B1232
LiFePO4 Battery Unit

User Manual V2.0

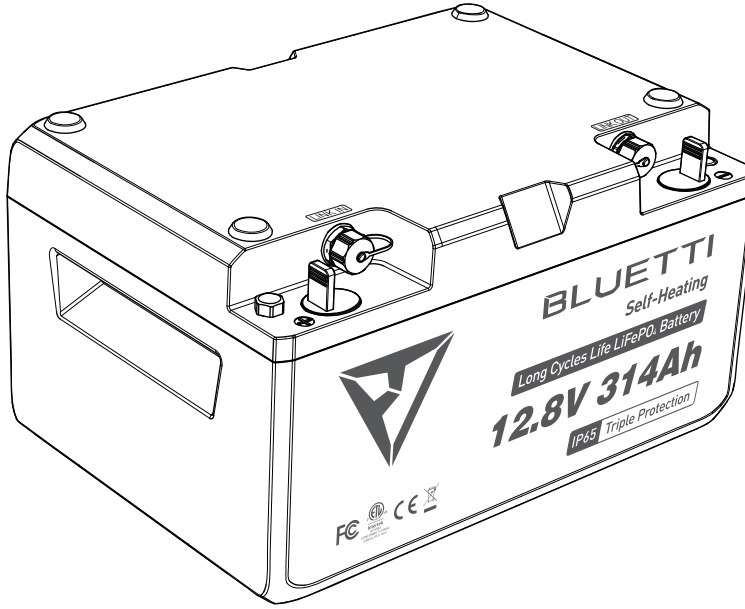
Important Instructions

Inspect the packaging for damage and fully charge the product 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.

BLUETTI


BLUETTI
Self-Heating
Long Cycles Life LiFePO4 Battery
12.8V 314Ah
IP65 Triple Protection

Legal Information

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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.

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Website: https://www.bluettipower.com/

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1. Safety Information

1.1 Important Guidelines

BLUETTI is not liable for the following situations or any resulting consequences:

- Damage caused by natural disasters, such as earthquakes, fires, floods, or storms.
- Damage due to improper handling or use not in accordance with this manual.
- Damage resulting from customer negligence, misuse, or intentional harm.
- Damage caused by unauthorized disassembly, modification, or repairs.
- Damage caused by using non-BLUETTI devices to power this product.
- Personal injury, fire, or equipment malfunction resulting from using this product in critical applications—such as nuclear energy, aviation, or medical fields—where high reliability is essential for personal safety or operation.

1.2 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.
- Fully charge the battery before first use.
- This product is for energy storage only. Do not use it as a starting or power battery for electric vehicles.
- Do not use the product in water.
- Keep the product away from open flames or heat sources like sunlight and heaters.
- Avoid charging the battery if the cell temperature is below 0°C (32°F) to prevent irreversible damage.
- Do not dispose of batteries in fire, water, or landfills. Recycle them responsibly according to local laws and regulations.
- Use a forklift or trolley to transport the product carefully, avoiding drops, violent impacts, short circuits, or damage that could lead to leakage or fire.
- Do not invert or stack the battery during unloading.
- Avoid touching the terminals to prevent electric shock.
- Keep the product out of reach of children and pets.

1.3 Battery Safety

- If the battery overheats, swells, leaks, or emits odors, stop using it immediately. Contact BLUETTI support or professionals for safe disposal.
- When connecting batteries in series or parallel, use batteries of the same brand, specification, and capacity. Do not mix new and used batteries to avoid system failure.

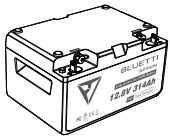
- Never short-circuit the battery terminals or connect the battery to an AC power source.
- Avoid mechanical vibrations, drops, impacts, punctures, or pressure to the battery, as these can cause damage or fire.
- Do not disassemble, modify, or repair the battery yourself. Unauthorized repairs can lead to leakage, overheating, or fire, and will void the warranty.
- After discharging, disconnect all loads to prevent over-discharge.

