

# Solar Air Conditioner

## SW-HYBRID-12U

SEER 35 | Solar Hybrid Heat Pump  
(3.5kw, 1ton, 12000btu, 1.5hp)



- Runs on solar power & AC power
- 12,000 (4500-14000) BTU Cooling
- Plug and play solar connection
- No batteries required



Wall Mount Indoor Unit (IDU)



Outdoor Unit (GOU)



**Energy Saving**



**User Friendly  
Remote w/ sleep  
mode, time (°C or °F)**



**Simple to Install**

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

### Ultra-High SEER Solar Air Conditioner

The SW-HYBRID-12U can utilize the maximum amount of available solar power\* drawn from the PV modules directly during the day even when there is no grid-tied utility power at all. Even when the sun is not shining at all during the night, this ultra high efficiency heat pump (A SEER 21 rating without solar and SEER 35 with solar) will keep you comfortable and save you money using far less electricity than a normal air conditioner or heat pump of the same capacity.

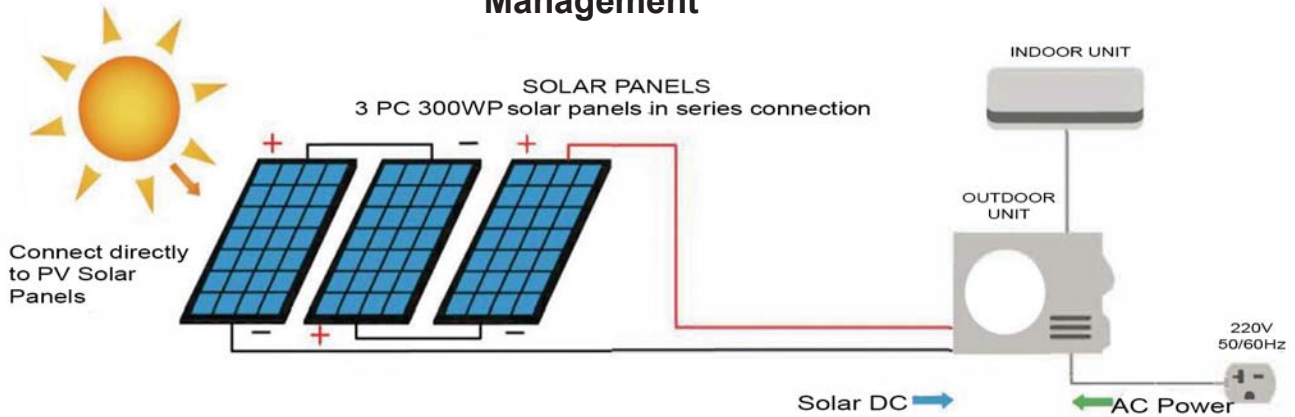
\*Ensuring extra PV wattage through larger module capacity can help in times where irradiation levels from the sun is reduced, due to early and late times of the day or due to cloud coverage.

**Model: SW-HYBRID-12U**  
**Solar Air Conditioner**

**SW-HYBRID-12U**



**Intelligent  
Power  
Management**



Like all DC-Inverter air conditioners, the SW-HYBRID-12U compressor runs on DC power converted from AC power, but with the Intelligent Power Management technology this system can also accept DC power directly from solar panels. Without needing any inverters, controllers or batteries. The solar DC power directly replaces any equivalent amount of AC power from the power company and can cut daytime energy cost for air conditioning or heating by up to 80-90%.

- 1) During the day, the SW-HYBRID-12U can get most out of its power from solar energy resulting in an efficiency above SEER 35 when using two  $\geq$  300W solar panels.
- 2) The unit can be connected 2 x 300W up to 8 x 300W panels.
- 3) The system is designed for hybrid operation with solar providing most of the energy needed during daylight hours.
- 4) This air conditioner must be connected to a 220/240VAC power source and is not designed for off-grid operation.

## SW-HYBRID-12U Solar AC Specifications

Power AC	220-240V 50/60Hz	Solar Power Input	$\leq$ 2700W
Power DC	50-380V	Solar Power Input	$\leq$ 10A
Cooling Capacity	12000 (4500 - 14000)BTU/h	Operating Range	17 - 32C
Cooling Power Input	900W	Outdoor Sound Pressure Level	55 dB (A)
Operating Avg. Power Consumption	550W	Outdoor Fan Speed	900/680 rpm
COP	3.8	Motor Outdoor Fan	40WDC
SEER	$>20/>35$	Input Outdoor Air Flow	1150CFM
Heating Capacity	13000 (3250 - 14500) BTU/h	Outdoor Unit Dimension (WXHXD)	835x540x320mm
Heating Power Input	1250	Compressor	GMCC
Avg Power Consumption, Heating	600W	Refrigerant	R410A
Rated Power Input	1300W	Connection Pipe Length	7.5m
HSPF	9.8	Gas Additional Charge	20g/m
Indoor Fan Type	Cross-flow	Outer Diameter Liquid Pipe	6mm
Indoor Fan Output	20W	Outer Diameter Gas Pipe	9.52mm
Indoor fan Motor Cooling Speed (SH/M/L/SL)	1300/1080/900/740/-r/min	Max Distance Height of Pipe	10m
Indoor fan Motor Heating Speed (SH/M/L/SL)	1300/1160/1140/920/-r/min	Max Distance Length of Pipe	20m
Sound Pressure Level (SH/h/M/L/SL)	40/36/32/26/-dB (A)	Application Area	16 - 24m <sup>2</sup>