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BLUETTI Apex 300

BLUETTI Apex 300 Portable Power Station & B500K Expansion Battery User Manual

Model: Apex 300 + B500K

Introduction Safety Information Setup Operation Maintenance Troubleshooting
Specifications Warranty & Support

1. INTRODUCTION

The BLUETTI Apex 300 Portable Power Station, paired with the B500K Expansion Battery, provides a robust and reliable energy solution for various applications, including home backup, RV use, camping, and emergency power. This system features a substantial 7884.8Wh LFP battery capacity, delivering 3840W of continuous AC output with a 7680W surge capability. It supports dual voltage output (120V/240V) and offers multiple charging options for flexibility.



Image: The BLUETTI Apex 300 Power Station stacked on top of the B500K Expansion Battery, illustrating their combined

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the BLUETTI Apex 300 and B500K system. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Do not disassemble, repair, or modify the unit.
- Keep the unit away from fire, water, and extreme temperatures.
- Ensure proper ventilation during operation and charging.
- Use only BLUETTI-approved accessories and cables.
- Keep out of reach of children and pets.
- In case of fire, use a dry powder fire extinguisher.



Image: Internal view of the BLUETTI Apex 300, emphasizing its robust design and safety mechanisms, including the LiFePO4 battery and advanced Battery Management System (BMS).

3. SETUP

3.1 What's in the Box

Upon unpacking, verify that all components are present:

- Apex 300 Power Station (x1)
- B500K Expansion Battery (x1, shipped separately)
- CA90 Battery Connection Cable for BLUETTI Apex 300 (x1)
- AC Charging Cable (x1)
- Car Charging Cable (x1)
- Grounding Screw (x1)
- User Manual (x1)

What You Get

Apex 300

×1



B500K

×1



Car Charging Cable

×1



Grounding Screw

×1



User Manual

×1



CA90 Expansion Cable

×1



AC Charging Cable

×1



Image: All items included in the BLUETTI Apex 300 and B500K kit, neatly arranged for identification.

3.2 Product Overview

The Apex 300 features a comprehensive interface for power management and output. The front panel includes AC outlets, a voltage selector, ECO mode, AC output control, and a charging mode selector. The rear panel provides AC input/output ports, a circuit protector, and battery expansion ports.

Blackout-Proof Power

No more spoiled food or missed emergencies



388 hrs
LED bulbs



60 hrs
Desktop PC



28 brews
Coffee maker



77 hrs
Refrigerator



Image: Close-up of the BLUETTI Apex 300's front panel, detailing the display, AC output ports, and control buttons for voltage and charging modes.



Image: A visual representation of the BLUETTI Apex 300 and B500K Expansion Battery connected, showing the modular design.

3.3 Connecting the Apex 300 and B500K

To expand the capacity of your Apex 300, connect the B500K Expansion Battery using the provided CA90 battery connection cable. Ensure both units are powered off before making connections.

1. Locate the battery expansion ports on both the Apex 300 and the B500K.
2. Connect one end of the CA90 cable to the Apex 300's expansion port.

3. Connect the other end of the CA90 cable to the B500K's expansion port.
4. Ensure all connections are secure.

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Video: This video demonstrates the connection process for the BLUETTI B300 (similar to B500K) expansion battery to a compatible power station, showing how to link the units for increased capacity.

4. OPERATION

4.1 Charging Options

The Apex 300 offers versatile charging methods to ensure your power station is always ready:

- **AC Charging:** Connect the AC charging cable to a standard wall outlet. The unit can reach 80% charge in approximately 45 minutes using TurboBoost 2000W fast charging.
- **Solar Charging:** Connect compatible solar panels to the DC/PV input ports. The Apex 300 supports up to 2400W built-in solar input, expandable to 6400W with SolarX 4K expansion.
- **Generator Charging:** The unit is 95% compatible with various generators for flexible power restoration.
- **Car Charging:** Use the provided car charging cable to charge from your vehicle's 12V/24V outlet.



Solar Charging

2.4kW → 6.4kW Solar Charging
(with D400S Expansion)



AC Charging

3,840W
65 mins 100% ⚡



Generator Charging

3,840W Max.
Ultra-Quiet Operation
<50dB Noise Level (*vs 70dB+ competitors*)

Image: Visual demonstration of the multiple charging methods available for the BLUETTI Apex 300: solar, AC, and generator.

Solar Fast Charge Unleashed

Fully charge before outages hit



Image: The BLUETTI Apex 300 being charged by solar panels, highlighting its fast solar charging capabilities and MPPT technology.

4.2 Operating Modes

The Apex 300 features a clear display and intuitive controls for managing power output and charging modes:

- **Voltage Selector:** Toggle between 120V and 240V output to match your appliance requirements.
- **ECO Mode:** Activates power-saving features to conserve battery life when loads are low.
- **AC Output:** Controls the activation of the AC outlets.
- **Charging Mode:** Select from Silent, Auto, or Turbo modes. Silent mode minimizes fan noise, Auto mode balances charging speed and noise, and Turbo mode provides the fastest charging.

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Video: A demonstration of the BLUETTI Apex 300 in action, showcasing its display, various ports, and control options for different operating modes.

