5.2 AC Charging Mode

The Apex 300 offers three charging modes: Standards, Turbo, and Silent. By default, the unit charges in Standard mode.

Mode	AC Input	Solar Input	AC + Solar Input	Note
Standard	1,440W Max.	1,440W Max.	1,440W Max.	Battery-friendly
Turbo	3,840W Max.	2,400W Max.	3,840W Max.	Quick recharge
Silent	500W Max.	500W Max.	500W Max.	Quiet and low-power operation

Note: The data above is for reference only.

5.3 Power Lifting Mode

Power Lifting Mode is disabled by default. It allows Apex 300 to power up to 7,680W pure resistive loads like kettles, electric blankets, hairdryers, and similar heating devices.

Notes:

- This mode is only for pure resistive loads rated 3,840W-7,680W.
- In this mode, the actual operating power of the connected device will be lower than its rated power.

5.4 ECO Mode

AC-ECO and DC-ECO modes are enabled by default. The Apex 300 shuts off the AC or DC output after a period of low (default 4 hours with 10W for AC, 5W for DC) or no load.

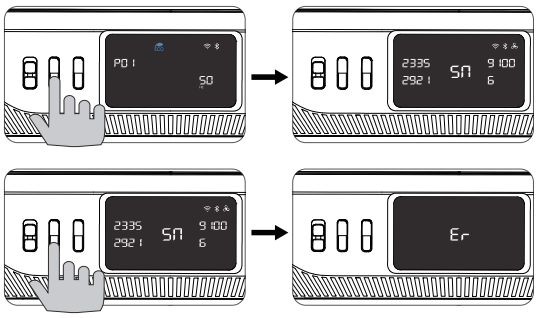
Notes:

- AC-ECO Mode is not available when charging with AC power.
- Press the ECO mode button to turn on/off AC-ECO and DC-ECO modes together, and use the BLUETTI app to control them separately.
- Disable the ECO mode when connecting small devices under 60W or critical appliances such as lights and refrigerators.

6. View Device Information

View device information in Settings Mode, too.

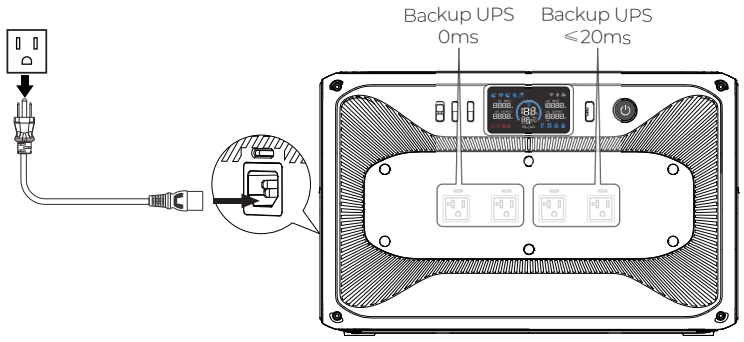
- Go to the P01 frequency page and long press the ECO mode button to view the unit's SN.
- To navigate through the settings, press and hold the ECO mode button again for about 2 seconds.
- When on Fault History page, long press the AC power button for about 2 seconds, then release to clear the history.



Page Code	Information
SN	Serial Number (SN)
Er	Error Code
H1	Fault History
VE	Version

7. UPS Feature

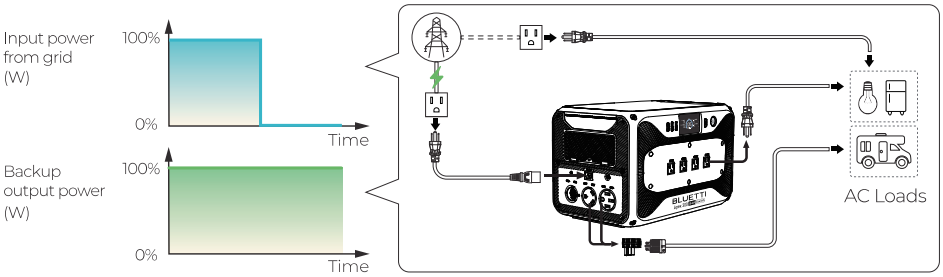
Connect Apex 300 to the wall, and it directly draws power from the outlet to operate connected devices. It switches to battery power instantly (within 0 ms or 20ms with specific outlets) during an outage when connected to specific outlets. Set UPS modes in the app.