1.4 Emergency Measures

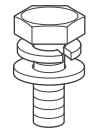
- Wear insulated gloves to prevent electric shock before handling the product.
- If the product gets wet, stop using it immediately. Dry it in a well-ventilated area and avoid contact. Do not reuse after drying; dispose of it according to local regulations or contact BLUETTI support.
- In case of fire, use water, sand, dry powder, or a CO_2 fire extinguisher to put out the fire.

SAVE THESE INSTRUCTIONS

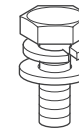
2. What's in the Box



B1232
LiFePO$_4$ Battery Unit

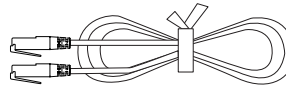


M8×20 Bolt
×4

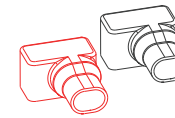


M8×30 Bolt
×2

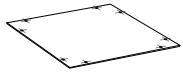
M8 Flange Nut
×6



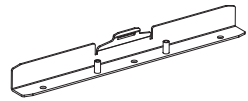
Ethernet Cable



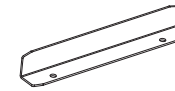
Terminal Cover
×2



Drilling Template

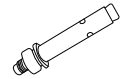


Fixed mounting bracket-1
×2



Fixed mounting bracket-2
×2

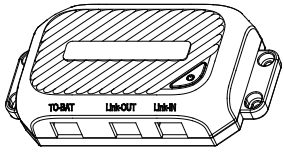
ST8 Wood Screw
×15



M8*60 Expansion bolt
×15

User Manual & Warranty Card

The following accessory is not included and can be purchased at https://www.bluettipower.com

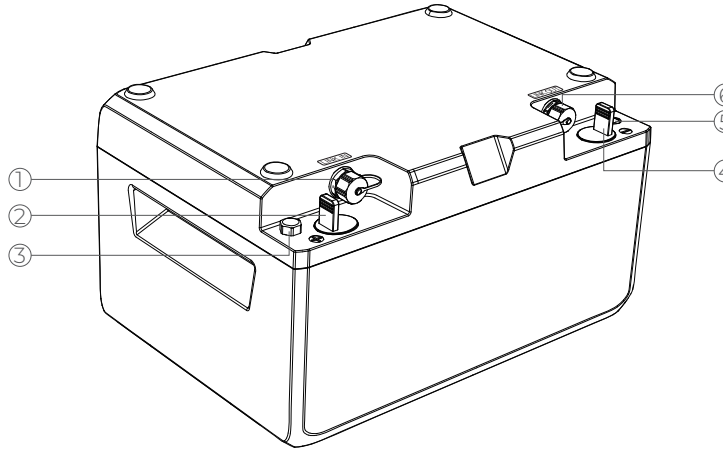


Edock Battery Communication Interface Box

3. Get to Know Your B1232

The BLUETTI B1232 battery pack is designed for RV non-driving systems, marine non-propulsion systems, and home energy solutions. Powered by Lithium Iron Phosphate ($LiFePO_4$) technology, it ensures long-lasting performance and safety, with an advanced Battery Management System (BMS) that provides protection against overcharging, short circuits, abnormal temperatures, and other risks.
With built-in self-heating, the B1232 continues to operate even in temperatures as low as -4°F (-20°C), keeping your power supply reliable in extreme conditions. It also supports external communication with other devices*, making it easy to integrate and customize your power system based on specific needs.

* For compatibility with third-party devices, an Edock battery communication interface box is required. Refer to the *Edock Battery Communication Interface Box User Manual* for more details.

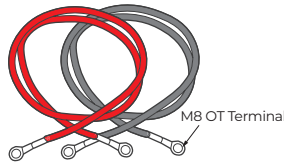


① COM Input Port
② Positive Terminal
③ Safety Vent*
④ Negative Terminal
⑤ Power Button & Indicator
⑥ COM Output Port

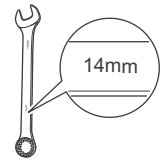
* The battery generates heat during operation, causing pressure inside and outside the unit to differ. Open the valve to balance the pressure.

