

DC4812VRF

# Solar/DC Air Conditioner



Specialty HVAC  
Manufacturing  
Since 2007

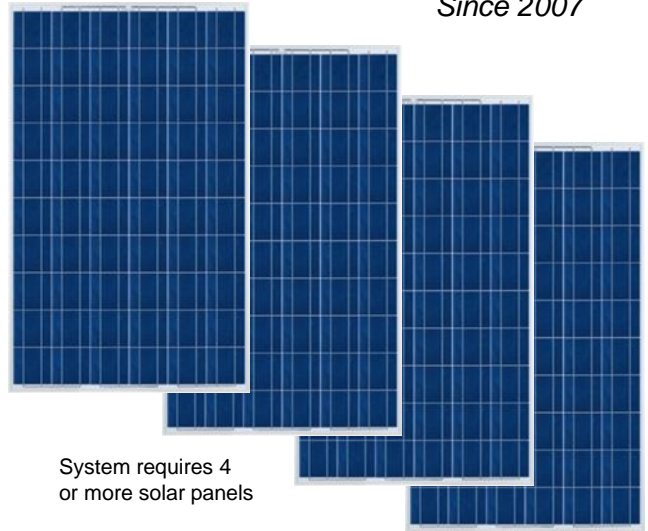
12,000 BTU 48V DC Heat Pump  
VRF Dynamic Capacity Compressor  
100% DC - No Inverter



Wall Mount Indoor Unit (IDU)

The DC4812VRF 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.

- **48v Solar/Battery Power**
- **12,000 BTU Heat Pump**
- **Cool or Heat up to 700 ft<sup>2</sup>**
- **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)



System requires 4 or more solar panels



User Friendly Remote  
w/ sleep mode, timer,  
& follow-me  
(C or F)

**Complete Kits**  
 48v DC Air Conditioner  
 4, 6 or 8 x 250w PV Panels  
 PV Mounting Hardware  
 Charge Controller  
 Deep Cycle Batteries  
 Refrigerant Line-set  
 \*Customer Supplied Wiring  
**Starting at \$3995**

### PV Solar Panels & Batteries Needed For System Operation @ Typical Conditions\*

Hours Per Day Solar Operation		10	15	20	24	*Assumes 5 Hours of Sun (Solar Insolation) and normal AC duty cycle. Battery discharge levels have been reduced to extend battery life.
PV Solar Panels	250w	4	6	8	10	
6v Golf Cart Batteries	AH 225	0	8	16	16	
12v Deep Cycle	AH 130	4	0	0	0	



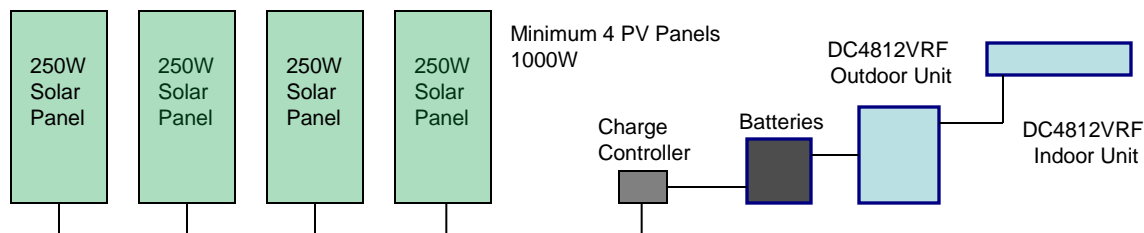
ODU (Outdoor Unit)

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 HotSpot Energy, a trusted name in specialty air conditioning manufacturing and renewable energy.

## Powered By Batteries & Solar Panels



Using technology similar to SEER 27 air conditioners, the DC2418VRF 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 [www.hotspotenergy.com/DC-air-conditioner/](http://www.hotspotenergy.com/DC-air-conditioner/) or call us for pre-sales technical support.

### DC4812VRF DC Solar AC Specifications

Power DC	48 VDC	DC Power Input (Max.)	22 Amps
Power DC Range	46-58 VDC	Low Voltage Disconnect	46V
Max Cooling Capacity	13098 Btu/h	Operating Range (cooling/heating)	20F-122F/5F-90F
Max Power Input, Cooling	960W	Outdoor Noise Level	55 db
Normal Power Consumption, Cooling	< 500W	Outdoor Fan Motor	Panasonic BLDC
Cooling COP	5.45	Outdoor Fan Input	35W DC
Cooling EER	18.61	Outdoor Air Flow	1295 CFM
Max Heating Capacity	13632 Btu/h	Outdoor Unit Dimension (W*D*H)	30" x 11.2" x 23.2"
Max Power Input, Heating	1081W	Compressor	BLDC Rotary
Normal Power Consumption, Heating	866	Refrigerant	R410A / 56.5 oz.
Heating COP	3.69	Pre-charged For Line Set L	23 Ft.
HSPF	9.6	Max. Lineset Length /Elevation	66 ft. / 26 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" / 1/2"
Indoor Unit Dimensions (W*D*H)	36.3" x 8.8" x 11.5"	* Cooling COP & EER Rated at AHRI 210/240 EV	