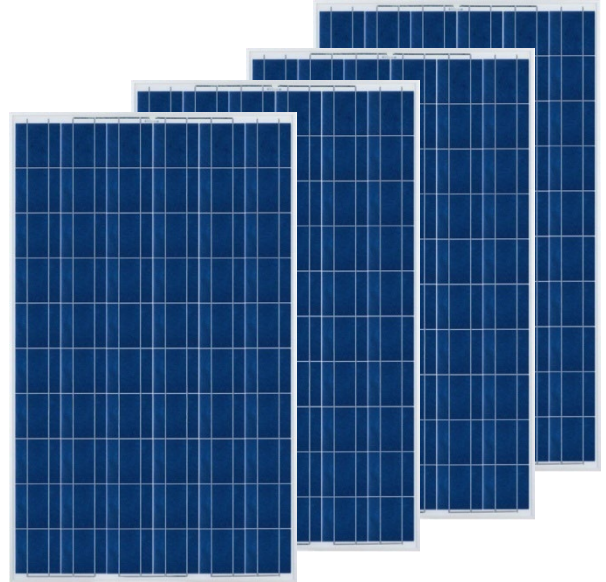


Solar Air Conditioner

Solar Hybrid Heat Pump
Model ACDC24C

Connect 4 Or More Panels (\geq Total 1800W)
Runs On Solar Power Only, AC Only, or Solar w/ AC Power
24,000 BTU Cooling & Heating
Plug-And-Play Solar Connection
No Batteries or Grid/AC Required

The Worlds Original Solar AC Manufacturer
Celebrating Over 10 Years of Production

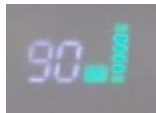


Home / Office

Keep the inside cool all day for next to nothing in energy costs. Preventing daytime heat build-up also cuts evening cooling costs. Cool or heat up to a 1500 Sq. Ft. (140m²) room..

International

Compatible with all types of solar panels & 50Hz and 60Hz power, use it anywhere in the world.



Display shows DC/Solar power utilization. Shown in heating mode at setting 90 °F, no AC connected. Display visible only when unit is on.



Simple To Install

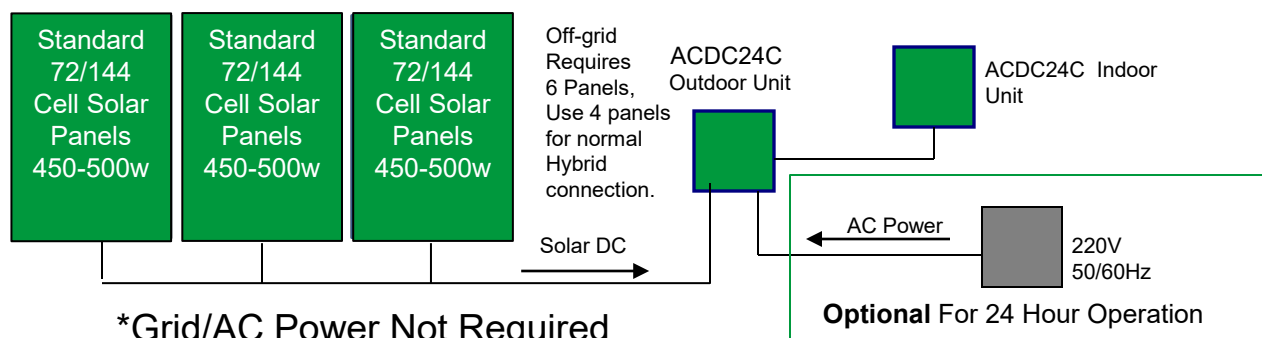
This unit installs exactly like a normal mini-split air conditioner. Standard MC4 cabling are used to connect the solar panels directly to the ACDC24C outdoor unit.

Ultra-High SEER Solar Air Conditioner

Your air conditioner needs the most power when the sun is shining, a coincidence you can take advantage of with our ACDC24C solar air conditioner. It can keep an indoor area cool during the day for free, or for just pennies, at times when solar power is not sufficient to carry 100% of the load. Use this system to cool a small area or to augment a larger system.

