



US Standard

SUPEREN[®]
New Energy Technology

Solar Air Conditioner / DC 48V Power
SuperEn New Energy Technology

-10 °C

Wide operating temperature range

+52 °C



PVfit ⚡
inside



40%
Fast cooling



high temperature
resistant

» The latest advancement proving the superiority of the PVFit[®] technology «



Energy Anytime Anywhere

Off Grid DC48V Solar Air Conditioner

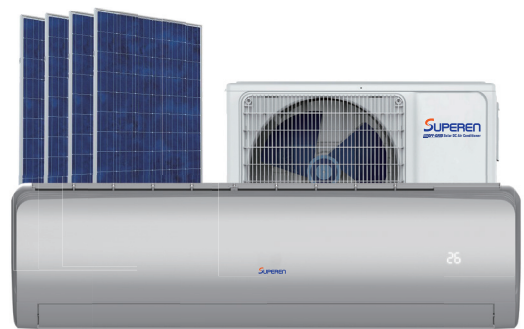
Technical data, Applications, Dimensions

Applications

Off Grid DC48V solar air conditioner is ideal for places with power shortage conditions, particularly for remote telecom station, container house, motor homes, remote locations, load shedding places, boatinf and island locations. As the latest advancement of the PVFit technology, this DC48V solar air conditioner will enable using 100% power from solar.

Your benefits:

- > High-SEER Brushless inverter DC permanent magnet compressors
- > All DC = No Inverter
- > Fast Cooling around 30s / Powerful heating with 1min Provide comfort in time
- > Wide operating temperature range: -10°C to +52°C
- > Anti-Corrosion Technology giving greater corrosion resistance for both outdoor and indoor unit
- > Eco-Friendly R410a Refrigerant
- > Solar connector terminal - Easy connection and maintenance plug and play
- > Low energy consumption
- > Quiet Indoor Unit (As Low As 26dB)



Faster Cooling



Energy Saving



Eco-friendly Refrigerant

Technical characteristics and data

Type	Part number	Nom. input voltage V DC	Capacity Cooling Btu/h	Capacity Heating Btu/h	Power Input Cooling W	Power Input Heating W	SEER WW	HSPF WW	Net Weight Indoor/Outdoor Kg	Net Size Indoor mm	Net Size Outdoor mm
DC48V	DC4812VRFS-US	42~60	12,000	12,000	250~1050	315~1114	22	11	11/47	850/300/180	800/545/315
DC48V	DC4809VRFS-US	42~60	9,000	9,000	225~700	280~735	23	10	9/41	800/300/198	730/545/285

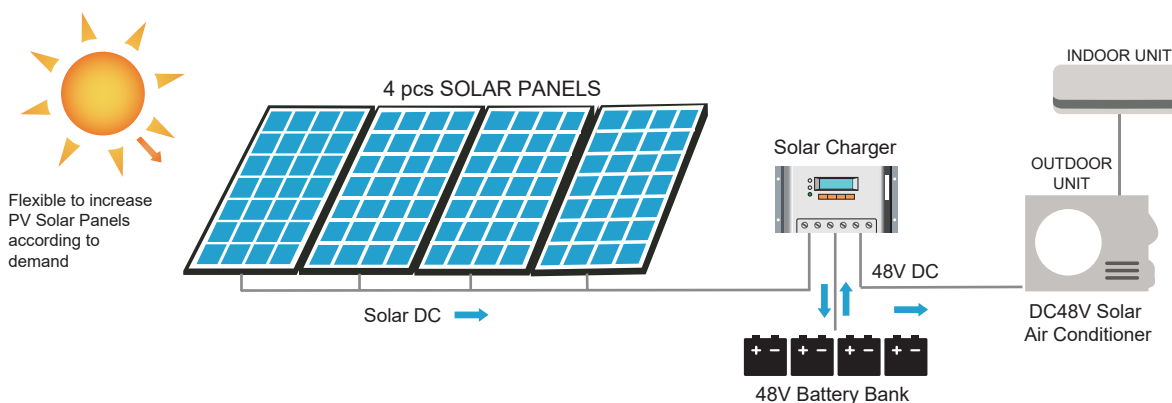
Specification

- > 12,000Btu capacity, 100% DC operation
- > Wide operating temperature range: -10°C to +52°C
- > Low energy consumption: SEER 22 (North America)
- > Low voltage protection: prevent battery overdischarge
- > Designed in accordance with UL and CSA standard
- > Approval: ETL, AHRI
- > Design life "> 12 Years - Very Long Life" according to normal installation conditions
- > Super Cooling performance is ensured by big compressor together with the greatest heat exchange system
- > 15m over long distance air flow design

Off Grid DC48V Solar Air Conditioner System Diagram & Component

System Diagram

Depending on conditions, the entry level set up can operate up to 10 hours per day using 4~6pcs 310w panels. A configuration of 6~8 pcs panels can provide up to 15 hours of daily operation, with 8~12 pcs panels yielding up to 20~24 hours. The batteries and charge controller must be sized appropriately.



