

# B500K

## LiFePO<sub>4</sub> Battery Pack

### User Manual v1.3

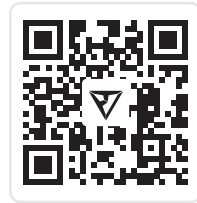
#### Important Instructions

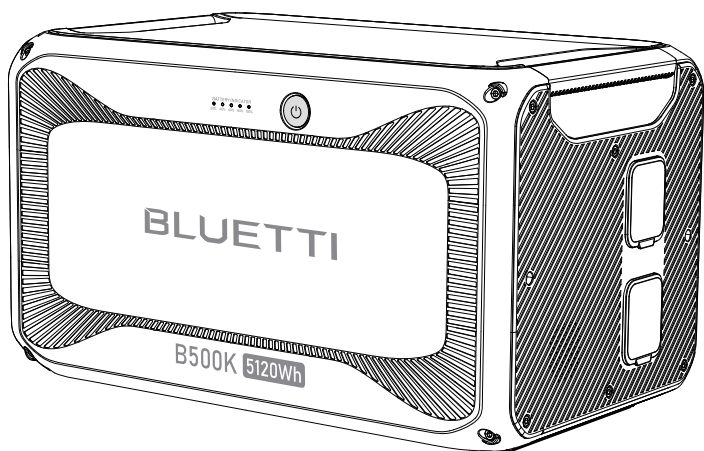
Inspect the packaging for damage before use.

Perform a charge cycle before first use.

Scan the QR code for the BLUETTI app.

Read and understand this manual before use and keep it handy for future reference.





## **Legal Information**

**Copyright © 2025 Shenzhen PowerOak Newener Co., Ltd. All rights reserved.**

No reproduction or transmission of any part of this document is permitted without the prior written consent of Shenzhen PowerOak Newener Co., Ltd.

### **Notice**

BLUETTI's products and services are subject to the terms and conditions agreed upon during purchase. Some aspects described in this manual may not be available under your purchase contract. Unless otherwise specified in the contract, BLUETTI makes no express or implied representations or warranties regarding the contents of this manual.

BLUETTI should assume no liability for the failures, damages, or injuries resulting from force majeure, repair attempts by unqualified personnel, or improper installation and operation.

The contents of this manual are subject to change without notice. Please obtain the latest version from BLUETTI official website.

If you have any questions or concerns about this manual, please contact BLUETTI support for further assistance.

**Shenzhen PowerOak Newener Co., Ltd.**

F19, BLD No.1, Kaidaer, Tongsha RD No.168, Xili street, Nanshan, Shenzhen, China

Web: <https://www.bluettipower.com>

Contents

1 Safety Information ..... 05

2 Packing List ..... 07

3 Get to Know Your B500K ..... 08

4 Use Your B500K ..... 09

    4.1 Power On/Off ..... 09

    4.2 Connect to B500K and Power Station ..... 09

    4.3 Charge Up ..... 13

    4.4 Control and Monitor ..... 13

5 Indicators Status ..... 14

6 Maintenance and Care ..... 14

7 Specifications ..... 15

8 Troubleshooting ..... 15

Appx. 1 FAQs (Frequently Asked Questions)..... 16

Appx. 2 Compliance ..... 17

Appx. 3 Consignes de sécurité ..... 19

# 1. Safety Information

## General Safety

**WARNING** – When using the product, basic precautions should always be followed to prevent the risk of fire, electric shock, or injury to persons:

- Read all the instructions before using the product.
- Use and store the product in a cool, dry place with good ventilation.
- Keep it away from flammable liquids, gases, explosives and corrosive substances.
- Do not expose it to high temperatures or heat sources like sunlight, fire, transformers, and heaters.
- Do not insert fingers or foreign objects into the product's ports.
- Do not use damaged or modified product to prevent electric shock, injury, etc.
- Operate the product only with undamaged plugs and cables.
- Do not move the product during use to avoid internal hardware damage from vibration and collision.
- Place the product on a stable platform.
- Keep the product out of reach of children and pets.
- Avoid submerging or cleaning the product with liquids.
- Power off the product before any servicing to reduce the risk of electric shock.
- Only professionals should handle leaks or defects — seek their assistance as needed.
-  The symbols on the unit and its accessories are intended to remind you to read the instructions in the literature accompanying the product before operation and maintenance.