Note: When the output voltage switches to 240V, the 20A socket has a difference of 0ms and 20ms. When the output voltage switches to 120V, both are 20ms.

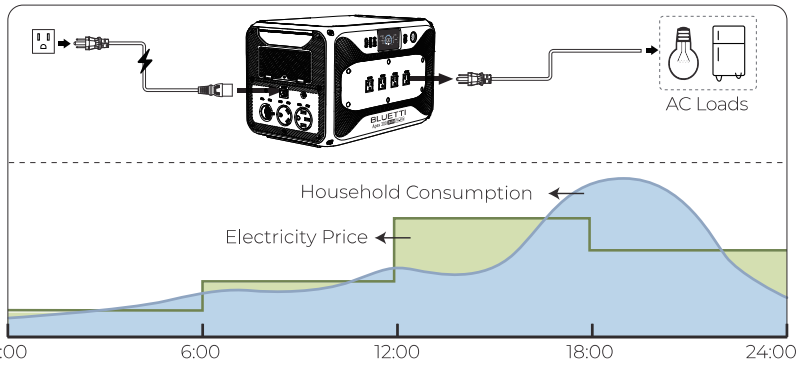
• **Backup**

Apex 300 charges using available solar and grid power, with a priority on solar.



• **Time of Use**

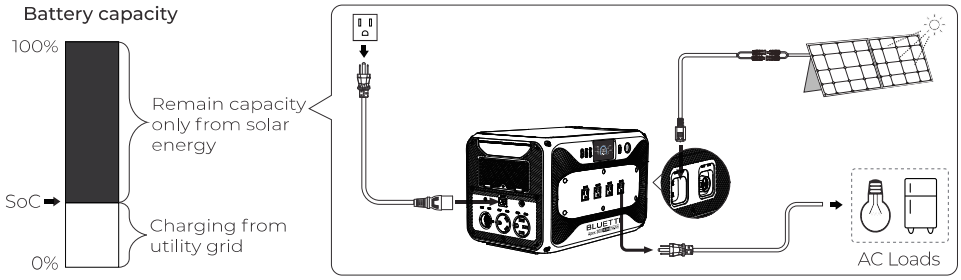
Save costs by scheduling Apex 300 to charge during off-peak hours and power devices during peak hours.



Period	Charge	Discharge	Discharge	Discharge
Load Power	Grid	Apex 300 + PV	Apex 300 + PV	Apex 300

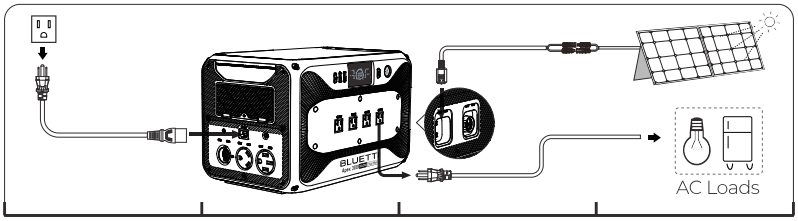
• **Self-consumption**

Efficiently uses solar energy. Apex 300 initially charges from the grid to a set SoC and seamlessly switches to solar replenishment.



• **Custom**

Personalize charging/discharging schedule, set battery SoC limits, and control the schedule and grid input switches.

