



Solar Air Conditioner

AC-DC HYBRID | SPLIT TYPE



- 100% Eco - Upto 100% Savings on Day Time
- Inbuilt Smart Hybrid Inverter
- Built In Solar MPPT
- Dual Power Mode
- Max Efficiency
- Grid AC Power Limiter
- Smart Wifi Control
- Wide Operating Temperature Range Between -10°C to +60°C
- Battery Free Operation
- Flexibility Auto Balance AC/DC
- Easy Installation Plug & Run
- Eco Friendly R410A Refrigerant
- Sustainability Reduces Carbon Footprint
- Durable
- Cost Saving-No Inverter + Battery & Charger Controller Required



VOLTOVA
SOLAR HYBRID AC

Introducing our state of the art Hybrid AC-DC Solar Air Conditioner, designed to seamlessly integrate with your sustainable lifestyle. VOLTOVA Hybrid AC-DC Solar Air Conditioner offers cutting-edge cooling solutions and advanced energy-saving technology using solar power. With our Hybrid AC-DC Solar Air conditioner, you can effortlessly harness the power of the sun, reducing your carbon footprint while enjoying optimal cooling performance. Designed for maximum efficiency & for eco-friendly cooling, VOLTOVA Hybrid AC-DC solar Air conditioner can operate partly or up to 100% on direct current (DC) from solar panels during the day and seamlessly switches to alternating current (AC) from the grid at night or when solar energy is unavailable. This requires no batteries, inverter or charger controller and it only requires dedicated PV panels to deliver huge savings to end user.

Key Features

- Can operate independently without grid power (Off Grid) by utilizing solar power.
- Our hybrid Solar AC units can run on 100% solar power during the daytime.
- Hybrid functionality with solar (DC) and grid Power (AC).
- High-Efficiency Smart Inverter Technology.
- Features efficient Brushless DC motors in both indoor and outdoor units for quiet operation.
- Wide ambient operating temperature range from -10°C to +60°C.
- Low energy consumption.
- Utilizes solar power for one of the highest energy consuming appliances.
- Grid AC Power Limiter restricts AC power consumption from 0-300W when DC power is available.
- Anti-Corrosion Technology provides greater corrosion resistance for both indoor and outdoor units.
- Easy plug and run with direct connection of solar panels to MC4 solar terminals.
- Uses eco-friendly R410A refrigerant gas, which is non-flammable and have minimal environmental impact.
- SMART WIFI functionality allows full control, daily and weekly timers, complete visibility with AC and DC consumption and complete history of all power consumption.
- Easy and convenient installation, just like a traditional air conditioner.
- Quiet Indoor Unit.

Advantages

- **Battery-Free Operation:**-Eliminates the cost, space, and maintenance requirements of battery system.
- **Reduced Energy Cost:**-Direct solar utilization minimizes reliance on grid electricity reducing electricity bills.
- **Cost Saving:** No additional inverter, battery or charger controller required bring huge cost savings.
- **Sustainability:**-Promotes the use of clean energy, reducing carbon footprint.
- **Durability:**-Robust design for long-term performance in diverse climates.
- **Flexibility:** Operates efficiently on various power sources, including off-grid systems and Instant switching between solar and grid power.
- No utility company authorization required.
- Best Energy Saving Solution with high investment return.




Item	Hybrid solar AC	Conventional inverter AC
AC Power supply (220V 50/60 Hz)	Y	Y
DC Power supply (80VDC-380VDC)	Y	N
Hybrid Operation (AC+DC MIX)	Y	N
Off Grid Operation	Y	N
App Smart Control	Y	DEPENDS
App Smart Power Meter	Y	N
Soft Power Start	Y	N
Average Energy Saving	60% -100%	20%

