

# Solar Air Conditioner

Solar Hybrid Heat Pump  
Model ACDC12C

Connect Three Or More Panels ( $\geq$  Total 870W)  
Runs On Solar Power Only or Solar & AC Power  
12,000 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 750 Sq. Ft. (69m<sup>2</sup>).

## 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

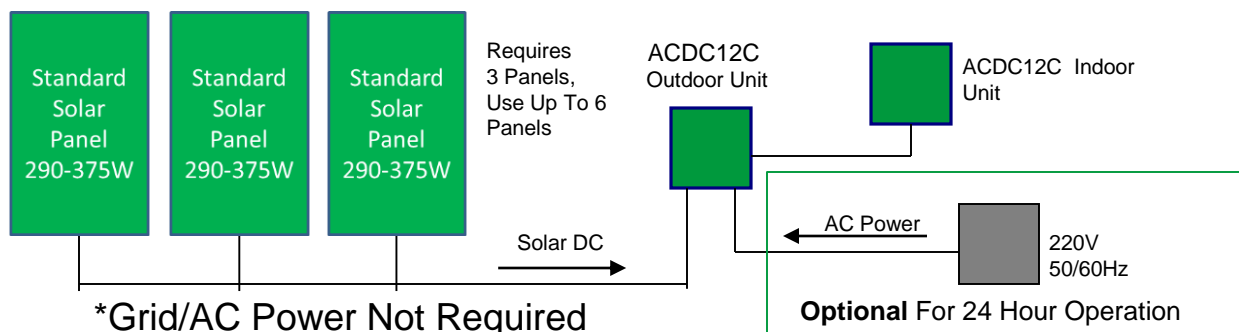
This unit installs exactly like a normal mini-split air conditioner. Standard MC4 cabling can be used to connect the solar panels directly to the AC unit.

## 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 ACDC12C 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 three (up to six) solar panels (290-360w per panel) in series. 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 22 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-for energy, the ACDC12C produces an equivalent SEER above **SEER 75**.

## Connects Directly To Solar Panels



No batteries needed. Like all DC-Inverter air conditioners, the ACDC12C 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.

During the day, the ACDC12C can get all or most of its power from three  $\geq 300W$  solar panels. The unit can be connected with up to six panels for running on 100% solar power even 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	Power DC, PV, series connection	100-300 Vmp
*Cooling Capacity	12,000 BTU/h	Solar Power Input	$\leq 15a$
Power Input @ Full Cooling Operation	960W	Outdoor Range (cooling/heating)	20F-125F / 5F-86F
Avg. Power Consumption, Cooling	544W	Outdoor Noise Level Max	53 dB(a)
Cooling EER / COP at 100% power	12.5 / 3.66	Outdoor Fan Motor	Welling BLDC
SEER / SEER w/ solar calculation	$>22$ / $>75$	Outdoor Air Flow CFM max.	1150
*Heating Capacity	12,000 BTU/h	Outdoor Unit, weight	71 Lbs.
Power Input @ Full Heating Operation	1028W	Outdoor Unit Dimension (W*D*H)	34" x 13" x 22"
Avg. Power Consumption, Heating	601W	Compressor	Toshiba/GMCC Rotary
Heating COP	3.42	Refrigerant / Oz. / G.	R410A / 44.1oz. / 1150g
HSPF	11	Max. Lineset / Max. Elevation (Ft.)	50 ft. / 16 ft.
Indoor Fan Motor	BLDC	Moisture Removal	1.3 L/h
Indoor Fan Input (Highest speed)	23W	Rated Current (RLA)	5.9A
Indoor Fan RPM (Hi/Med/Lo)	1250/1000/850	Locked Rotor Amp (LRA)	.58
Indoor Air Flow CFM	360/340/295	Refrigerant Oil	VG74 / 370 ml
Indoor Noise Level (Hi/Med/Lo)	41/38/32 dB(a)	Design Pressure	550/340 PSIG
Indoor Unit Dimensions (W*D*H)	34" x 8" x 12"	Liquid side/ Gas side	1/4" / 3/8" Flare
Indoor Unit Weight	22 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.  
 \*BTU capacity may be reduced when solar power is limited. An AC backup connection is recommended for full & uninterrupted operation.