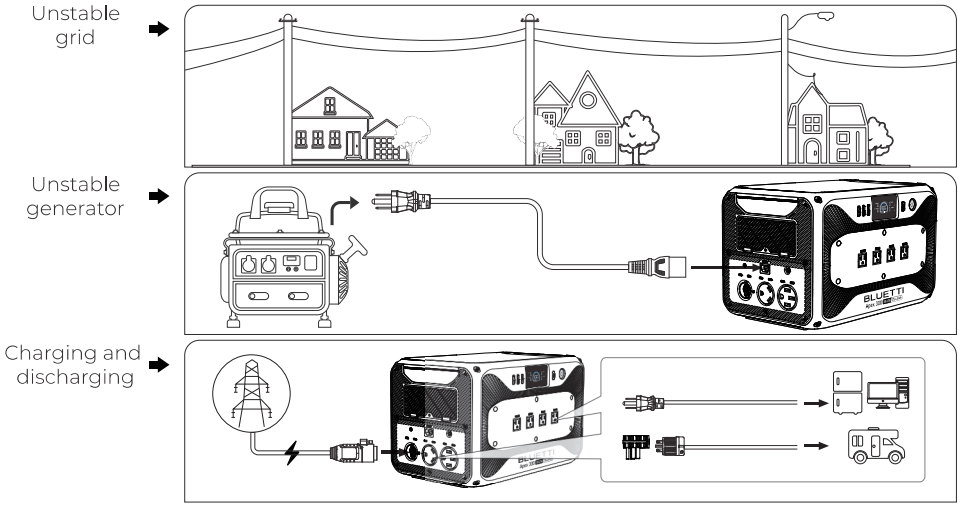


Period	Charge	Discharge	Discharge	Discharge
Load Power	Grid	Apex 300	Apex 300	Apex 300

Attention: Not for devices like data servers or workstations that require high-performance UPS. BLUETTI assumes no liability for issues arising from violating this restriction.
Notes: For a seamless 0ms UPS switchover, set the voltage to 240V and connect to the grid via the 15A AC input. Then, plug essential loads into the two left AC outlets.

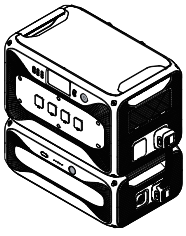
8. Grid Self-Adaption Mode

When charging with an unstable generator or grid power, or if consumption power exceeds charging power, enable this mode in the app. The Apex 300 automatically adjusts to handle power fluctuations, protecting the unit and connected devices from potential issues due to variations in power quality.

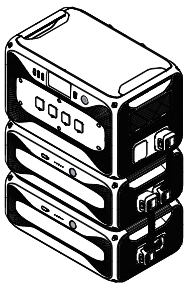


9. Connect Expansion Battery

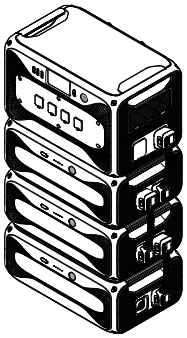
Use the battery expansion cables to connect to up to 6 B300K batteries for a maximum capacity of 19,353.6Wh.



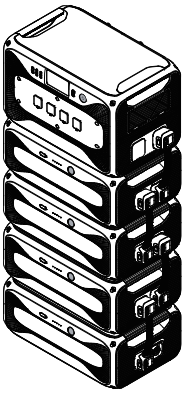
Apex 300 + 1*B300K



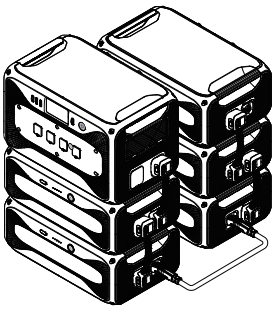
Apex 300 + 2*B300K



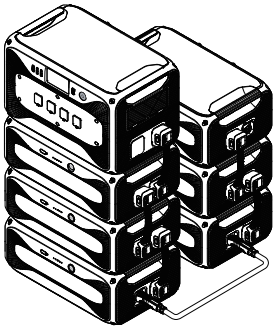
Apex 300 + 3*B300K



Apex 300 + 4*B300K



Apex 300 + 5*B300K



Apex 300 + 6*B300K

Notes:

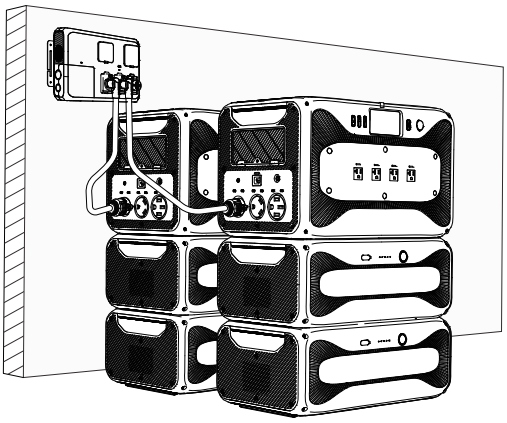
- Power off all units before connecting.
- Power on the Apex 300, and the battery activates automatically. Stacking the units is recommended.
- When connecting two or more B300K batteries, it's recommended to securely mount the units to the wall using metal brackets and screws.
- The Apex 300 is compatible with both B300 and B300S battery packs, but mixing them is not recommended.
- Both ends of all battery cables must be locked for normal charging and discharging.
- The P090D cable needs to be purchased separately.