4. Install Your B1232

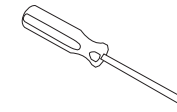
4.1 Required Accessories and Tools



Battery Connection Cable*
(M8 OT terminal)

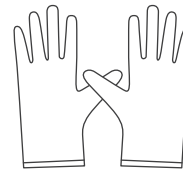


Wrench
(9/16")



Screwdriver

Multimeter



Protective Gloves

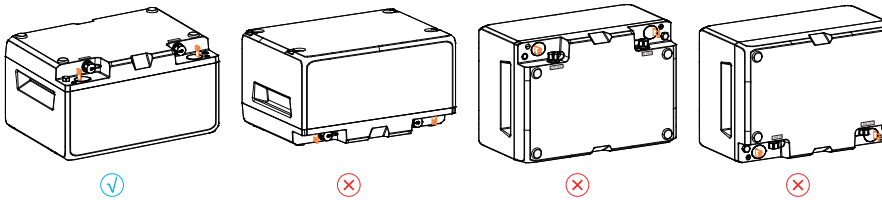
* Recommended to use a cable larger than 4 AWG or 20 mm^2.

4.2 Installation Requirements

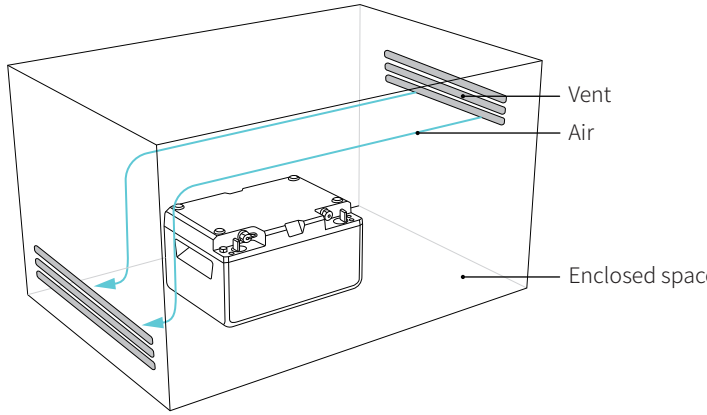
WARNING:

- Keep the battery away from water, oil, or dirt to prevent leakage, self-discharge, or short circuits.
- Ensure proper airflow around the battery. Place it in a well-ventilated area and avoid surfaces like blankets that may block airflow. Minimize temperature differences between connected batteries.
- For marine use, install the battery in a dry, stable location, away from salty, moist air. For optimal performance, operate in an environment between 68°F and 77°F (20°C and 25°C) with about 50% relative humidity.

- Place the battery upright with the battery terminals facing up.



- Install the battery in a clean, dry, and well-ventilated area. If it's in an enclosed space, position it as shown below.



Humidity

Rain

Flammable materials

Explosive materials

High temperature

Below 32°F (0°C)

Snow

Keep dry

Handle with care

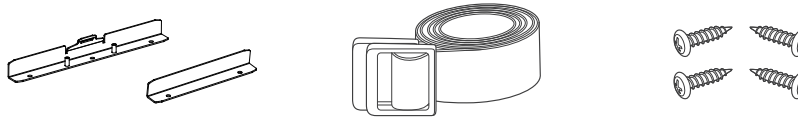
Good ventilation

Charging:32°F to 131°F (0°C to 55°C)
Discharging:–4°F to 131°F (–20°C to 55°C)

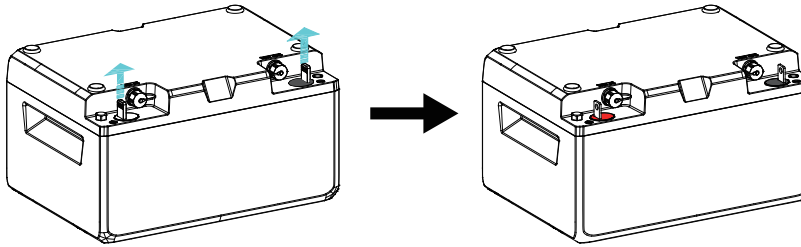
5% to 95% RH

4.3 Installation Steps

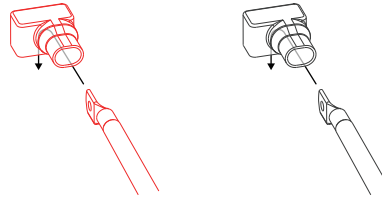
Step 1: Secure the battery (optional).



