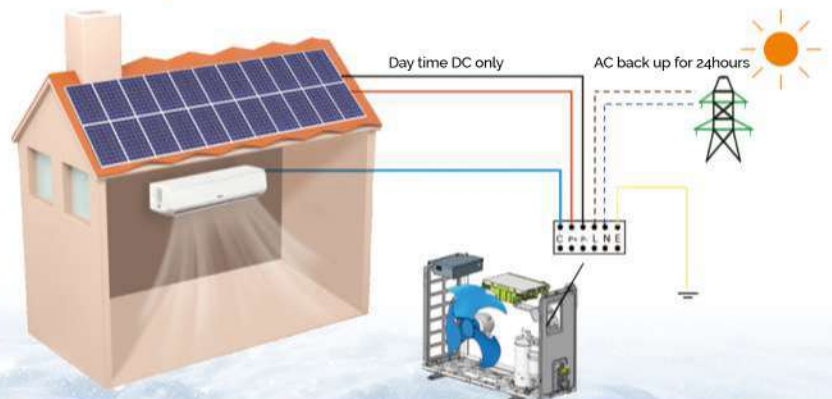
### Max Efficiency

DC-driven

### Auto Balance

AC/DC auto balance

### Hybrid AC/DC Inverter Solar Air Conditioner



**ECOLOGICAL AND ECONOMICAL = JUST COMMON SENSE**