System Component



> DC Powered Indoor unit
One reason that a DC Air Conditioner makes the best use of solar power is because there is no loss associated with converting DC power from solar panels into AC power to run a standard air conditioner



> 100% DC Powered Outdoor unit
Using standard solar panels which produce native DC power, the 48V DC air conditioners avoid the inefficient addition of an "inverter" that converts solar DC current into AC current.



> DC Brushless fan motor
We use 48V DC brushless fan motors for both indoor and outdoor units. DC brushless fan motors can greatly reduce energy consumption, and run with super low noise. Plus, 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 Panel
We suggest you to connect 4 to 10 pcs 260W-320W solar panels to drive each solar air conditioner. Both mono-crystalline and poly-crystalline solar panels can be accepted.



> 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.

Service – We Provide Complete Energy Solutions

Keeping your business on the move

We are the Expert

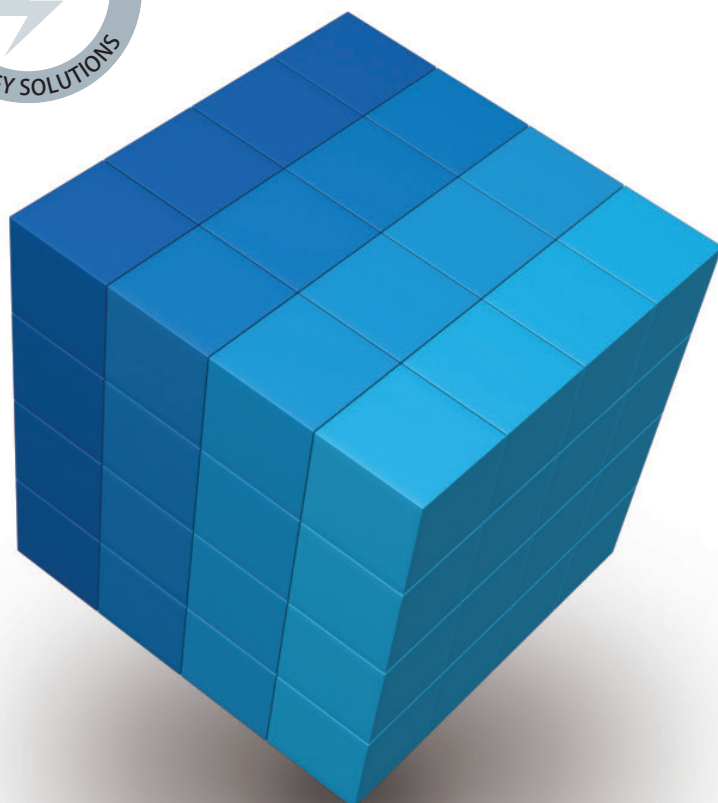
With more than 10 years of experience in solar air conditioner development, production and application, our team is trying to not only supply quality product but also providing complete energy solutions for our clients.

Leave the responsibility for the maintenance of your air conditioner and solar system to the professionals: our experienced service contract provides you with exceptional economic advantages through time savings, cost savings and safety!



Installation of Solar Air Conditioner System

- > Development of complete turnkey solutions from the design concept to installation and commissioning.
- > Installation according to legal and safety regulations including UL certification by approved installation technicians.
- > Training and certification of external installation technicians according to UL regulations.



-  **Inspection Contract**
-  **Maintenance Contract**
-  **Lifetime Warranty Contract**
-  **Full Service Contract**

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SuperEn New Energy Technology

We are a Energy Solution Provider, supplying AC/DC Solar Air conditioners, 100% Off Grid Air Conditioners, solar panels, and solar power systems. Our vision is to protect the environment by manufacturing and designing products that utilize solar energy and to give all countries of the world a sustainable quality of life.

We Invent – we don't copy!

We introduce a range of innovative solar energy saving products that are cost effective, clean and green.