

BLUETTI AC300+2xB300

BLUETTI AC300 Portable Power Station User Manual

Model: AC300 + B300 Expansion Batteries

Brand: BLUETTI

1. PRODUCT OVERVIEW

The BLUETTI AC300 is an expandable portable power station designed to provide reliable and versatile power for various applications, from home backup to off-grid adventures. When paired with B300 LiFePO4 expansion batteries, its capacity can be significantly increased to meet diverse energy demands.

Key Features:

- **Expandable Power:** The AC300 with a 3000W inverter connects to B300 LFP battery packs, boosting capacity up to 12,288Wh for extended power during outages.
- **Fast Charging:** Achieve a 5400W total input rate (2400W solar + 3000W AC outlet) for full system recharge in approximately 1.6 hours when combined with two B300 expansion batteries.
- **Independent B300 Functionality:** B300 units are not just extra batteries; they feature 100W USB-C, 12V/10A car output, and 18W USB-A ports, allowing them to function as standalone high-efficiency power banks.
- **Seamless UPS:** Provides 24/7 Uninterruptible Power Supply (UPS) to power essential household needs during emergencies or power outages.
- **Multiple Recharge Options:** Recharge the AC300/B300 system from AC wall outlets, solar panels, roof solar, car, lead-acid battery, generator, or EV stations.

2. SYSTEM COMPONENTS AND CONNECTIONS



Figure 2.1: BLUETTI AC300 Power Station with two B300 Expansion Batteries.

The BLUETTI AC300 system typically consists of the AC300 inverter unit and one or more B300 battery modules. These units are designed to stack and connect seamlessly to expand power capacity.

Input and Output Ports:

16 VERSATILE OUTLETS

1 12V/30A RV	1 24V/10A Car Port	6 AC Outlets	2 18W USB-A
1 100W USB-C	2 5V/3A USB-A	1 30A NEMA TT-30	2 15W Wireless Charging Pads



Figure 2.2: The AC300 unit features 16 versatile outlets, including AC, DC, USB-A, and USB-C ports.

The AC300 unit provides a wide array of output ports to power various devices and appliances. These include multiple AC outlets, DC outputs (12V/30A RV, 24V/10A car port), USB-A ports (18W and 5V/3A), and a 100W USB-C port. Additionally, the B300 battery packs offer their own 100W USB-C, 12V/10A car output, and 18W USB-A ports for independent use.

Video 2.1: This video demonstrates the easy setup and versatile output ports of the BLUETTI AC300 system, showcasing its ability to power various tools and appliances in a workshop setting.

3. INITIAL SETUP

Setting up your BLUETTI AC300 system is designed to be straightforward. Ensure all components are unpacked and placed on a stable, level surface. Connect the AC300 unit to the B300 battery modules using the provided cables. The system is plug-and-play, allowing for quick deployment.

Connecting Modules:

1. Place the AC300 unit on top of the B300 battery module(s).
2. Connect the communication and power cables between the AC300 and B300 units. Ensure connections are secure.
3. Power on the units using the designated power buttons.

4. OPERATING INSTRUCTIONS

Powering Devices:

The AC300 provides a robust 3000W (6000W Peak) AC output, capable of powering high-demand appliances. Simply plug your devices into the appropriate AC or DC outlets on the unit. The system's modular design allows for significant power expansion to meet diverse needs.

MODULAR POWER SUPPLY

From home backup to off-grid power

3072Wh / 3000W



 **1.7** Hours
Heater (1500W)

 **2.6** Hours
Washer (1000W)

 **3** Hours
Refrigerator (800W)

 **3-5** Hours
A/C (8000BTU)

Figure 4.1: The modular BLUETTI power supply can power essential home appliances like heaters, washers, refrigerators, and air conditioning units.

Wireless Charging:

The AC300 unit is equipped with two 15W wireless charging pads on its top surface. Simply place compatible devices on these pads to initiate charging.

App Remote Control:

Monitor and control your BLUETTI AC300 system remotely using the dedicated BLUETTI app, available for both iOS and Android devices. The app provides real-time data on power input/output, battery status, and allows for settings adjustments.

APP REMOTE CONTROL

Everything at your fingertips

Bluetooth Wi-Fi

Download the **BLUETTI** App

Download on the App Store GET IT ON Google Play

The advertisement features a scenic background of a mountain range at sunset. In the foreground, a BLUETTI AC300 power station and a tent are set up on a grassy field. A hand holds a smartphone displaying the BLUETTI app interface, which shows the AC300 battery status at 88% and real-time power data: PV 425 W, Solarmax 2022 W, DC 120 W, and AC 778 W. The app also displays AC and DC output status as 'ON' and a 'Fault' section. At the bottom, it states 'Totally 16.8kWh generated by your PV, equivalent of 16.16kg CO₂ emission.'