10. Parallel Connection

To increase your power output, you can connect two or three Apex 300 units in parallel using the Hub A1 parallel box. For details, refer to the *Hub A1 User Manual*.

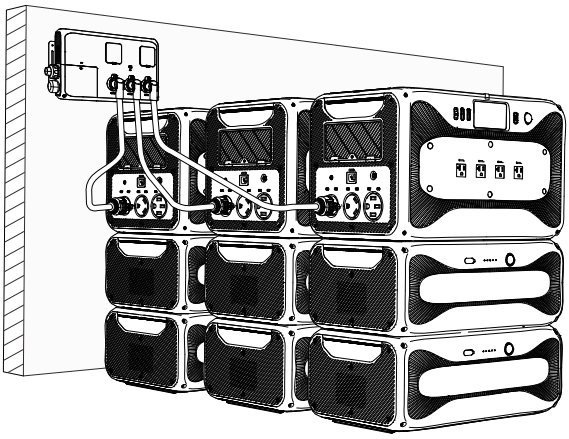
Connecting Two Apex 300 Units

This setup provides up to 7,680W of power and 38,707.2Wh of capacity with 12 B300K batteries.



Connecting Three Apex 300 Units

This setup provides up to 11,520W of power and 58,060.8Wh of capacity with 18 B300K batteries.



Notes:

- Make sure all Apex 300 units are powered off before connecting.
- Power on one Apex 300 unit to automatically turn on the others.
- Settings from one unit will sync with all connected units.

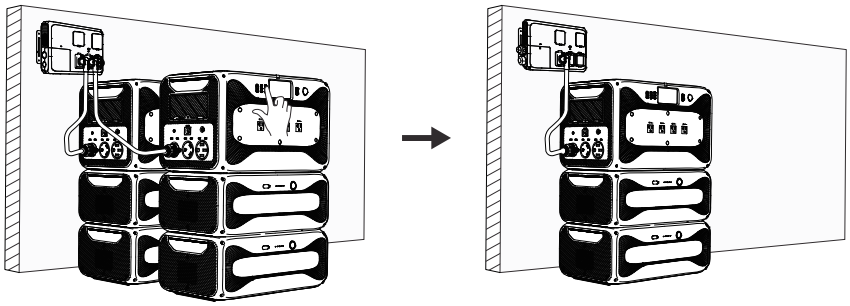
Disconnecting the System

To disconnect the parallel system, follow these steps:

Step 1: Press and hold the AC power button on one Apex 300 unit until both AC input and output power display "OFF" on the screen.

Step 2: Disconnect its parallel cable from Hub A1.

Step 3: Close the cover of the Hub A1's unused outlet.

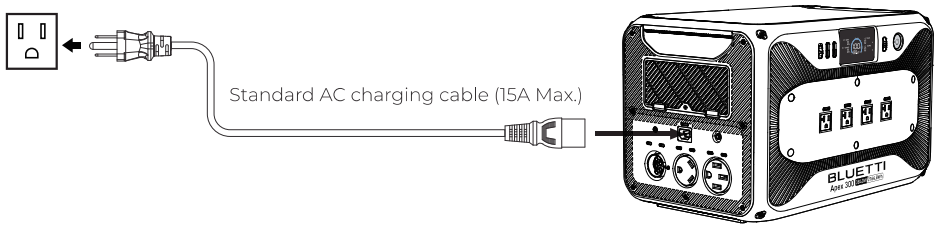


Attention: Follow proper steps when connecting or disconnecting devices. BLUETTI is not responsible for any issues caused by unauthorized actions.

11. Adjust Grid Input Current

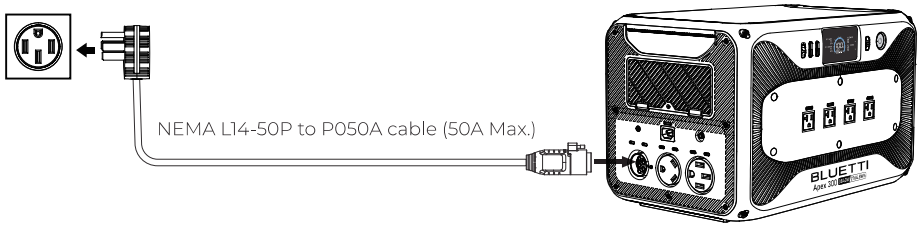
Standard Charging

The default grid input current is set at 12A.



