

SOLAR AIR CONDITIONER

Experience next-generation hybrid solar air conditioning engineered for maximum energy efficiency, lower electricity costs, superior comfort, and sustainable performance.



SOLAR + GRID HYBRID TECHNOLOGY

Reliable Cooling Anytime,
Anywhere.



**HYBRID
SOLAR TECHNOLOGY**



**UP TO 80%
ENERGY SAVINGS**



**SMART INVERTER
COOLING**



**ECO-FRIENDLY
PERFORMANCE**

ABOUT

A game-changer! The MeLana Solar Air Conditioner is an innovative solution that harnesses solar energy to provide efficient cooling. Here are some key benefits and features of this advanced technology:

Key Benefits

- **Renewable Energy Source:** The air conditioner uses solar energy as its primary power source, reducing reliance on fossil fuels and lowering carbon emissions.
- **Energy Efficiency:** By utilizing solar energy, it significantly reduces energy consumption and operational costs.
- **Low Operating Costs:** With solar energy as the primary source, operating costs are minimized, especially during peak sunlight hours.
- **Environmentally Friendly:** This technology promotes sustainability and reduces the environmental impact of traditional air conditioning systems.

Key Features

- **Direct Solar Connection:** The air conditioner connects directly to solar panels, eliminating the need for a solar charge controller or inverter.
- **Hybrid Model:** The system automatically switches to grid power when sunlight is insufficient or during nighttime, ensuring uninterrupted cooling.
- **Primary Energy Source:** Solar energy serves as the main power source, reducing dependence on grid electricity.
- **Innovative Technology:** This direct solar air conditioner represents a cutting-edge solution for sustainable and efficient cooling.

Applications

- **Residential Users:** Ideal for homeowners looking to reduce their carbon footprint and energy bills.
- **Commercial Users:** Suitable for businesses seeking to lower energy consumption and operating costs.
- **Off-Grid Applications:** Perfect for remote areas or communities without access to grid electricity.



Reduce your reliance
on fossil fuels



Lower your
energy bills



Increase your energy
independence



Contribute to a cleaner,
healthier environment

Solar Panel Connection

The MeLana Solar Air Conditioner uses three to six solar panels to deliver the energy needed for daytime operation. It connects directly to solar panels, which generate DC power from sunlight.

DC Power Utilization

The DC power generated by the solar panels is used directly by the air conditioner, eliminating the need for a solar charge controller or inverter.

Cooling Cycle

The air conditioner uses DC power to run the compressor, fan, and other components, effectively cooling the space.

Hybrid Mode

When sunlight is insufficient or during nighttime, the air conditioner automatically switches to grid power, ensuring continuous cooling.

Energy Efficiency

The MeLana Solar Air Conditioner optimizes energy efficiency by using solar energy as the primary power source. It reduces reliance on grid electricity and helps save on energy bills. With its official SEER 22 rating, the unit continues to deliver exceptional energy savings.

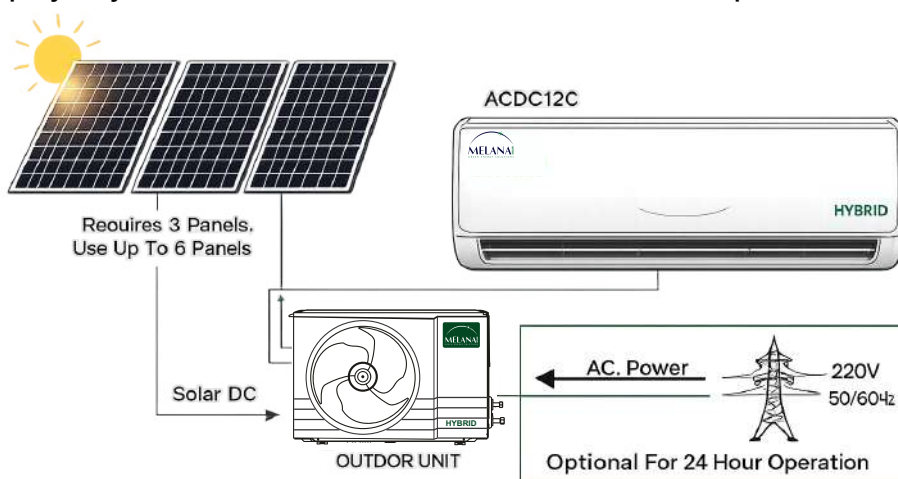
Installation

Easy solar connections make installation very simple. The Melana Solar 12K solar air conditioner is installed just like a normal mini-split air conditioner. The solar panels can be connected using standard MC4 connectors. You can use two or more standard solar panels, each rated between 350W and 500W, wired in series. Please note that the panels must have a minimum rating of 36 Vmp. You can either purchase the panels from us or buy them locally.

The Melana Solar 12K solar air conditioner is shipped pre-charged with R410 or R32, an ozone-friendly refrigerant. We recommend hiring a professional air conditioner installer for proper installation.

Anti-Corrosion For Long Life

The Melana 12K solar air conditioners use SeaSpray Anti-Corrosion Technology to protect major components from corrosion. This technology enables the air conditioners to last a long time, especially in coastal or island areas where salty mist or salt spray may come in contact with critical air conditioner components.



*Grid/AC Power Not Required

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PRODUSTS

12000 BTU

590 W PANLES  3 PCS	6mm PV CABLE  50M EACH
MC 4 CONNECTOR S  5 SET	MOUNTING SYSTEM (ALUMINIUM BRACKET)  1 SET



18000 BTU

590 W PANLES  4 PCS	6mm PV CABLE  50M EACH
MC 4 CONNECTOR S  5 SET	MOUNTING SYSTEM (ALUMINIUM BRACKET)  1 SET



24000 BTU

590 W PANLES  6 PCS	6mm PV CABLE  50M EACH
MC 4 CONNECTOR S  5 SET	MOUNTING SYSTEM (ALUMINIUM BRACKET)  1 SET





MELANA SOLAR

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