Figure 4.2: The BLUETTI app allows for convenient remote monitoring and control of your power station via Bluetooth or Wi-Fi.

Video 4.1: This video highlights the expandability of the BLUETTI AC300 and B300 system, demonstrating how multiple units can be combined for massive power capacity and controlled via the intuitive mobile app.

5. CHARGING AND POWER MANAGEMENT

Recharge Options:

The BLUETTI AC300 system offers multiple flexible charging methods to ensure your power is always ready. These include AC wall charging, solar panel charging, car charging, and even charging from lead-acid batteries, generators, or EV stations. For the fastest recharge, combine AC and solar inputs to achieve up to 5400W max input.

CHARGE YOUR WAY

Max. 3000W input



Wall Outlet + Solar

1.5 Hours



NEMA L14-30 R
(30A AC Charging Cable)

1.5 Hours



Solar Panel

1.8-2.3 Hours



Dual Wall Outlet

1.8 Hours



Wall Outlet

2.2 Hours



Generator

2.2 Hours



Vehicle



Lead-acid Battery



Wind Turbine
(coming soon)



EV Station
(coming soon)



Figure 5.1: The BLUETTI AC300 supports diverse charging methods, including wall outlet, solar panel, generator, vehicle, and more, with a maximum input of 3000W.

UPS Functionality:

The AC300 features a seamless Uninterruptible Power Supply (UPS) function, providing continuous power to connected devices during grid outages. With a switch time of less than 20ms, your essential electronics will remain powered without interruption.

24/7 UPS HOME BACKUP

Non-stop for emergency

⌚ Switch time $\leq 20\text{ms}$



Figure 5.2: The AC300 offers 24/7 UPS home backup, ensuring continuous power for critical devices during emergencies.

6. SYSTEM EXPANSION AND CAPACITY

The BLUETTI AC300 is designed for modular expansion, allowing you to customize your power capacity by adding B300 battery packs. A single AC300 can connect with up to four B300 units, reaching a massive 12,288Wh capacity.

BUILD YOUR POWER CENTER

3072Wh → 24576Wh

24576Wh

2×AC300 + 4×B300

12288Wh

AC300 + 4×B300

9216Wh

AC300 + 3×B300

6144Wh

AC300 + 2×B300

3072Wh

AC300 + 1×B300



Figure 6.1: Expand your power center from 3072Wh up to 24576Wh by adding more AC300 and B300 units.

B300 as an Independent Power Bank:

Beyond expanding the AC300's capacity, each B300 battery pack can function as an independent power bank. It features a 100W USB-C port, a 12V/10A car output, and an 18W USB-A port, making it a versatile power source on its own.

STAND ON ITS OWN

Connectedly or separately



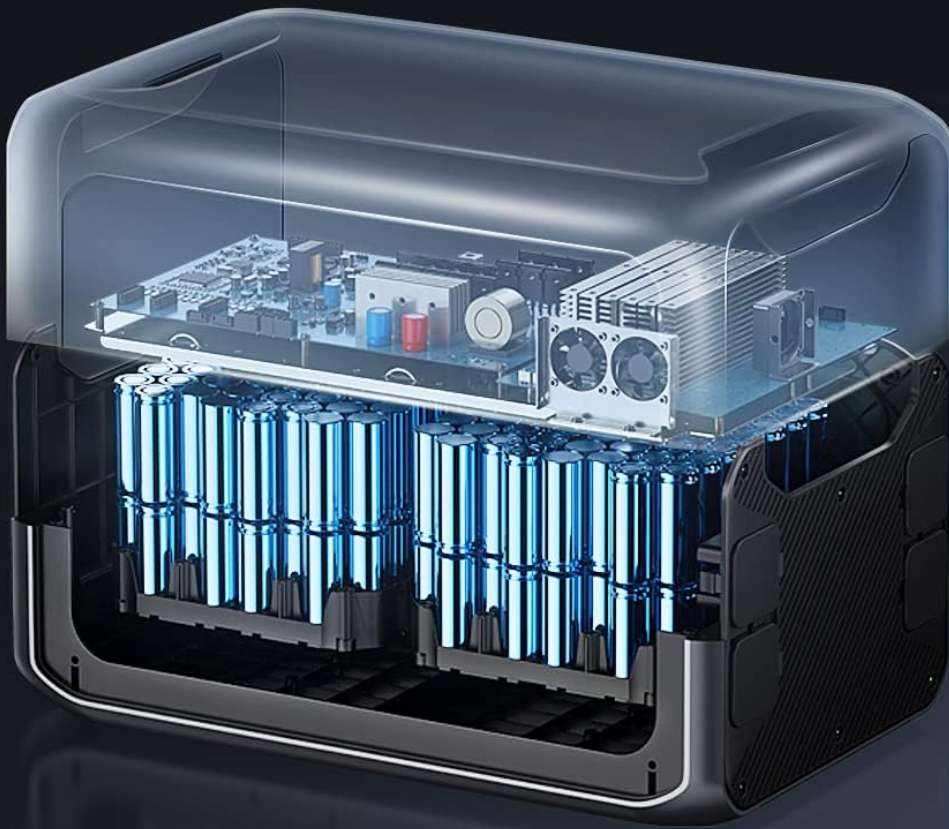
Figure 6.2: The B300 battery unit can stand on its own, providing power through its 18W USB-A, 100W USB-C, and 12V/10A car socket.