## Battery Safety

- Use the battery within the specified temperature range.
- Do not disassemble, modify, or damage the battery to prevent leakage, overheating, or fire.
- Keep the positive and negative battery terminals from touching each other or metal objects.
- Avoid welding or grinding near batteries to prevent fire from sparks or arcs.
- Do not drop metal tools onto the battery to prevent sparks or short circuits.
- Lithium-ion batteries pose fire risks, so be aware of these hazards:
  - a. Thermal runaway can release flammable and harmful gases such as CO and HF. Vapors from burning batteries may irritate the eyes, skin, and throat.
  - b. The concentration of these gases could lead to deflagration and explosion.
  - c. The battery electrolyte is flammable, toxic, and volatile.
- If a battery leaks chemicals or emits odors, don't approach it — contact professionals for safe disposal. They'll need proper protective gear.

- Do not touch a battery that's been submerged in water, to avoid electric shocks.  
Discard soaked batteries through proper recycling channels.
- Electrolyte is corrosive and can cause irritation and chemical burns. If you come into direct contact with battery electrolyte:
  - a. Inhalation of Vapors: Evacuate the contaminated area, get fresh air immediately, and seek medical attention.
  - b. Eye Contact: Immediately flush eyes with water for at least 15 minutes, do not rub eyes, and seek medical attention immediately.
  - c. Skin Contact: Immediately wash the infected area with soap and water and seek medical attention immediately.
  - d. Ingestion: Seek medical attention immediately.
- Follow local guidelines for proper battery disposal; never burn, crush, or discard them improperly.

**Handling Requirements**

During transportation or storage, take care to avoid dropping, violently impacting, or tilting the product as it may result in internal damage. If necessary, use mechanical assistance such as carts or adjustable height workbenches to ensure safe handling.

**Recommended Number of People Based on the Weight of Product**

| Weight                         | Number of people |
|--------------------------------|------------------|
| < 18 kg/39.7 lbs               | 1                |
| 18 kg–32 kg/ 39.7 lbs–70.5 lbs | 2                |
| 32 kg–55 kg/70.5 lbs–121.3 lbs | 3                |
| > 55 kg/121.3 lbs              | 4 or a cart      |

**Personal Precautions**

- When working near batteries, wear eye and clothing protection.
- Avoid smoking, sparks, or flames near the battery or engine.
- In abusive conditions, liquid may eject. If contact occurs, flush with water; seek medical help if liquid contacts eyes.

SAVE THESE INSTRUCTIONS

## 2. Packing List



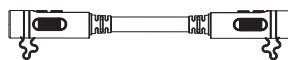
B500K  
LiFePO<sub>4</sub> Battery Pack



Documents



CA90\*  
Battery Expansion Cable  
(270 mm/10.62 in)



P090A\*  
Battery Expansion Cable  
(800 mm/31.49 in)

\*The package includes only one battery expansion cable (CA90 or P090A), based on the ordered kit.

The following optional accessory is not included. You can purchase it at <https://www.bluettipower.com>

**Note:** Image for reference only.

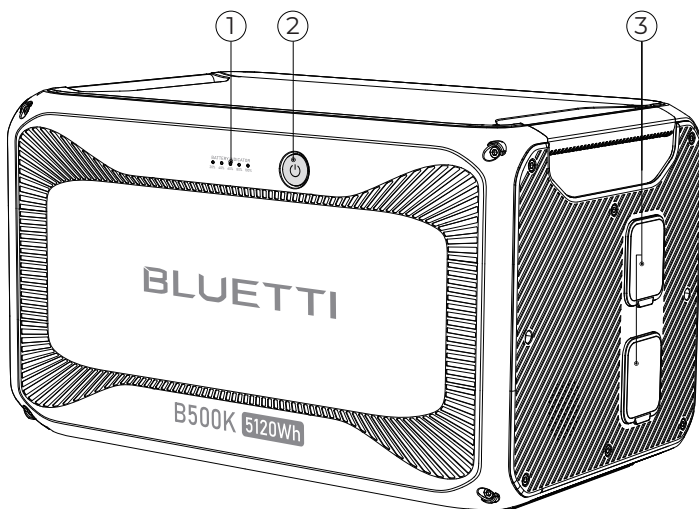


P090D to P150D Battery Expansion Cable  
(800 mm/31.49 in)

### Battery Expansion Cables:

- ① Connect the B500K to Apex 300, B300K, or other B500K units with the CA90 battery expansion cable.
- ② Use the P090A cable to connect to B300, AC300, AC200MAX, or AC200L.
- ③ For AC500 and B300S, use the optional P090D to P150D cable.