4.3 Usage Scenarios

The Apex 300 + B500K system is designed for diverse power needs:

- **Home Backup:** Provides essential power during outages, keeping refrigerators, lights, and critical devices running.
- **RV and Camping:** Powers RV ovens, AC units, and other appliances without needing shore power.
- **Workshop:** Capable of powering heavy-duty tools and equipment with its 7680W surge capacity.
- **Off-Grid Living:** Offers energy independence with solar charging capabilities and silent operation.

Reliable Backup for Every Scenario

Keeping your family safe and comfortable

 77.3 Hrs Refrigerator (250W)	 14.1 Hrs Vacuum (500W)
 7.7 Hrs Air Conditioning (1350W)	 4.8 Hrs Washer (1500W)

*Hours under load based on Apex 300 paired with B500K.



Image: The BLUETTI Apex 300 and B500K providing reliable backup power for a household, illustrating its capacity to run essential appliances during outages.

Power Your Workshop with Confidence

Keep your tools and lights powered effortlessly with the Apex 300 + B500K combo

 10.2 Hrs Drill (700W)	 7.2 Hrs Sander (1000W)
 4.8 Hrs Chainsaw (1500W)	 4.0 Hrs Lawn Mower (1800W)

*Hours under load based on Apex 300 paired with B500K.



Image: The BLUETTI Apex 300 and B500K powering various tools in a workshop setting, highlighting its suitability for demanding power requirements.

4.4 Expansion and Parallel Connection

Expand your power capabilities further with additional B500K batteries and the BLUETTI Hub A1 for parallel connection:

- The Apex 300 system can scale from 2764.8Wh up to 33484.8Wh with multiple B500K expansion batteries.
- The BLUETTI Hub A1 allows for parallel connection of up to three Apex 300 head units, providing up to 11.4kW AC output and access to 30A and 50A outputs for larger loads.

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Video: This video explains how the BLUETTI Hub A1 enables the Apex 300 system to achieve up to 58kWh capacity and 11.4kW AC output through parallel connections.

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Video: An initial impression and setup guide for the BLUETTI Hub A1 with dual Apex 300 units, demonstrating how to connect and utilize the parallel system.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your BLUETTI Apex 300 and B500K system:

- **Regular Cleaning:** Keep the unit clean and free from dust and debris. Use a dry, soft cloth.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures. For long-term storage, charge the battery to 50-80% every 3-6 months.
- **Battery Health:** The 2nd-gen LiFePO4 battery is designed for 6,000+ cycles to 80% capacity, offering an estimated 17-year lifespan with proper care.
- **Ventilation:** Ensure the ventilation openings are not blocked to prevent overheating.

Image: An infographic detailing BLUETTI's core technological advancements, including the 6,000+ cycle lifespan of the LiFePO4 battery, ensuring long-term durability.

6. TROUBLESHOOTING

If you encounter issues with your BLUETTI Apex 300 system, refer to the following common troubleshooting tips:

- **Unit Not Powering On:** Ensure the main power button is pressed and held until the display activates. Check battery charge level.
- **No AC Output:** Verify the AC output button is enabled. Check for overload protection (circuit protector). Reduce connected load if necessary.
- **Charging Issues:** Ensure charging cables are securely connected. Check the power source (wall outlet, solar panels, generator) for proper function. Verify selected charging mode.
- **Overload Protection:** If the unit shuts down due to overload, disconnect some appliances and restart the unit.
- **App Connectivity:** Ensure Bluetooth or Wi-Fi is enabled on your device and the power station. Restart both devices if connection fails.

Your browser does not support the video tag.

Video: This video discusses a minor issue with the BLUETTI Hub D1 (similar to A1) and its setup, offering insights into potential connectivity or compatibility considerations.

7. SPECIFICATIONS

Feature	Detail
Brand	BLUETTI
Model	Apex 300 + B500K
Battery Type	LFP (LiFePO4)

Feature	Detail
Capacity	7884.8Wh (Apex 300: 2764.8Wh, B500K: 5120Wh)
AC Output Power	3840W (7680W Surge)
AC Output Voltage	120V/240V Dual Voltage
AC Outlets	6 (3840W), 1x NEMA TT-30R (120V/30A), 1x NEMA 14-50R (120V/240V, 50A)
DC/PV Input	12-60V/20A/1200W Max x2 (Solar: 2400W built-in, 6400W expanded)
Life Cycles	6,000+ cycles to 80% capacity
Charging Time (AC)	80% in 45 minutes (TurboBoost 2000W)
Item Weight	83.8 Pounds (Apex 300 unit)
Product Dimensions	20.67" L x 12.87" W x 12.6" H (Apex 300 unit)
Special Features	14 Versatile Ports, Smart App Control, BLUETOPUS AI-BMS, ≤10ms UPS Backup, Silent Operation (22dB)

8. WARRANTY & SUPPORT

BLUETTI stands behind the quality and durability of its products. The Apex 300 and B500K system features a 2nd-gen LiFePO4 battery with 6,000+ cycles to 80% capacity, ensuring a long lifespan of approximately 17 years. The product is CNAS-certified and has undergone 33 extreme tests for reliability. For any questions, technical assistance, or warranty claims, please refer to the contact information provided in your user manual or visit the official BLUETTI website. Our widespread sales and after-service networks are available to assist you.



PERFECT AFTER-SALE SERVICE

Widespread sales and after service networks, feel free to contact us should you have any questions.

Image: A customer service representative, representing BLUETTI's commitment to after-sale support and assistance.

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