Step 2: Remove the dust covers and battery terminals.

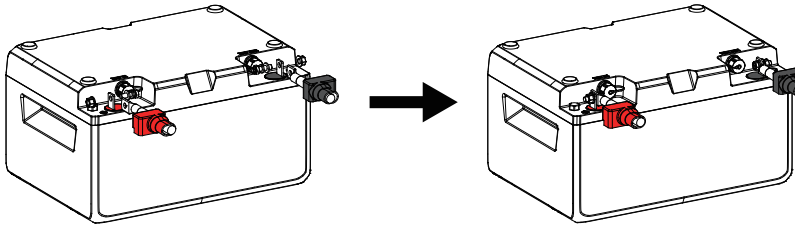


Step 3: Thread the battery connection cables through the terminal covers.

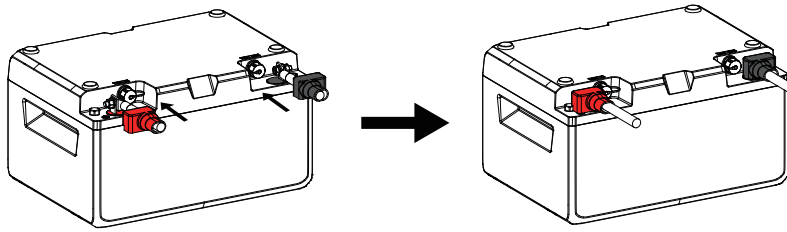


Step 4: Attach the battery terminals.

WARNING - Do not place washers between the terminal bolts and cable lugs to avoid high resistance and overheating.

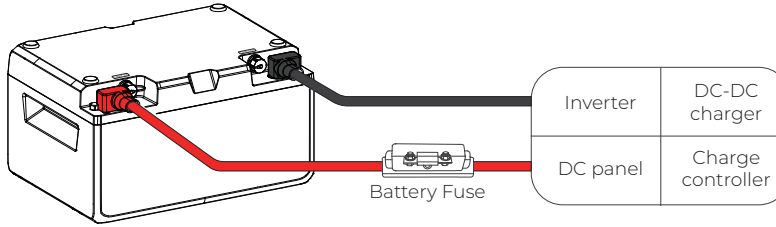


Step 5: Install the terminal covers.



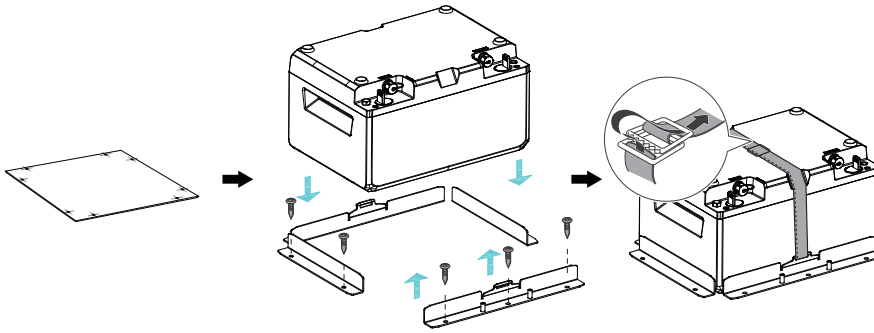
Step 6: Discharge and charge the battery.

Prepare an AC-DC charger, DC-DC charger, or other compatible devices as shown below. Refer to the specifications to choose the appropriate one.



Step 7: Fixed installation.

Install the fixed mounting bracket, Thread the strap through the designated holes and secure it with the hook-and-loop fastener.