Turbo Charging

The maximum grid input current is 50A.



Notes:

- Use the BLUETTI app to adjust the grid input current.
- It is recommended that an overcurrent protection device (OCPD) be installed upstream. A model rated at 60A, 2-pole, 120/240VAC is suggested to ensure the safety and stability of the circuit.
- It's recommended to consult a licensed electrician to confirm your home circuit can support the required current.
- To achieve a grid input current exceeding 15A, the NEMA L14-50P to P050A cable must be purchased separately.
- The Standard AC charging cable and the NEMA L14-50P to P050A cable cannot be connected simultaneously to charge the device.

12.Maintenance and Care

- If the unit's SoC falls below 5%, please recharge the unit in time.
- Before storing, charge to 40%-60% SoC, then power off and disconnect all cables.
- Store it in a cool, dry place, away from flammable materials.
- Safe storage temperature: -10°C to 40°C (14°F to 104°F). For storage over a month, keep it below 35°C (95°F).
- Fully cycle every 3 months to maintain battery health.
- Avoid extended storage; it may impact performance and lifespan.

If SoC drops to 0 during storage or startup:

- Shut down immediately.
- Charge within 48 hours.
- Keep it at 5°C to 35°C (41°F to 95°F) for 6 hours before charging.
- Recommended to charge via an AC source; if using solar energy, ensure an input of over 100W.

13. Specifications

Model	Apex 300
Battery Capacity	2,764.8Wh (51.2V/54Ah)
Battery Type	$LiFePO_4$
Weight	About 38kg (83.78lbs)
Dimensions (L × W × H)	525 × 327 × 320mm (20.67 × 12.87 × 12.6in)
Charging Temperature	0°C to 40°C (32°F to 104°F)
Discharging Temperature	-20°C to 40°C (-4°F to 104°F)
Storage Temperature	-20°C to 40°C (-4°F to 104°F)
Working Humidity	10% to 90%
IP Rating	IP20
AC Output	
4 × AC Outlet (NEMA 5-20R)	3,840W Max. Output (Voltage Selector: 120V):120V 50/60Hz, 20A Max. each port Output (Voltage Selector: 240V)： 120V 50/60Hz, 16A Max. each port (Every Two Ports: 1920W Max.)
1 × AC Outlet (NEMA TT-30R)	3600W Max. Output (Voltage Selector: 120V): 120V 50/60Hz, 30A Max. Output (Voltage Selector: 240V): 120V 50/60Hz, 16A Max.
1 × AC Outlet (NEMA 14-50R)	3840W Max. Output (Voltage Selector: 120V): (Discharge Only): 120V 50/60Hz, 32A Max. (Bypass Mode): 120V 50/60Hz, 50A Max. Output (Voltage Selector: 240V): (Discharge Only): 120V/240V 50/60Hz, 16A Max. (Bypass Mode): 120V/240V 50/60Hz, 50A Max.
1 × AC Output (P050A)	3,840W Max. (Requires to be used with Hub A1)
AC Charging	3,840W Max. (80% in 45 mins @15°C to 25°C / 59°F to 77°F)
AC Input	
AC charging input port	120V, 50Hz / 60Hz, 15A Max. 1,800W Max. (Charging + Bypass)
1 × AC Input (P050A)	120V/208V or 120V/240V 50/60Hz, 50A Max. 120V: 6,000W Max. (Charging + Bypass) 240V: 12,000W Max. (Charging + Bypass)
DC Input (2 × XT60PM-M)	1,200W Max. per port, 12V-60V, 20A Max.
AC + DC Charging	Apex 300: 3840W Max Apex 300+1~6 B300K: 6240W Max

