ECOLIBRI

Wind energy, better future

On Grid Hybrid ACDC solar air conditioner

Intelligent | Green | Safe | High efficiency

Intertek

R410A

INVERTER

UP TO 100%

Energy Saving

Built-in MPPT

TECHNICAL SPECIFICATIONS & FEATURES

TECHNICAL SPECIFICATIONS

Model	AC Power	DC Power	Cooling Capacity	Heating Capacity	Cooling Power Input	Heating Power Input	Indoor/ outdoor Net Weight	Indoor Net Size	Outdoor Net Size
KFR-26GW/BPSA	220V 50/60HZ	50-380V	90000BTU	9500BTU	100-1200W	120-1200W	9.6/39	870x270x360	900x400x600
KFR-35GW/BPSA			12000BTU	19000BTU	110-1500W	130-1510W	9.6/40	870x270x360	900x400x600
KFR-50GW/BPSA			18000BTU	19000BTU	140-1800W	200-1900W	12.5/44	1035x305x380	900x400x600
KFR-70GW/BPSA			24000BTU	25000BTU	240-3030W	260-3140W	15.2/62	1120x310x405	1063x480x760
KFR-90GW/BPSA			30000BTU	31000BTU	280-3350W	300-3450W	15.2/62	1120x310x405	1063x480x760
KFR-100GW/BPSA			36000BTU	37500BTU	320-3510W	350-3650W	15.2/73	1120x310x405	1090x500x860

FEATURES

The Hybrid ACDC Solar Air Conditioner does not require any battery, and just need a few solar panels to deliver huge saving. During the sunshine day, when air conditioner is needed at the most, you can operate this unit up to 100% by solar panesl. When night comes, you continue to save > SEER 21 rating on this unit.

High efficiency brushless inverter permanent-magnet compressor

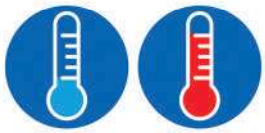
0.1Hz low frequency running, low power consumption

R410a environment protection refrigerant

Indoor unit noise level low to 26 dB

30s fast cooling/1 min powerful heating

Built-in MPPT, maximum utilizes the solar power during the day

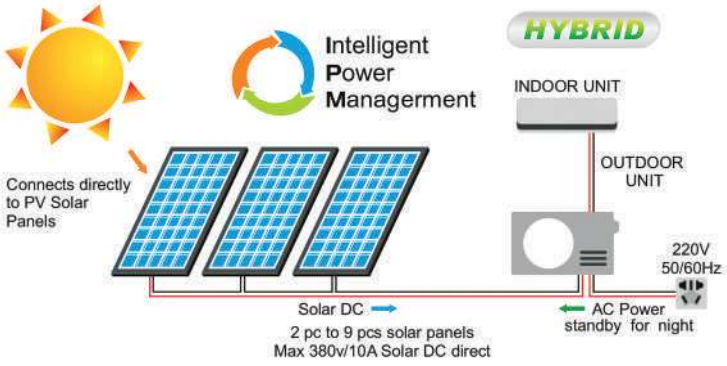


Super wide operating temp. range: -10℃~52℃

Solar panel connection on outdoor unit: Easy installation and maintenance, Plug & Run

SYSTEM

SYSTEM DIAGRAM



The ACDC Hybrid Solar Air Conditioner is different as the regular DC inverter air conditioners. During the day, it runs directly on DC power from solar panels. With the intelligent Power Management technology, this system can directly utilize the DC power from the solar panels, no longer need an inverter, controller or battery. During the sunshine day, when the solar power generated is bigger than the air conditioner power consumption, the ACDC hybrid solar air conditioner can get most power from the solar panels, the efficiency high up to SEER36 rating. The unit can be connected with up to 380v/10A solar DC power. This system is designed for hybrid operation by utilizing the solar providing all the power required during sunshine hours. This system primarily uses solar power, and mixes it with normal 220v~240v AC power if needed.