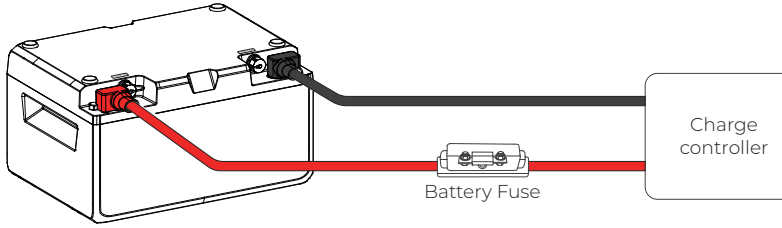


5. Connect Multiple Batteries

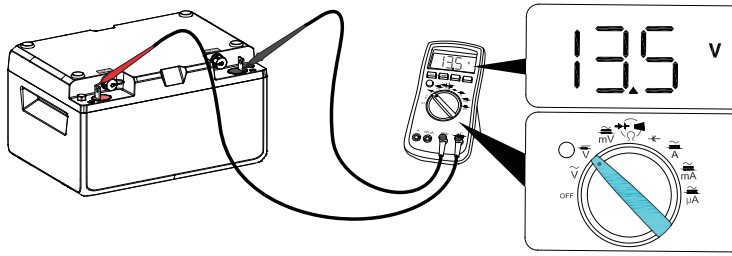
5.1 Balance Battery Voltage

Before connecting batteries in series or parallel, balance their voltage for optimal performance.

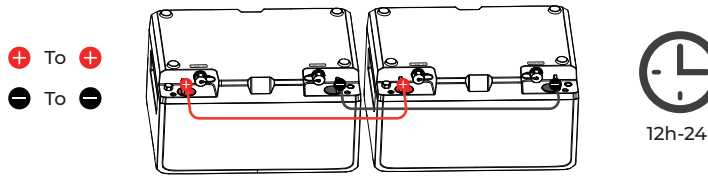
Step 1: Fully charge each battery using the appropriate charger.



Step 2: Use a multimeter to check the voltage of each battery. The difference should be no more than 0.2V.



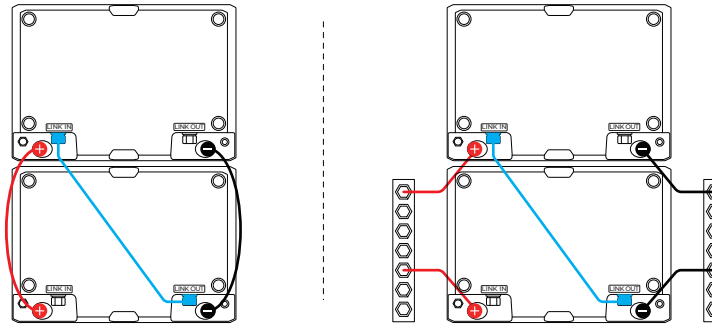
Step 3: Connect the batteries in parallel and allow them to rest together for 12 to 24 hours.



Note: To maintain balanced voltage, perform this process every 6 months, as battery chemistry, temperature, and usage can cause voltage differences over time.

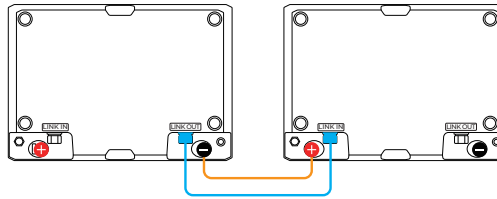
5.2 Direct Connection or via a Busbar

Batteries can be connected in series or parallel through their terminals or by using a busbar for efficient power distribution. Here's an example with two batteries connected in parallel.



5.3 Connect in Series

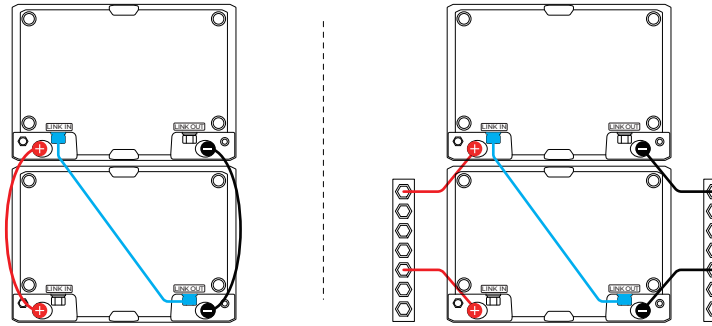
Up to 4 batteries can be connected in series for 48V power systems.