Connect up to six 72/144-cell panels in series, suggested panels \geq 450w. Many other panel configurations are possible, contact us to discuss. The unit can also connect to 220v (208v-240v) AC power for extra power during overcast conditions, transient clouds, or at night. No need for batteries. Even when the sun is not shining at all, with an AC connection this ultra high-efficiency (**SEER 20** without solar) heat pump will keep you comfortable and save you money using far less electricity than a normal AC or heat pump unit of the same capacity. Calculated using only paid energy in hybrid AC-DC operation, the ACDC24C can produce an equivalent SEER above **SEER 60**. Max string voltage 325 VOC rating, max actual string voltage 370v DC. For ACDC24C we suggest PV \geq 450w per panel. Actual string under load voltage must be $>$ 125v DC to operate on solar.

Connects Directly To 4-6 Solar Panels



No batteries needed. Like all DC-Inverter air conditioners, the ACDC24C compressor runs on DC power, which may at times be converted from AC power. This special solar air conditioner can accept DC power directly from solar panels, without needing an inverter, charge controller, or batteries. The solar DC power directly replaces AC power from the power company and can cut daytime energy costs for air conditioning or heating by up to 100%. No power is exported and no net metering agreement or special meter is needed. Can be used with all-DC, all-AC, or AC-DC whereby the unit can seamlessly blend both power sources with a bias towards using all available DC (solar) power first.

During the day, the ACDC24C can get all or most of its power from 4-6 $\geq 450W$ solar panels. The unit can be connected with up to 6 panels for running on 100% solar power with no AC connection or when the sun is not at full strength. The system is designed for hybrid operation with solar providing most or all of the energy needed during daylight hours, supplemented by AC power at night or during times of cloud cover. This air conditioner may be connected to a 208-240VAC 50/60Hz power source as desired for night time or cloudy day operation. Ratings per AHRI 210/240.

| | | | |
|------------------------------------|-------------------|-------------------------------------|---|
| Power AC | 208-240V, 50/60Hz | SEER (AC) / ACDC Equivalent | 20 / 60 |
| *Cooling Capacity (rated/max) BTU | 23,000 / 24,000 | HSPF (AC) / ACDC | 9.5 / 29 |
| Power Input @ Max Cooling | 1950W | Power DC, PV, series connection | 110-300 Vmp |
| Avg. Power Consumption, Cooling | 1143W | Solar Power Input | $\leq 15a$ |
| Cooling EER / COP at Rated Cooling | 19.78/ 5.8 | Outdoor Range (cooling/heating) | 50F-125F / 5F-86F |
| SEER / SEER w/ solar calculation | >21 / >65 | LRA / RLA | 29 / 5.2 |
| *Heating Capacity | 24,000 BTU | Swing (manual) | Up & Down |
| Power Input @ Rated Heating | 2400W | Dehumidification | 2.15 L/h |
| Avg. Power Consumption, Heating | 1390W | Outdoor Unit, weight | 106 Lbs. |
| Heating COP (Full Speed) | 2.92 | Outdoor Unit Dimension (W*H*D) | 900×700×350 mm |
| Max power Input | 2400W | Refrigerant g/oz | 1.62 kg / 58 Oz. |
| Indoor Fan Motor | BLDC | Max. Lineset / Max. Elevation (Ft.) | 50 ft. / 16 ft. |
| Indoor Fan Input (Highest speed) | 50W | Moisture Removal | 2.4 L/h |
| Indoor Air Flow (CFM) | 1300/1090/880 | Refrigerant g/oz | 1.62 kg./ 58 Oz. |
| Outdoor Fan Motor | Variable BLDC | Refrigerant Oil | VG74 / 770 ml |
| Indoor Noise Level (Hi/Med/Lo) | 50/42/34 dB(a) | Design Pressure | 601/167 PSIG |
| Indoor Unit Dimensions (W*H*D)mm | 1121x329x231 | Liquid side/ Gas side (Flare) | $\phi 6.35 \times 0.5 + \phi 15.88 \times 0.75$ |
| Indoor / Outdoor Unit Weight | 30 Lbs. / | Certifications | ETL / UL, Energy Star |

All specifications subject to change without notice. Images for reference only. See website for full details on operation and requirements. *Off-grid BTU capacity will be reduced when solar power is limited. An AC backup connection is recommended for full & uninterrupted operation. Extra panels, up to eight, should be used for intended off-grid applications.