### 3. Get to Know Your B500K



① Battery Level Indicators\*

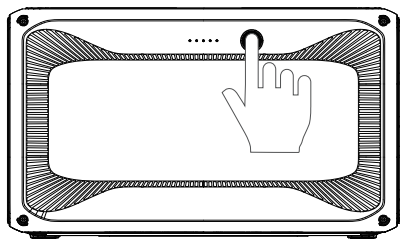
③ Expansion Ports

② Power Button\*

\*See Chapter 5 for details on the indicators.

## 4. Use Your B500K

### 4.1 Power On/Off



#### Power On

1. Long press the power button.
2. When the button lights up, the B500K is on standby.

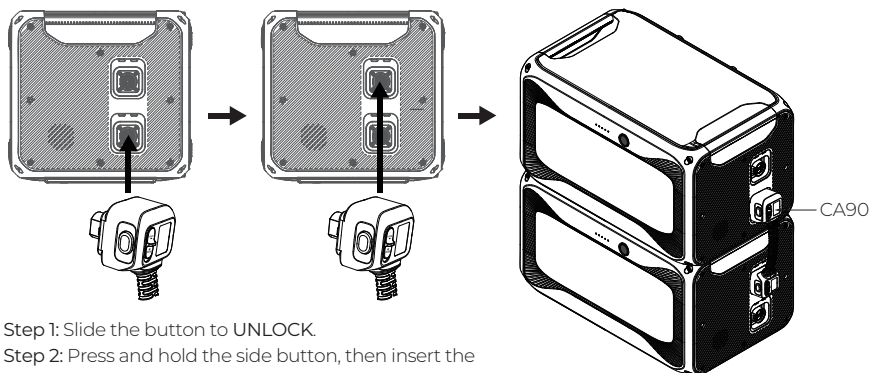
#### Power Off

1. Long press the power button.
2. The button light and indicators turn off.

**Note:** Connected to a power station, the B500K automatically turns on when the combo charges with AC power or solar panels.

### 4.2 Connect to B500K and Power Station

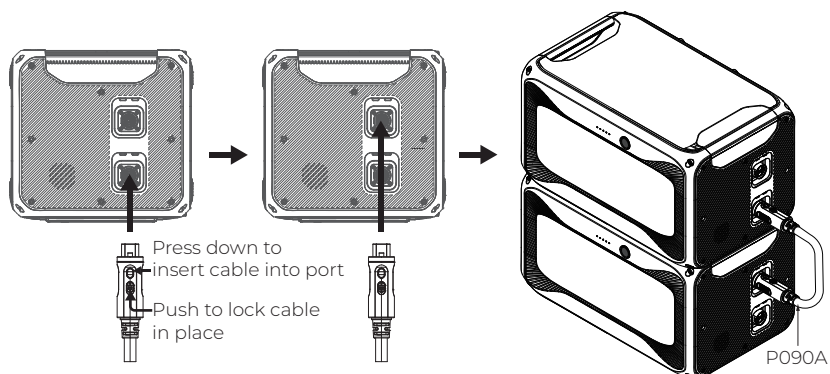
#### Connecting to B500K Battery



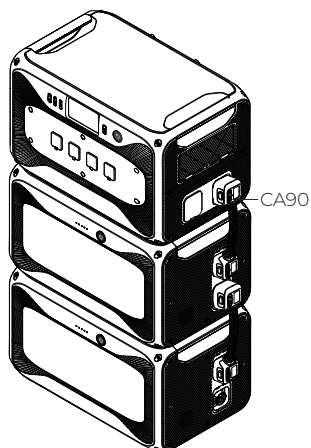
Step 1: Slide the button to UNLOCK.

Step 2: Press and hold the side button, then insert the connector into the main unit/battery pack.