7. CARE AND MAINTENANCE

To ensure the longevity and optimal performance of your BLUETTI AC300 and B300 system, regular care and maintenance are recommended. The system utilizes ultra-safe LiFePO₄ battery cells and a premium Battery Management System (BMS) technology, designed for reliability and durability with over 3500+ life cycles, retaining 80% of original capacity.

10-YEAR LIFESPAN

6X Longer*



* After 3500+ cycles, the LFP battery remains around 80% of its original capacity and lasts 6-8 times longer than conventional ones.

Figure 7.1: The BLUETTI system features LiFePO₄ battery cells, offering a 10-year lifespan and 6 times longer durability than conventional batteries.

General Maintenance Tips:

- Keep the units clean and free from dust and debris.
- Store in a cool, dry place away from direct sunlight and extreme temperatures.
- Charge the unit fully at least once every 3-6 months if not in regular use to maintain battery health.

- Ensure proper ventilation around the units during operation and charging.

8. TROUBLESHOOTING COMMON ISSUES

If you encounter any issues with your BLUETTI AC300 system, please refer to the following common troubleshooting steps:

- **Unit Not Powering On:** Ensure all cables are securely connected between the AC300 and B300 units. Verify that the power button is pressed correctly.
- **Charging Issues:** Check if the charging source (AC outlet, solar panel) is functioning correctly. Ensure charging cables are properly connected. For solar charging, confirm panels are receiving adequate sunlight and are within the specified voltage range.
- **Connectivity Problems (App/WiFi/Bluetooth):** If the app is not connecting, try restarting the unit and your mobile device. Ensure Bluetooth is enabled and the unit is within range for initial pairing. For WiFi, verify network credentials and signal strength. Firmware updates can sometimes resolve connectivity issues.
- **Unusual Alarms or Errors:** The unit's display will show error codes or messages. Consult the detailed user manual (PDF) for specific interpretations of these codes and recommended actions.
- **Reduced Performance:** Ensure the unit is not operating in extreme temperatures. Over time, battery capacity may slightly decrease, which is normal for LiFePO4 batteries after many cycles.

For persistent issues or complex problems, please contact BLUETTI customer support.

9. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	BLUETTI
Model Name	AC300+2xB300
Item Model Number	B300
Wattage	3000 watts
Output Wattage	3000 Watts
Starting Wattage	600 Watts
Running Wattage	3000 Watts
Fuel Type	Electric
Power Source	Solar Powered
Recommended Uses	Residential
Voltage	12 Volts
Special Feature	Portable
Included Components	2 B300 Expansion Battery

Specification	Value
Color	Black
Material	Metal, Plastic, Lithium Iron Phosphate
Total Power Outlets	6
Frequency	60 Hz
Product Dimensions	9.84 x 11.81 x 7.87 inches

10. WARRANTY AND CUSTOMER SUPPORT

BLUETTI is committed to providing excellent products and customer service. For detailed warranty information, please refer to the official BLUETTI website or the user manual PDF provided with your product. Many customers have reported positive experiences with BLUETTI's technical support, noting prompt and effective assistance.

For further assistance, you can visit the [BLUETTI Store](#) or refer to the comprehensive [User Manual \(PDF\)](#) for in-depth instructions and support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