Battery Expansion Port	51.2VDC, 90A Max.
Parallel Port	
Interface	P050A

14. Troubleshooting & FAQs

Error Code	Description	Solutions
E001	Inverter overload	• Check device power usage. • Reduce load if too high.
E002	Inverter overtemperature protection, AC output off	• Wait 10 mins for the unit to cool down. • Turn on the AC output again.
E003	Inverter short circuit	• Check devices for short circuits. • Disconnect and fix.
E033	PV overvoltage	• Make sure the PV input voltage is within 12V-60V.
E039	PV overtemperature	• Wait 10 mins for the unit to cool down. • Re-enable the PV input.
E085	Charging temperature too high	• Wait for the unit to cool down before using it again.
E086	Charging temperature too low	• Place the unit in an ambient temperature range of 0°C to 40°C (32°F to 104°F).
E087	Discharging temperature too high	• Wait for the unit to cool down before using it again.
E088	Discharging temperature too low	• Place the unit in an ambient temperature range of -20°C to 40°C (-4°F to 104°F).
E115	Grid overfrequency	• Verify home grid frequency. • Contact utility company if necessary.
E116	Grid underfrequency	• Verify home grid frequency. • Contact utility company if necessary.
Others	/	• Contact BLUETTI support for assistance.

FAQs (Frequently Asked Questions)

Q1: How do I know whether my devices will work with this product?

A: Keep the total AC power below 3,840W. Some devices with motors or compressors may start at 2-4 times their rated power, which could easily overload the Apex 300.

Q2: Can I use third-party solar panels to charge this product?

A: Yes, you can use third-party solar panels with open circuit voltage of 12V-60V and MC4 connectors. Avoid mixing different types of solar panels.

Q3: Can it charge and discharge at the same time?

A: Yes, the Apex 300 supports pass-through charging.

Q4: Why is the charging power often too low?

A: The built-in BMS adjusts the charging power based on battery temperature and SoC to protect the battery and extend its life.

Q5: How to calculate the operation time?

A: Operation time = Battery Capacity × DoD × η ÷ (Load + Apex 300's Self-consumption)
Note: DoD (Depth of Discharge) is 95%. η (inverter efficiency) is over 90%. The Apex 300 self-consumption is about 20W.

Q6: Why does a warning come up when using a diesel heating pump with the cigarette lighter port?

A: The pump may require more initial power to start. Use a compatible adapter to start and run the pump with our AC outlets.

Appendix

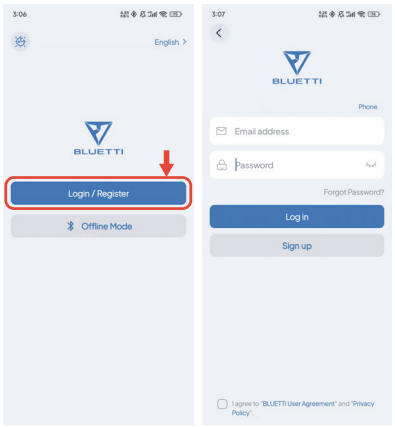
Update Firmware via BLUETTI App

Keeping firmware updated is IMPORTANT for optimal performance. For detailed instructions, refer to the app user manual in the app. Using the Elite 200 V2 upgrade as an example.

1. Download the BLUETTI app
Scan the QR code or search for “BLUETTI” in the App Store or Google Play to download the app.

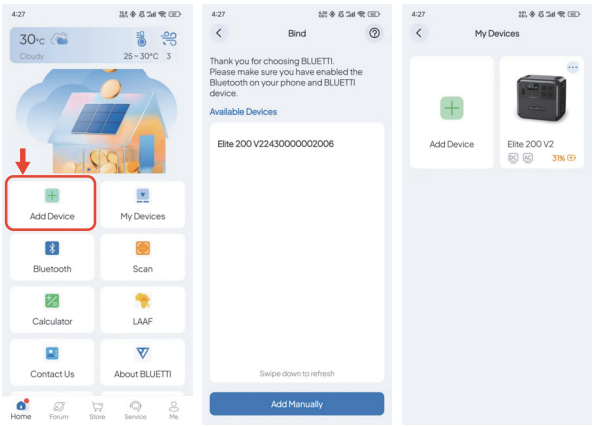
2. Log in or sign up

Log in with a BLUETTI account. If there is no account, create one by following the on-screen instructions.