WiFi Smart Control







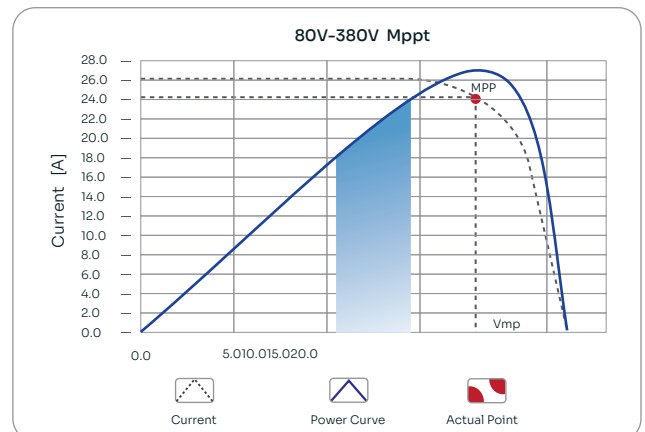
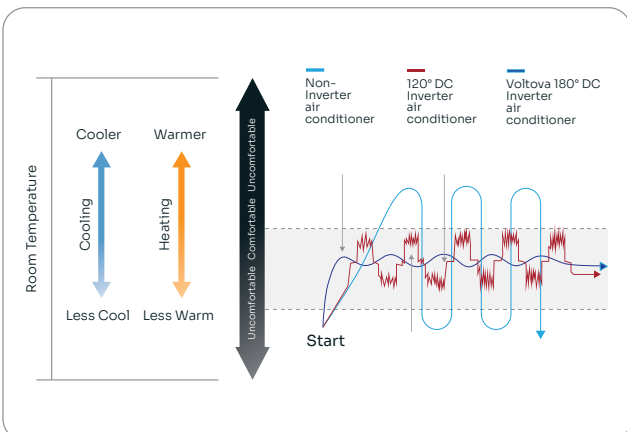
System Components

SVPWM Technology

-  180° sine wave controller technology
-  Operate even during 50% voltage drop
-  Compressor can operate below 1.1Hz

Build in Solar MPPT

-  Intelligent control for detection and adjustment
-  Efficiency 99.9%
-  10+ Years life design
-  DC to DC 0% convert lose



DC Powered Indoor unit



VOLTOVA Indoor unit utilize direct DC power, eliminating the energy loss that occurs when converting AC power to DC power like in traditional units. This quiet indoor unit is equipped with digital display for real-time energy and performance monitoring. The horizontal and vertical adjustable air deflector design can achieve an all round air and long distance air distribution ensuring comfortable cooling in every corner of the room .Equipped with sophisticated multilayer air filter system, this unit effectively captures dust, allergens, and other airborne particles, ensuring the air you breathe is clean and revitalizing.

AC-DC Hybrid Outdoor unit



VOLTOVA outdoor unit features with hybrid inverter technology and eco-friendly twin rotary DC compressors for quiet and efficient performance. It is designed to be highly efficient, even when subjected to fluctuating power inputs. The body is built with high strength Zinc coated material and after anticorrosion process treatment makes the outdoor unit long-term performance in diverse climates.

DC Brushless fan motor



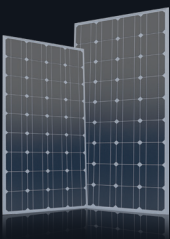
VOLTOVA Hybrid AC-DC Solar Air Conditioner are built with brushless fan motors both indoor and outdoor units and they have low energy consumption and operate quietly. The inclusion of a brushless permanent magnet motor driver enables a variable frequency drive, allowing the system to adjust its capacity dynamically according to the prevailing conditions.

Twin Rotary Compressor



The Twin Rotary DC Compressor is engineered to deliver powerful cooling capacity while consuming less energy, making it an ideal choice for our Hybrid AC-DC Solar Air Conditioner. With its innovative design and high-quality construction, this compressor ensures reliable and consistent operation, providing you with peace of mind and long-lasting performance.

Solar Panel



Our Hybrid solar air conditioners can easily be connected to any solar panels by wiring them in series with a maximum of 380V DC

*Solar Panel not Included and to be purchased separately

MC4 Connectors



The outdoor unit comes equipped with built-in MC4 connectors, ensuring a hassle-free connection with your solar panels.” Just Plug & Run”

WiFi Smart Control



- Designed for End-User
- Easy setting
- Wifi Enabled remote control via Smartphone apps
- Programmable settings for temperature and energy optimization
- Convenient & long-range remote control

Applications



- Residential Villas & Buildings
- Offices • Hospitals & Clinics
- Off Grid Location – Desert Camps & Site Offices
- Labour Camps • School
- Commercial Spaces – Restaurants, Hotels, Cafes & Hypermarkets



