

# Deye

## Solar Air Conditioner ACDC HYBRID



**100% Eco**  
Up to 100% Saving  
in day time



**Grid AC Power  
Limiter**  
Limit AC power from  
0-300W



**Savings**  
No Inverter, battery, or  
Charger controller needed



**Wide Operating  
Temperature**  
Temperature Range between  
-10°C to +58°C



**Max Efficiency**  
DC-driven

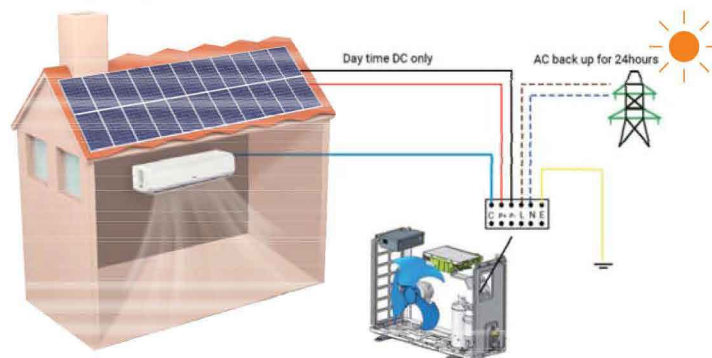


**Auto Balance**  
AC/DC auto balance



- ✓ 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 R410 a refrigerant gas – non-flammable! Compared with widely used flammable R32 gas.
- ✓ 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!

### Deye Hybrid AC/DC Inverter Solar Air Conditioner



CB

CE

CCC

Intertek

ETL



# Solar Air Conditioner

## ACDC HYBRID



### Application

Deye hybrid ACDC 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.
- Can run directly on 100% solar power during the daytime.
- AC Limiter will limit the AC consumption to 100w when DC power is available and slightly more when there is no DC.
- Wide ambient operating temperature range:  $-10^{\circ}\text{C}$  to  $+58^{\circ}\text{C}$ .
- Anti-Corrosion Technology giving greater corrosion resistance for both outdoor and indoor units.
- Eco-Friendly R410a Refrigerant.
- Mc4 Solar connector terminals - Easy plug and play connection and maintenance.
- Low energy consumption.
- Quiet Indoor Unit (As low as 26dB).

### Technical Specifications

| Hybrid AC/DC WIFI             |                 |                 |                 |
|-------------------------------|-----------------|-----------------|-----------------|
| Model                         | 3.5kw           | 5.0kw           | 7.0kw           |
| Solar Input Voltage (V dc)    | 80~380          | 80~380          | 80~380          |
| Capacity Cooling (kw)         | 3.51(0.90-3.81) | 5.01(1.30-5.57) | 6.44(1.80-7.30) |
| Capacity Heating (kw)         | 3.60(0.90-3.96) | 5.27(1.50-5.71) | 7.00(1.80-7.60) |
| Power Input Cooling(W)        | 910(200-1200)   | 1350(250-1720)  | 1790(410-2500)  |
| Power Input Heating(W)        | 940(180-1250)   | 1300(250-1540)  | 1900(340-2100)  |
| AEER Without Solar            | 3.77            | 3.64            | 3.55            |
| ACOP Without Solar            | 3.74            | 3.98            | 3.63            |
| Min DC required DC operation  | 200             | 250             | 300             |
| 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)           | 845*205*295     | 1085*330*239    | 1085*330*239    |
| Net Size Outdoor(mm)          | 802*564*323     | 802*564*323     | 700*900*337     |

### System Components

#### DC Powered Indoor unit

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



#### 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.



#### 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.



#### 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.