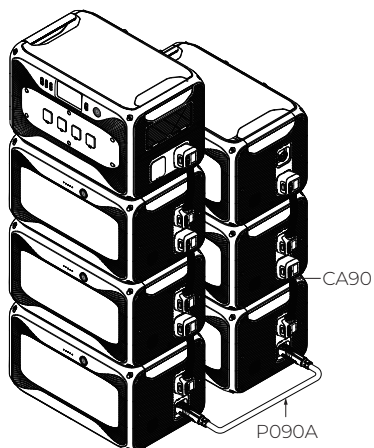
Step 3: Once securely connected, slide the button to LOCK.



## Connecting to Apex 300



Apex 300 + 2\* B500K

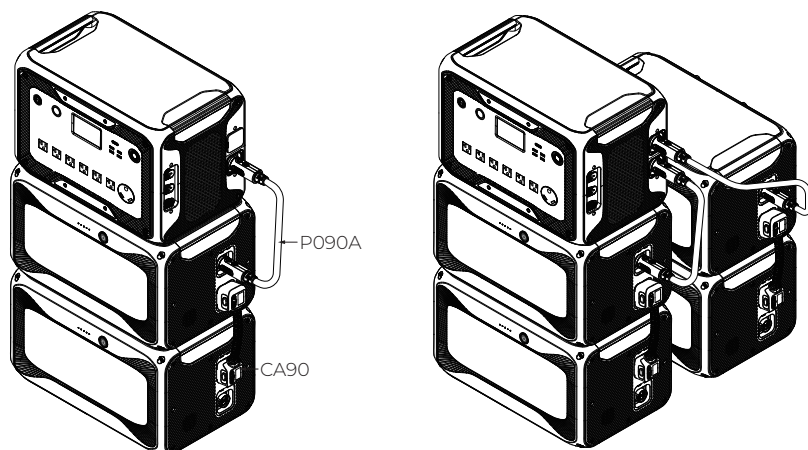


Apex 300 + 6\* B500K

### Notes:

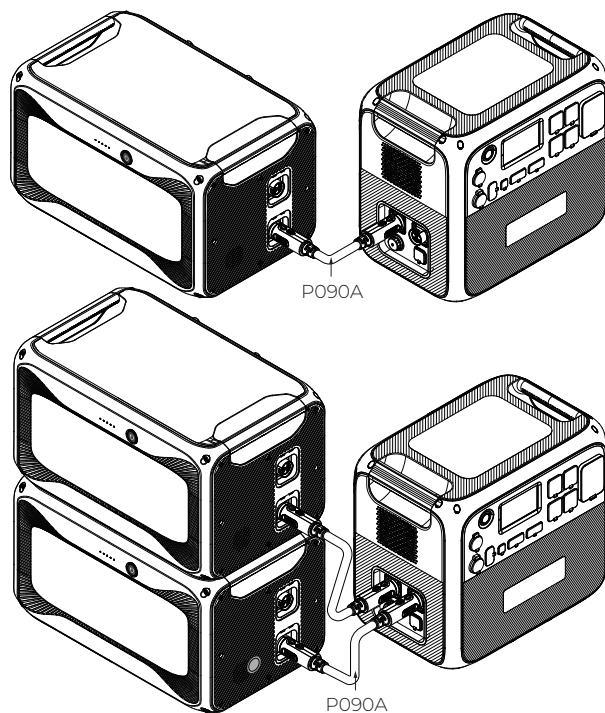
- Power off all units before connecting.
- Power on the Apex 300, and the battery activates automatically. Stacking the units is recommended.
- When connecting two or more B500K batteries, it's recommended to securely mount the units to the wall using metal brackets and screws.

## Connecting to AC300

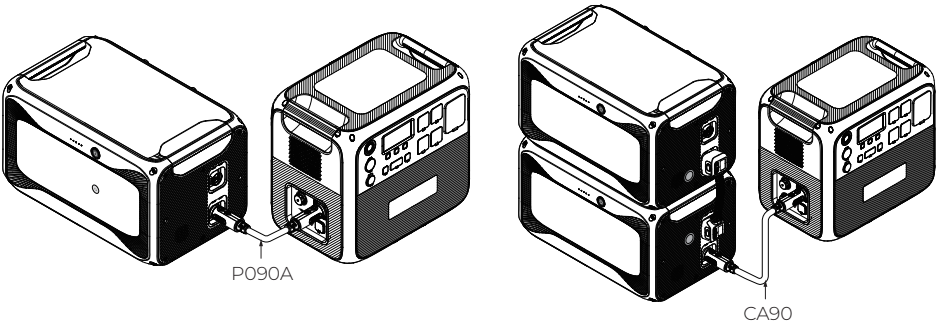


**Note:** The AC300 can work with B500K and B300 expansion batteries simultaneously using P090A battery expansion cables.

