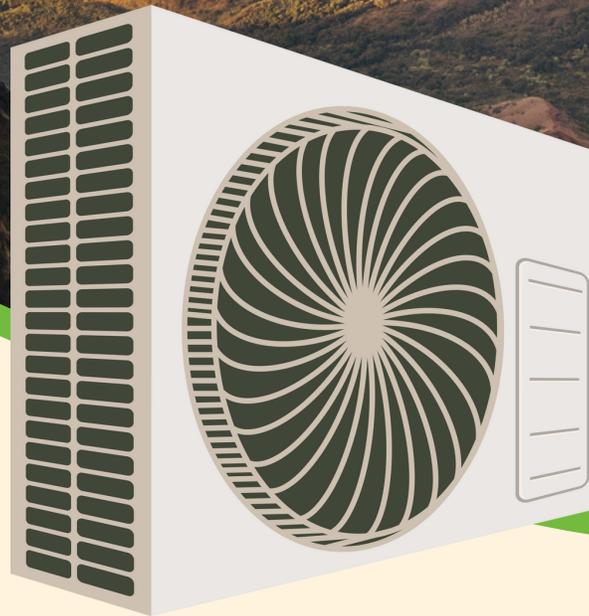




# SunChillers™

Datasheet



Our team at Adon Renewables has developed an innovative compressor that powers our proprietary Solar HVAC system. We utilize a hybrid of direct current (DC) and alternating current (AC) technology that can switch between using solar and grid energy resulting in huge cost savings - up to 90% during peak sun hours.