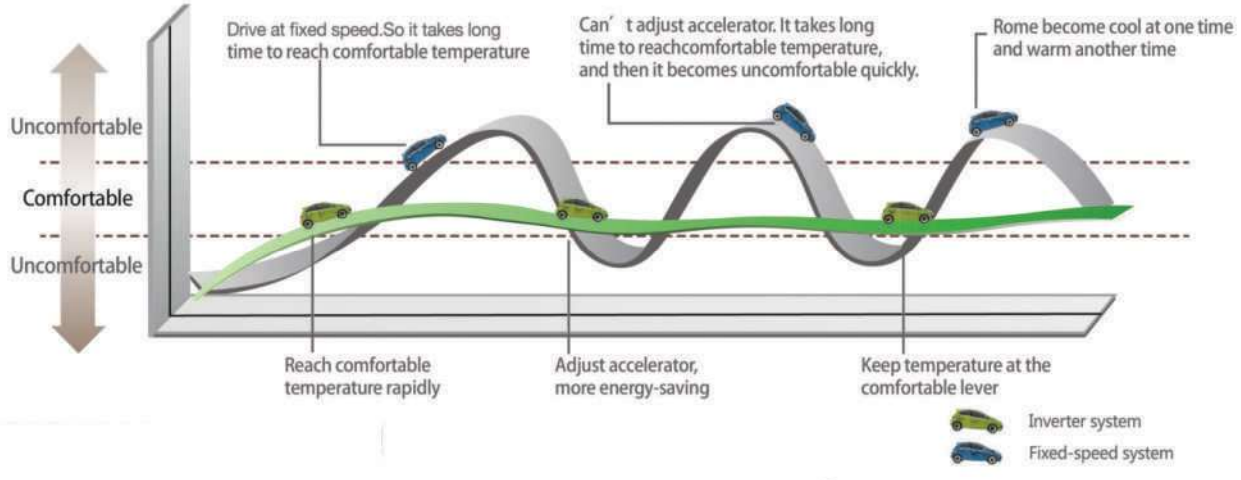
SYSTEM COMPONENT

Indoor & Outdoor unit both adopting DC brushless fan motor and DC permanent-magnet rare earth compressor, greatly reduce the energy loss, ensured low noise. Moreover, the DC brushless fan motor can adjust the frequency and cool/heat power accordingly.

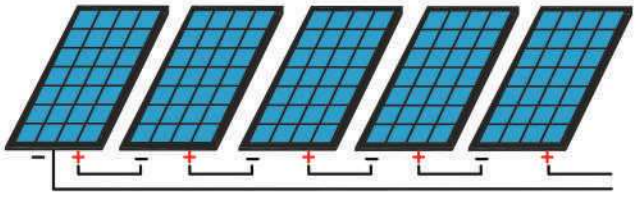
Outstanding Feature

Our ACDC Hybrid Solar Air Conditioner system is designed to use solar. When the grid voltage low to 165v, our system can still work well. Besides the compressor and control circuit, all the main components are DC powered, like high efficient DC fan motor, compressor and electronic expansion valve.

There are several sensors in the system detect the circuit, control the refrigerant flow volume through the electronic expansion valve, thus achieve perfect combination of intelligent refrigerant flow and inverter technology, raise or lower the air conditioner' s cooling/heating capacity according to the actual conditions. The inverter controller manage compressor running speed, refrigerant flow volume and fan speed etc., these all can be managed through the several sensors detect the circuit, and adjust automatically according to the actual conditions. When the room temp. is approached to the setting temp, the system will automatically lower its capacity and power consumption, so the inverter Variable Refrigerant Flow (VRF) technology itself can save 40% ~50% compared to the regular air conditioner.



OTHER FEATURES



2 pc to 9 pcs solar panel

Wide voltage design
Series connect 2 ~9 pcs solar panels, achieve 50~380V DC.

Advanced variable angels air flow design, increased air flow volume and distribution, more comfortable. The longdistance air distribution design can cool/ heat the room quickly.

High strength zinc coated material, strictly anticorrosion process treatment. Even installed at seaside places, still has longer lifetime than the regular air conditioner.

Multi-layer air filter, good for your health.

The ACDC Hybrid Solar Air Conditioner installation is very simple and convenient, similar like the regular air conditioner, connect with the solar panels after installed, plug & run.

Press the "ECO" on the remote controller, the air conditioner instantly enters into ECO energy saving mode without fussy setting and operate.

Auto restart memory function, when the grid power comes back after power cut, the air conditioner can automatically restart and run under previously setting mode.

Outdoor main board reverse installation design, better anti-fungus, better duct and wind prevention, especially suitable for GCC countries.

Intelligent design Mobile APP control, terminal centralized control, uniform management, more energy saving and convenient.