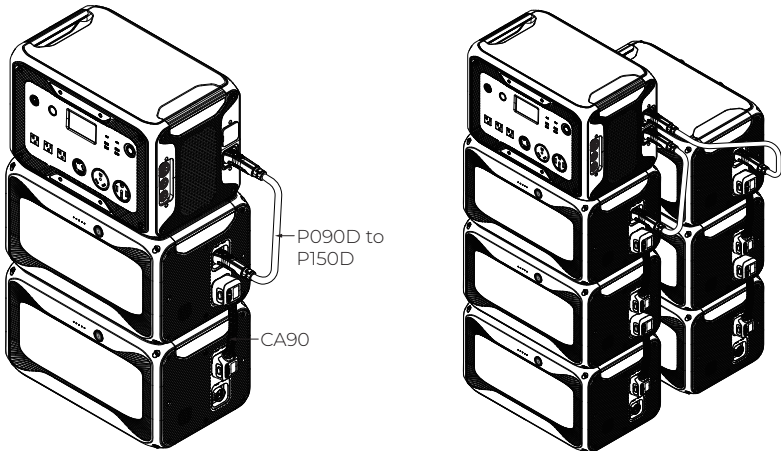
## Connecting to AC200MAX



Connecting to AC200L



Connecting to AC500

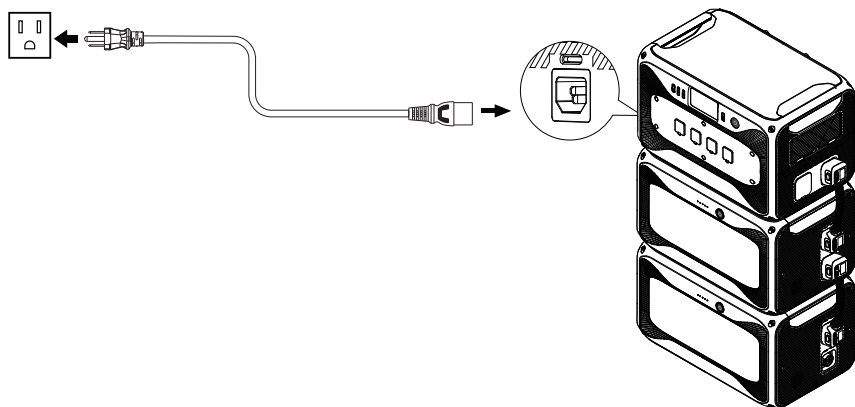


**Note:** The AC500 can work with B500K, B300S and B300 expansion batteries simultaneously. To connect them:

| Connection          | Cable Required                         |
|---------------------|----------------------------------------|
| AC500 to B300S      | P150D battery expansion cable          |
| AC500 to B500K/B300 | P090D to P150D battery expansion cable |
| B500K/B300 to B300S |                                        |
| B500K to B300       | P090A battery expansion cable          |

### 4.3 Charge Up

Connect the B500K to a power station for charging.



**Note:** Recommended charging temperature: 15°C to 30°C (59°F to 86°F)

### 4.4 Control and Monitor

Connect the B500K to a power station, and check the battery level and upgrade it using the BLUETTI app. For more details, please refer to your power station's app user guide.

