ZAMNA CLIMATE

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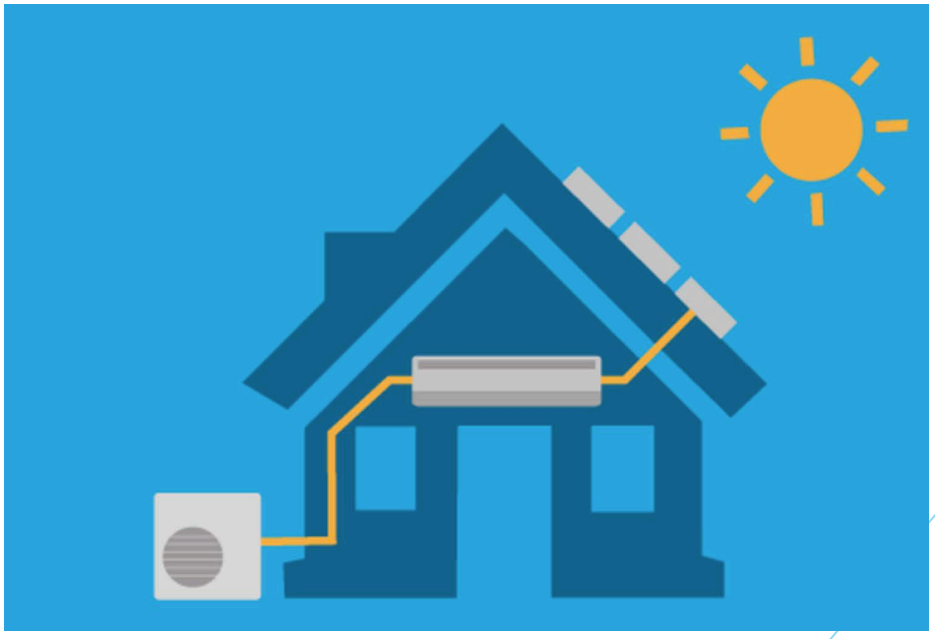


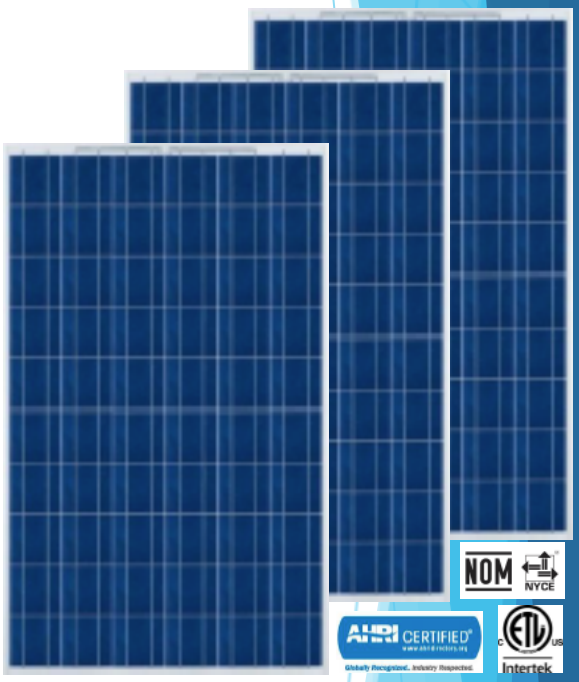
Solar DC Air Conditioner

12,000 BTU 48V DC Heat Pump VRF Dynamic Capacity Compressor 100% DC - No Inverter

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

- 48v Solar/Battery Power
- 12,000 BTU Heat Pump
- Cool or Heat up to 700 ft^2
- Eligible For US Tax Credits
- Variable Capacity
- Anti-Corrosion Technology
- Eco-Friendly R410a Refrigerant
- Washable Filters
- Digital Wireless Remote
- Quiet Indoor Unit (As Low As 26dB)

The DC48 is designed from the ground up to operate on DC power. There is no AC power used inside or needed externally to operate the unit. DC power is connected to the outdoor unit. The indoor unit receives DC power from the outdoor unit.