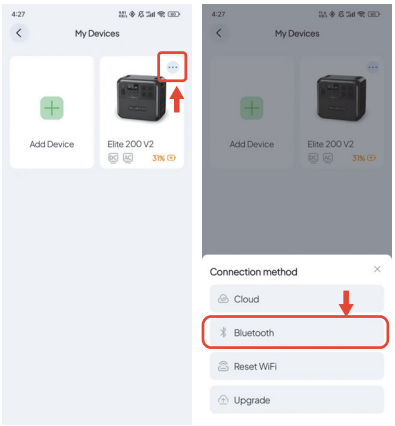
3. Bind the unit

- Tap **Add Device** directly or access **My Devices** > **Add Device** to start the process.
- Select the unit from the available device list, or choose **Add Manually** and enter the unit's serial number (SN).
- Alternatively, tap **Scan** on the **Home** page or in **Add Device** page to bind via QR code.



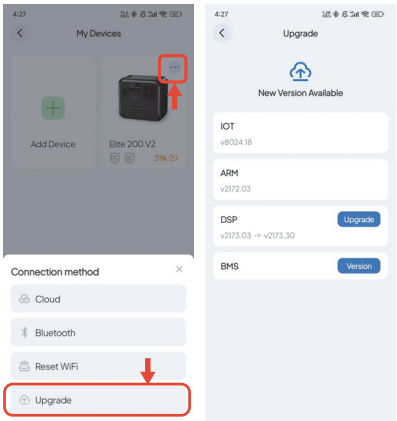
4. Connect via Bluetooth

On the **My Devices** page, tap the unit and select **Bluetooth** as the connection method.



5. Check for Firmware Updates

Tap **Upgrade** to access the **Upgrade** page.
The app will check for the latest firmware version available for the unit.



6. Download and Install the Update

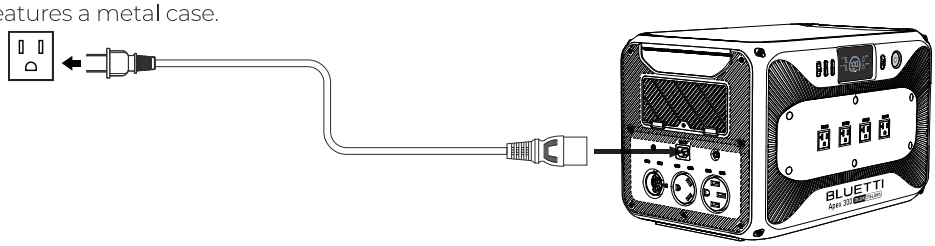
If a new firmware update is available, tap **Upgrade** and follow the on-screen instructions.

Note:

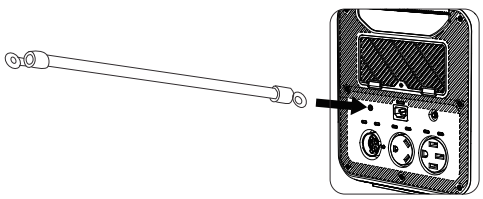
- Ensure the unit remains powered on and connected during the update.
- Keep your phone and the unit close together (recommended range: 16.4ft / 5m).
- Do not exit app until done.

Grounding Guidelines

Only use the grounding terminal when the product is connected to the home grid using a 2-pin cable, or if the wall outlet's grounding is ineffective, and the connected device features a metal case.



Use a cable with OT terminals for grounding. Connect one end to the grounding terminal with a grounding screw and the other end to the wall outlet or home distribution box ground.



Compliance

• FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE: FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

• **IC Caution**

This device contains licence-exempt transmitter(s) / receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure statement: The equipment complies with ISED Radiation exposure limits set forth for uncontrolled environments. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) L' appareil ne doit pas produire de brouillage;

(2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

Déclaration d'exposition aux RF : L'équipement est conforme aux limites d'exposition aux rayonnements ISDE définies pour les environnements non contrôlés. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

CAN ICES (B) / NMB (B)

Need Help? We're here for you!

+1 800-200-2980 (Mon-Sun 9:00-17:00)

service@bluettipower.com

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BLUETTI Power Inc.

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Apex 300
Centrale électrique portative

Manuel d’utilisation V3 .0

Instructions importantes

Pour des performances optimales, **mettez à jour votre appareil avec la dernière version du micrologiciel avant la première utilisation.**
Voir l’annexe « Mise à jour du micrologiciel via l’application BLUETTI » pour obtenir des conseils.
Lisez et familiarisez-vous avec ce manuel avant utilisation et conservez-le à portée de main afin de pouvoir le consulter ultérieurement.

BLUETTI