## 5. Indicators Status

| Indicators    | Status                                                                                                                                                                                                                                                                            | Description                                |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Power Button  | Steady green                                                                                                                                                                                                                                                                      | Normal operation                           |
|               | Flashes 4 times per second                                                                                                                                                                                                                                                        | Malfunction                                |
|               | Flashes 1.5 s on, 1.5 s off                                                                                                                                                                                                                                                       | Upgrading                                  |
|               | Off                                                                                                                                                                                                                                                                               | Shutdown                                   |
|               | Flashes twice, pause 4 seconds, repeat                                                                                                                                                                                                                                            | The battery expansion cable is not locked. |
| Battery Level | <ul style="list-style-type: none"><li>• Each lit indicator represents 20% SoC.</li><li>• All indicators remain steady when fully charged and go off when fully discharged.</li><li>• Flashing indicators show the charging progress. Only one flashes when nearly full.</li></ul> |                                            |

## 6. Maintenance and Care

- When the SoC drops to 1% without any power input, power off the unit promptly to prevent overdischarge.
- Before storing, charge it to 60%–80% SoC and fully cycle every 6 months to maintain battery health.
- For long-term storage over 6 months, charge it to 40%–60% SoC and fully cycle every 3 months.
- Safe storage temperature: -20°C to 40°C (-4°F to 104°F). For storage over a month, aim for a range of -20°C to 25°C (-4°F to 77°F). Perform a cycle charge before reuse.
- Avoid extended storage periods as it can impact the battery's performance and lifespan.
- Use a dry and soft towel to clean the battery's exterior.

## 7. Specifications

|                         |                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------|
| Model                   | B500K                                                                                    |
| Battery Capacity        | 5,120 Wh                                                                                 |
| Battery Type            | LiFePO <sub>4</sub>                                                                      |
| Net Weight              | Approx. 45 kg/99.21 lbs                                                                  |
| Dimensions (L × W × H)  | 520 × 327 × 308.5 mm/20.47 × 12.87 × 12.15 in                                            |
| 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     | Up to 1 month: -20°C to 40°C/-4°F to 104°F<br>Up to 6 months: -20°C to 25°C/-4°F to 77°F |
| Working Humidity        | 5% to 95% RH                                                                             |
| Charging Current        | 60 A Max.<br>(Current may decrease outside specified temperatures)                       |
| Discharging Current     | 70 A Max.                                                                                |
| 2 × Expansion Port      | 58.4 VDC Max., 90 A Max.                                                                 |
| Enclosure Rating        | IP20                                                                                     |

## 8. Troubleshooting

When the B500K malfunctions, the indicators may flash or turn off in various combinations. Check the BLUETTI app for error details and solutions. If the issue persists, stop using the product immediately and contact BLUETTI support for assistance.

## **Appx. 1 FAQs (Frequently Asked Questions)**

**Q1: How to claim warranty?**

**A:** Please refer to the warranty card.

**Q2: How to upgrade the B500K?**

**A:** Connect the B500K to the power station and upgrade it via the BLUETTI app in Settings > Firmware Upgrade. Follow in-app instructions.

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

**A:** Yes, the B500K supports pass-through charging.

**Q4: Why doesn't the B500K drain all its power?**

**A:** The B500K reserves some energy to avoid overdischarging and protect the battery's lifespan.

**Q5: Can I leave the battery uncharged after fully discharging?**

**A:** No, charge promptly after use to prevent damage. Keep the battery in the environment of at least 10°C (50°F) for at least 12 hours beforehand.

## Appx. 2 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.

## IC Warning statement

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.

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.

CAN ICES (B)/NMB (B)

## Appx. 3 Consignes de sécurité

### Sécurité générale

**AVERTISSEMENT** - Lors de l'utilisation du produit, des précautions de base doivent toujours être suivies pour éviter tout risque d'incendie, de choc électrique ou de blessure:

- Lisez toutes les instructions avant d'utiliser le produit.
- Ne l'exposez pas à des températures élevées ou à des sources de chaleur comme la lumière du soleil, le feu, les transformateurs et les radiateurs.
- N'insérez pas les doigts ou des objets étrangers dans les ports du produit.
- N'utilisez pas de produit endommagé ou modifié pour éviter les chocs électriques, les blessures, etc.
- Utilisez le produit uniquement avec des fiches et des cables intacts.
- Ne déplacez pas le produit pendant l'utilisation pour éviter tout dommage matériel interne dû aux vibrations et aux collisions.
- Manipulez le produit avec précaution pour éviter les chutes, les chocs violents ou le basculement.
- Placez le produit sur une plate-forme stable.
- Gardez le produit hors de portée des enfants et des animaux domestiques.
- évitez de submerger ou de nettoyer le produit avec des liquides.
- éteignez le produit avant tout entretien pour réduire le risque de choc électrique.
- Seuls des professionnels doivent gérer les fuites ou les défauts – demandez leur aide si nécessaire.
-  Les symboles figurant sur l'appareil et ses accessoires sont destinés à vous rappeler de lire les instructions contenues dans la documentation accompagnant le produit avant son utilisation et son entretien.