Warranty

- 1 Year Warranty for all other components
- 5 Year Warranty for Compressor



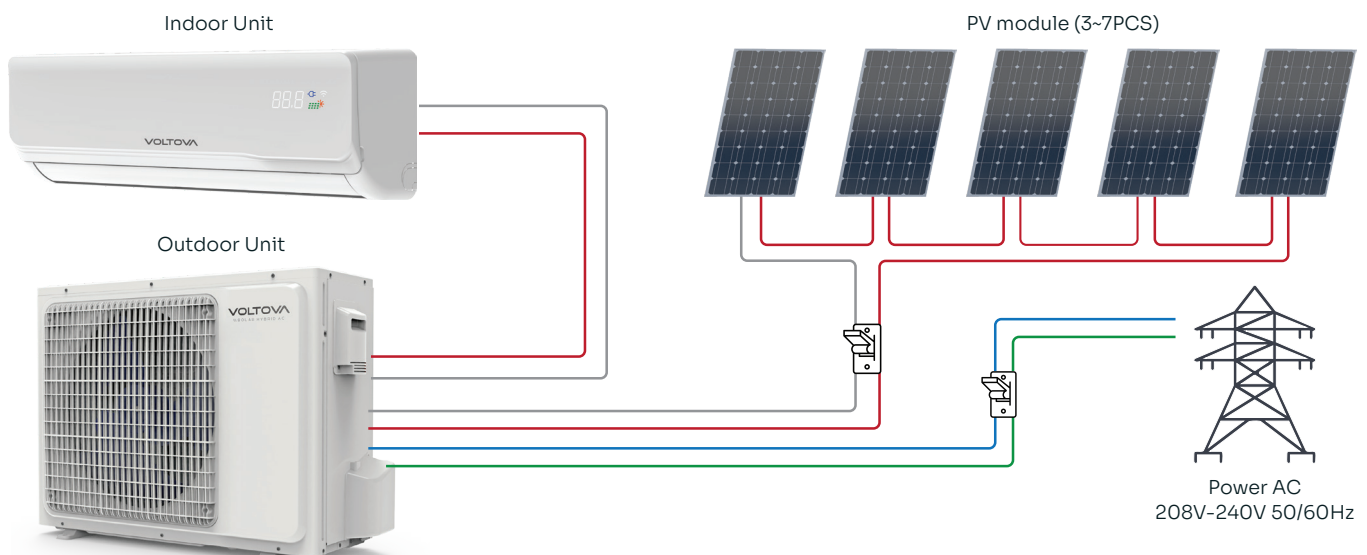
Support Services include

- Providing installation guidelines for solar panels and air conditioning units.
- Offering troubleshooting and technical support through phone or online channels.
- Providing onsite assistance when needed.



**Split Type Air Conditioner
Technical Specification**

ITEMS	UNIT	12000BTU	18000BTU	24000BTU
Model	/	DX-VTA10-HYBAC-SHN-12K	DX-VTA15-HYBAC-SZY -18K	DX-VTA20-HYBAC-SZN-24K
Solar Power Voltage	V	80 - 380	80 - 380	80 - 380
Grid Power Voltage	V/Hz	208V-240V/50-60Hz	208V-240V/50-60Hz	208V-240V/50-60Hz
Cooling Capacity	BTU	12000(3000-13300)	17300(4100-20400)	22000(6100-27000)
Cooling Power Input	W	940(190-1270)	1400(220-2100)	1790(300-3200)
Heating Capacity	W	3600(900-3960)	5150(1500-5250)	7000(1800-7200)
Heating power input	W	940(180-1250)	1260(250-1410)	2030(340-2150)
Indoor unit Dimension (WxHxD)	mm	840x205x295	1080x330x237	1080x330x237
Indoor unit Packing ((WxHxD)	mm	920x290x360	1140x300x382	1140x362x300
Outdoor unit Dimension (WxHxD)	mm	802x564x323	802x564x323	900x700x337
Outdoor unit Packing ((WxHxD)	mm	910x622x405	910x622x405	1006x755x418





Vision

Our vision is to spearhead the creation of high-quality, sustainable, and innovative eco-friendly products that enhance quality of life and protect our planet for future generations to come. We are committed to revolutionizing the home appliance industry by incorporating hybrid technology that combines the efficiency of DC systems with the essential reliability of AC power.



VOLTOVA
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