

Deye ACDCBLW Hybrid/Hybrid Solar AC/Solar Air Cooler

12K-24K BTU solar air conditioner with 100% daytime solar operation and AC/DC auto balance.

Models Covered: ACDCBLW Hybrid, Hybrid Solar AC, Solar Air Cooler

Manufacturer: Ningbo Deye Technology Co., Ltd. (Stock Code: 605117.SH)

Application: The Deye ACDCBLW Hybrid AC/DC Solar Air Conditioner delivers 100% solar-powered cooling during daytime without batteries or inverters. With 12K-24K BTU capacity, AC power limiter (0-600W), automatic AC/DC balance, full DC-driven compressor, wide operating temperature (-10°C to 58°C), and R410A refrigerant, it's the eco-friendly choice for tropical climates.

Technical Specifications

Parameter	ACDCBLW Hybrid	Hybrid Solar AC	Solar Air Cooler
General Data			
Cooling Capacity	12K-24K BTU	12000 BTU	12K-24K BTU
EER	—	3.60-3.75	—
Heating Capacity	4100 (1000-4500) BTU	—	—
Power Modes	—	—	AC, DC, AC+DC Auto Balance
Coverage Area	—	12 m – 20 m	—
Max Airflow	3300 m³/h	—	—
Refrigerant	R410A	R410A	—
Available Models / Configurations	—	12K, 18K, 24K BTU	12K, 18K, 24K BTU
PV String Input Data			
Solar Module	3-8 × 330W	3-4 × 330W	—
DC (PV) Voltage Range	80 V – 380 V	80-380V	—
Electrical / AC Output Data			
AC Power Supply	208-240V 50-60Hz	208-240V/50-60Hz	—
Max Current	≤10 A	10 A	—
AC Power Limiter	0 W – 600 W	—	0 W – 600 W
Mechanical Data			
Compressor	2× Rotary Inverter	2× Rotary Inverter	—
Cooling Method	—	—	Air Water Cooler
Operating Conditions			
Climate Type	T3/T1 Tropical	Tropical (T3/T1)	—
Indoor Noise	—	≤42.5-50 dB	—
Operating Temperature	-10 to 58 °C		
Communication			
Control	—	—	WiFi + App

Note: Specifications are based on the official Deye ACDCBLW Hybrid/Hybrid Solar AC/Solar Air Cooler datasheet. Values may be subject to change; always verify against the latest manufacturer documentation before system design and procurement.

Configurations & shipping weights

Configuration	Weight	Dimensions (W × D × H)
DGA2-ACDCBLW-12K — 12,000 BTU	50 kg	910 × 405 × 622 mm
DGA1-ACDCBLW-18K — 18,000 BTU	60.5 kg	910 × 405 × 622 mm
DGA1-ACDCBLW-24K — 24,000 BTU	73 kg	1006 × 418 × 755 mm

This listing covers several shippable configurations. Each row is the manufacturer's stated figure for that build; the page weight above is the smallest one, which is what a single unit ships at.

Availability & grid compliance in UAE

Market	UAE
Grid authority / regulator	DEWA, ADDC, SEWA
Quotation currency	AED
Support hours timezone	Asia/Dubai
Delivery & installation coverage	Dubai, Abu Dhabi, Sharjah, Ajman, Ras Al Khaimah

Figures on this page are the manufacturer's own, measured at the test conditions the datasheet states — they do not change by country. What changes is the approval that has to be met before the unit is energised: in UAE that is DEWA, ADDC, SEWA. Confirm the grid code, import requirements and any local certification with them, or with us, before you order.

Key Features & Technical Highlights

- **100% Solar Daytime:** No battery or inverter needed
- **AC/DC Auto Balance:** Automatic power source switching
- **AC Power Limiter:** Limit grid power 0-600W
- **Tropical Ready:** -10°C to 58°C operation
- **WiFi Control:** App monitoring and control
- **Eco-Friendly:** R410A refrigerant
- **Hybrid Operation:** Auto-switches between solar and grid
- **No Batteries Needed:** Direct solar panel connection
- **Tropical Rated:** Works up to 58°C ambient
- **Heating & Cooling:** Year-round climate control
- **Auto Balance:** Smart AC+DC power mixing
- **Wide Temp Range:** -10°C to 58°C operation

Frequently Asked Questions

- ▶ Can the DEYE ACDCBLW Hybrid run on solar power?
- ▶ Is the ACDCBLW Hybrid suitable for the Middle East climate?
- ▶ Do I need batteries for this air conditioner?
- ▶ How many solar panels do I need?
- ▶ Do I need batteries for this AC?
- ▶ Can it work in hot climates?
- ▶ What equipment do I need besides the cooler?
- ▶ How does the AC power limiter work?
- ▶ What's the difference between ACDCBLW-1 and ACDCBLW-2?

Official Source & Documentation

This technical datasheet is derived from official manufacturer documentation provided by **Ningbo Deye Technology Co., Ltd.**. For the latest specifications, firmware updates, and official documentation, visit the manufacturer's website.

- **Manufacturer Website:** www.deyeinverter.com
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Disclaimer: All specifications and technical data presented on this page are based on the official Deye ACDCBLW Hybrid/Hybrid Solar AC/Solar Air Cooler datasheet published by Ningbo Deye Technology Co., Ltd. Specifications are subject to change without notice. Always verify against the latest manufacturer documentation at deyeinverter.com before system design, procurement, or installation. Compliance with local regulations, grid codes (DEWA, ADDC, SEWA) and utility requirements in UAE is the responsibility of the system designer/installer.

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