### Sécurité de la batterie

- Utilisez la batterie dans la plage de température spécifiée.
- Ne démontez pas, ne modifiez pas et n'endommagez pas la batterie pour éviter une fuite, une surchauffe ou un incendie.
- évitez que les bornes positives et négatives de la batterie ne se touchent ou ne touchent des objets métalliques.
- évitez de souder ou de meuler à proximité des batteries pour éviter tout incendie dû à des étincelles ou à des arcs.
- Ne laissez pas tomber d'outils métalliques sur la batterie pour éviter les étincelles ou les courts-circuits.

- Les batteries au lithium-ion présentent des risques d'incendie, alors soyez conscient de ces dangers:
  - a.L'emballlement thermique peut libérer des gaz inflammables et nocifs tels que le CO et le HF. Les vapeurs provenant des batteries en feu peuvent irriter les yeux, la peau et la gorge.
  - b.La concentration de ces gaz pourrait entra?ner une déflagration et une explosion .
  - c.L'électrolyte de la batterie est inflammable, toxique et volatil.
- Si une batterie laisse échapper des produits chimiques ou dégage des odeurs, ne vous en approchez pas - contactez des professionnels pour une élimination en toute sécurité. Ils auront besoin d'un équipement de protection approprié.
- Ne touchez pas une batterie qui a été immergée dans l'eau pour éviter les chocs électriques. Jetez les piles usagées via les filières de recyclage appropriées.
- L'électrolyte est corrosif et peut provoquer des irritations et des brûlures chimiques. En cas de contact direct avec l'électrolyte de la batterie:
  - a. l nhalation des vapeurs: évacuer la zone contaminée, respirer immédiatement de l'air frais et consulter un médecin.
  - b. Contact avec les yeux: Rincer immédiatement les yeux à grande eau pendant au moins 15 minutes, ne pas se frotter les yeux et consulter immédiatement un médecin.
  - c. Contact avec la peau: Lavez immédiatement la zone infectée avec de l'eau et du savon et consultez immédiatement un médecin.
  - d. Ingestion: Consulter immédiatement un médecin.
- Suivez les directives locales pour une mise au rebut appropriée de la batterie; ne les brûlez jamais, ne les écrasez pas et ne les jetez jamais de manière inappropriée.

**Exigences en matière de manutention**

Pendant le transport ou le stockage, veillez à ne pas faire tomber, heurter violemment ou incliner le produit, car cela pourrait entraîner des dommages internes. Si nécessaire, utilisez une assistance mécanique telle que des chariots ou des établis à hauteur réglable pour assurer une manipulation sûre.

**Nombre de personnes recommandé en fonction du poids du produit**

| Le poids                       | Nombre de personnes |
|--------------------------------|---------------------|
| < 18 kg/39.7 lbs               | 1                   |
| 18 kg–32 kg/ 39.7 lbs–70.5 lbs | 2                   |
| 32 kg–55 kg/70.5 lbs–121.3 lbs | 3                   |
| > 55 kg/121.3 lbs              | 4 ou un chariot     |

## Personnel Précautions

- Lorsque vous travaillez à proximité de batteries, portez des lunettes et des vêtements de protection.
- évitez de fumer, d'étincelles ou de flammes à proximité de la batterie ou du moteur.
- Dans des conditions abusives, du liquide peut s'échapper. En cas de contact, rincer à l'eau; consulter un médecin si le liquide entre en contact avec les yeux.

SAVE THESE INSTRUCTIONS



## Need Help? We're here for you!

☎ +1 909-570-0909

Mon–Sat, 06:00–17:00 (PDT)

✉ [service@bluettipower.com](mailto:service@bluettipower.com)



@BLUETTI Official



@ bluetti\_inc



@bluetti.inc



@bluetti.inc

## Visit Us

**BLUETTI Power Inc.**

6185 S Valley View Blvd, Ste D, Las Vegas, NV 89118, US



## Certificate

Inspector: \_\_\_\_\_

QC: \_\_\_\_\_

Always Share Excellence

P/N: 17.0303.1012-00A0