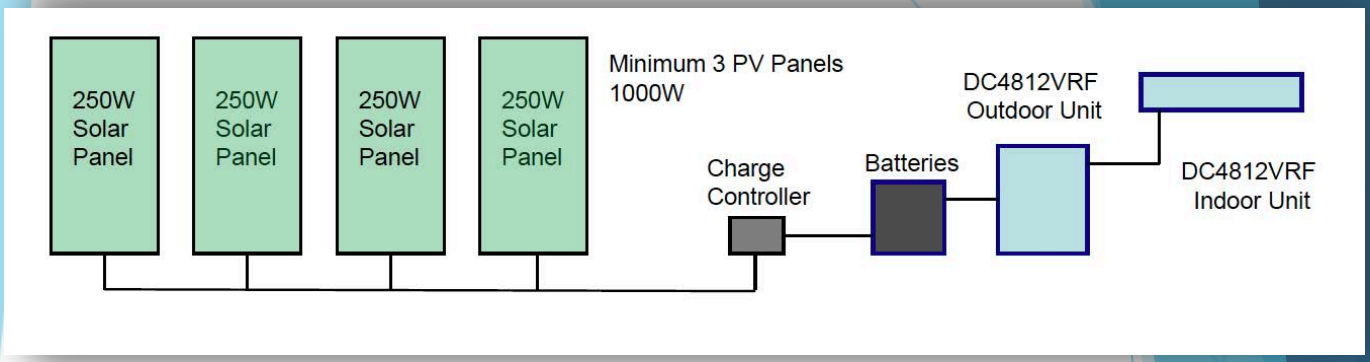


Variable Refrigerant Flow & Capacity means that the air conditioner is always the right size for the conditions and is never wasting power. This unit uses utilizes SeaSpray™ anti-corrosion technology including hermetically sealed compressor, sealed circuit boards, and silica-nanotech condenser and evaporator protection. A product of Zamna Solutions, a trusted name in specialty air conditioning manufacturing and renewable energy.

Complete Kits
48v DC Air Conditioner 3, 6 or 9 x 300w PV Panels PV Mounting Hardware Charge Controller Deep Cycle Batteries Refrigerant Line-set
*Customer Supplied Wiring

PV Solar Panels & Batteries needed For System Operation @ Typical Conditions*						
Hours Per Day Solar Operation		9	15	20	24	*Assumes 5 hours of insolation &
PV Solar Panels	300w	3	6	9	12	properly sized for the space. AH
6v Golf Cart Batteries	225 AH	0	8	16	16	has been doubled to extend
12v deep Cycle	130 AH	4	0	0	0	battery life.

Powered By Batteries & Solar Panels



Using technology similar to SEER 27 air conditioners, the DC24 compressor runs on DC power at various frequencies and refrigerant flow depending on cooling load. The all-DC solar air conditioner uses DC power directly without needing an inverter or other AC power source. Due to solar voltage fluctuations the unit cannot connect directly to solar panels and must have a stable source of power such as batteries.

Depending on conditions, the entry-level setup can operate up to 10 hours per day using 4 x 250w panels. A configuration of 6 panels can provide up to 15 hours of daily operation, with 8 panels yielding up to 20 hours. A 10 panel configuration can handle up to 24 hours per day operation. Batteries and charge controller must be sized appropriately. See our website for calculation information at https://www.zamnasolutions.com/dc-offgrid-ac or call us for pre-sales technical support.

Power DC	48 VDC		DC Power Input (Max.)	20 Amps
Power DC Range	46-58 VDC		Low Voltage Disconnect	46V
Max Cooling Capacity	12000 Btu/h		Operating Range (cooling/heating)	20F-122F/5F-90F
Max Power Input, Cooling	980W		Outdoor Noise Level	50 db
Normal Power Consumption, Cooling	< 500W		Outdoor Fan Motor	Panasonic BLDC
Cooling COP	5.66		Outdoor Fan Input	35W DC
Cooling EER	19.30		Outdoor Air Flow	1295 CFM
Max Heating Capacity	12624 Btu/h		Outdoor Unit Dimension (W*D*H)	30.4" x 10.2" x 21"
Max Power Input, Heating	1050W		Compressor	GMCC Toshiba
Normal Power Consumption, Heating	722		Refrigerant	R410A / 38 oz.
Heating COP	3.69		Pre-charged For Line Set L	25 Ft.
HSPF	9.6		Max. Lineset Length /Elevation	72 ft. / 16 ft.
Indoor Fan Motor	Panasonic BLDC		Moisture Removal	.25 G/h
Indoor Fan Input	30W DC		Digital Display	F or C
Indoor Fan RPM (Hi/Med/Lo)	1250/900/700		Refrigerant Oil	VG74 / 17 oz.
Indoor Air Flow (Hi/Med/Lo)	412/295/235 CFM		Design Pressure	550/340 PSIG
Indoor Noise Level (Hi/Med/Lo)	39/29/26 dB		Liquid side/ Gas side	1/4" / 3/8"
Indoor Unit Dimensions (W*D*H)	32" x 8.6" x 11.5"		* Cooling COP & EER Rated at normal operating conditions	