**(DC/AC)  
Hybrid Technology**



**Wifi-Enabled**



**Mobile App  
Control**



**Schedule  
Heat/Cool**

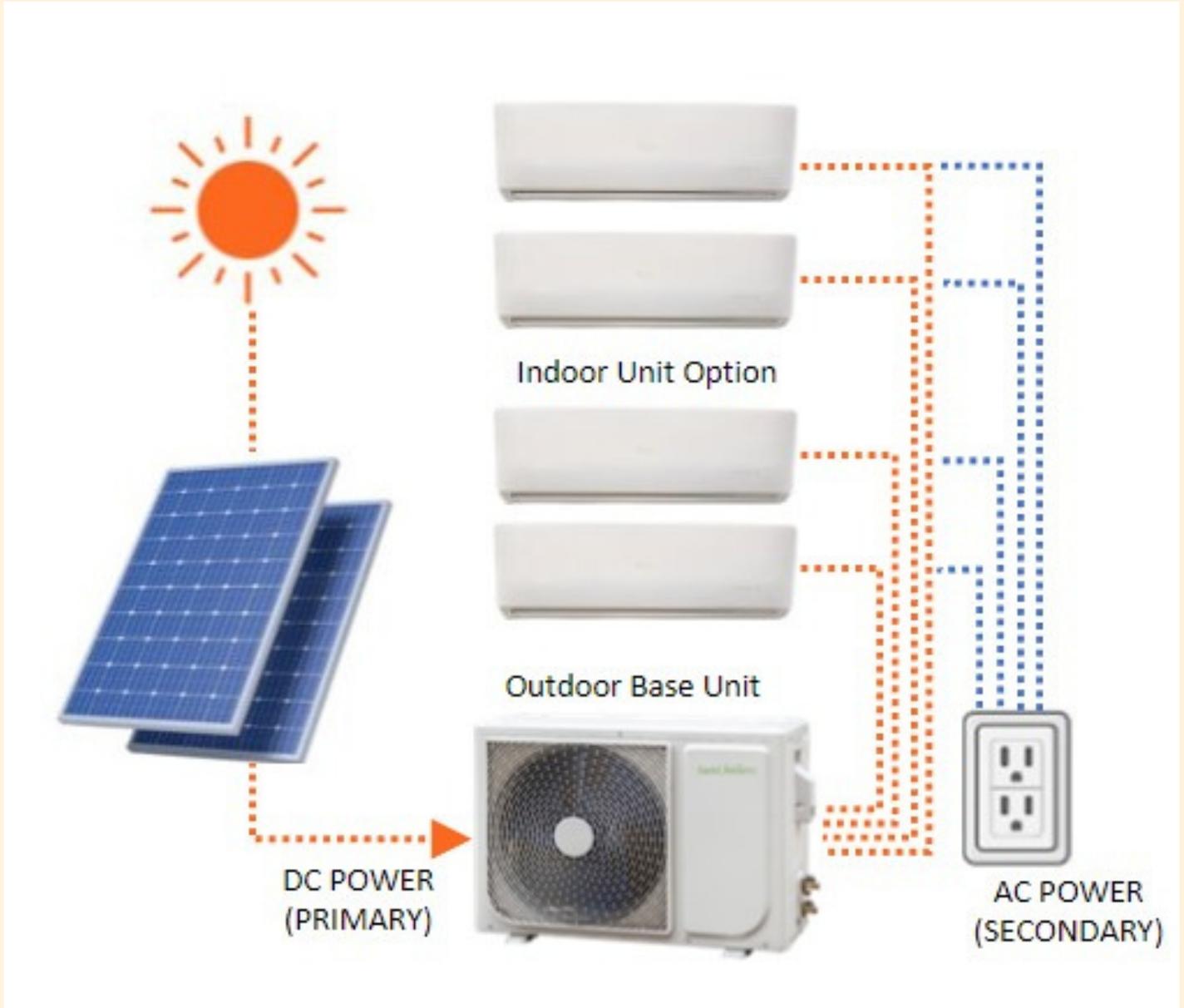


**Immediate  
Energy Savings**



# SunChillers™

## System Overview



**Indoor Option One:**  
12,000 BTU (Up to 4)

**Indoor Option Two:**  
24,000 BTU + 12,000 BTU (up to 2)

# SunChillers™

## Outdoor Compressor (Required)

36,000 BTU



### Features:

- No Inverter
- No Backfeed to Central Grid
- Condenser Uses Rectified Grid Power when Solar is Not Available
- Use Solar Power to Cool/Heat up to 4 Separate Areas, with independent control
- Qualifies for many incentives

# SunChillers™

## 4 Venting Options:



Wall Mount



Ducted Unit



Overhead Unit



Cassette Unit

## System Performance Data

### Power Supply

Normal Operational Voltage	(V, Ph, Hz)	208/230, 1, 60, 1 Phase, 60Hz
Voltage Range	(V)	187-253

### AC Electrical

Minimum Circuit Ampacity	(A)	30.0A
Max. Fuse	(A)	45.0A

### DC Electrical

Voltage	(V)	50v-300v
Wattage (Max)	KW	2.5KW
Amperage (Max)	A	15A

### Cooling

Rated Capacity	(Btu/h)	36000(8209~40555)
Capacity Range	(Btu/h)	36000(8209~40555)
Power Input	(W)	3125
Rated Current	(A)	13.6
EER	(Btu/W)	11.5
SEER without Solar	(Btu/W)	23.0
SEER with Solar		>36

### Heating at 47F

Rated Capacity	(Btu/h)	36000(8209~40555)
Capacity Range	(Btu/h)	36000(8209~40555)
Power Input	(W)	3000
Rated Current	(A)	13.0
COP	(W/W)	3.61
HSPF4	(Btu/W)	11.3
HSPF5	(Btu/W)	9.2

### Heating at 17F

Max Capacity	(Btu/h)	28510
--------------	---------	-------

### Refrigerant Pipe Data

Design Pressure	(PSIG)	550/340
Refrigerant Type	(Oz)	R410A/134.04
Refrigerant Precharge	(ft)	30.0
	(m)	98
Additional Charge for Each Ft (Φ6.35 (1/4") Liquid Pipe)	(oz/ft)	0.0161
	(g/ft)	30
Additional Charge for Each Ft (Φ9.52 (3/8") Liquid Pipe)	(oz/ft)	0.322
	(g/ft)	30
Liquid Side	inch	4 x 1/4"
	mm	4 x Φ4.35
Gas Side	inch	3 x 3/8" + 1 x 1/2"
	mm	3 x Φ9.52 + 1 x Φ12.7
Max. Length for All Rooms	(ft)	262
	(m)	80
Max. Length for One Indoor Unit	(ft)	115
	(m)	35
Max. Height Difference Between Indoor and Outdoor Unit	(ft)	49.0
	(m)	15.0
Max. Height Difference Between Indoor Units	(ft)	33
	(m)	10.0
Outdoor (Cooling/Heating)	(Deg. °F)	-13~122/-13~75
	(Deg. °C)	-25~50/-25~24
Application Area	(sq.ft)	516.67~753.47
	(m2)	48~70

## Outdoor Unit Data

### Compressor

Type		DC
Model		Rotary
Capacity	(Btu/W)	32380
Input	(W)	2600
Rated Current (RLA)	(A)	--
Refrigerant Oil/Oil Change	(ml)	VG74/1000
Throttle		Capillary + EXV

### Outdoor Fan Motor

Model		DC
Qty.		1
Input	(W)	150.0
RLA	(A)	--
Speed	(r/min)	1000/900/750

### Air Flow & Noise Level

Outdoor Airflow (Max.)	(CFM)	2147.06
Outdoor Noise Level	[dB(A)]	63

### Outdoor Unit

Dimension (W x D x H)	(inch)	37.24x16.14x31.89
	(mm)	946x410x810
Packing (W x D x H)	(inch)	42.91x19.69x34.84
	(mm)	1090x500x885
Net/Gross Weight	(lbs.)	169.09/181.44
	(kg)	76.7/82.3

## Outdoor Unit Dimension