2S	Battery System	24 V (25.6 V/314 Ah)	4S	Battery System	48 V (51.2 V/314 Ah)
	Energy	8,038.4 Wh		Energy	16,076.8 Wh

5.4 Connect in Parallel

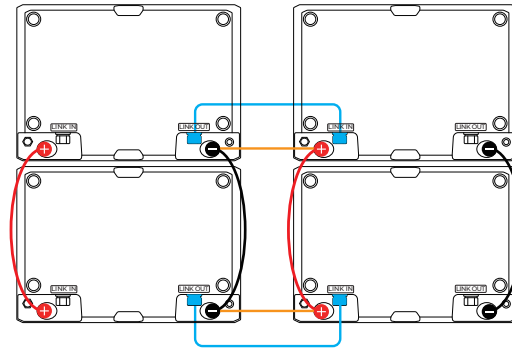
Up to 24 batteries can be connected in parallel to expand capacity. For setups with more than 8 batteries, Edock battery communication interface boxes are required. Each box supports up to 8 batteries. Refer to the *Edock Battery Communication Interface Box User Manual* for details.



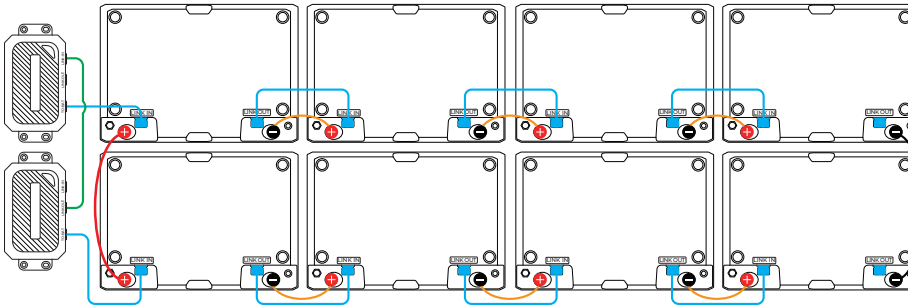
2P	Battery System	12 V (12.8 V/628 Ah)	6P	Battery System	12 V (12.8 V/1,884 Ah)
	Energy	8,038.4 Wh		Energy	24,115.2 Wh
4P	Battery System	12 V (12.8 V/1,256 Ah)	8P	Battery System	12V (12.8 V/2,512 Ah)
	Energy	16,076.8 Wh		Energy	32,153.6 Wh

5.5 Connect in Series-Parallel

When combining batteries, connect them in parallel first, then in series (or vice versa). For every 8 parallel or 4 series-connected batteries, use one Edock battery communication interface box as the master.



2P2S



2P4S

2P2S	Battery System	24 V (25.6 V/628 Ah)	4P2S	Battery System	24 V (25.6 V/1,256 Ah)
	Energy	16,076.8 Wh		Energy	32,153.6 Wh
2P4S	Battery System	48 V (51.2 V/628 Ah)	8P4S	Battery System	48 V (51.2 V/2,512 Ah)
	Energy	32,153.6 Wh		Energy	128,614.4 Wh

6. Estimate the Battery SoC

The SoC values below are based on the battery's resting voltage after 30 minutes of inactivity, not during charging or discharging.

SoC	Voltage	SoC	Voltage
100%	13.44V	30%	13.21V
95%	13.36V	20%	13.11V
90%	13.35V	10%	12.89V
70%	13.35V	5%	12.8V
50%	13.23V	0%	11.57V

Note: You can check the remaining battery SoC and upgrade the product by connecting to the BLUETTI app via Bluetooth.

7. Maintenance and Care

1. Do not clean the product with liquids. Use a dry, soft cloth to wipe the surface.
2. Store the battery in a dry environment free from corrosive gases, with 50%±15% relative humidity. Protect it from strong electromagnetic fields and direct sunlight.
3. Before storing, charge the battery to over 60% SoC and fully cycle every 6 months to maintain battery health.
4. Safe storage temperature:

• Up to 1 month: -4°F to 104°F (-20°C to 40°C)
• 1 to 3 months: -4°F to 95°F (-20°C to 35°C)
• Over 3 months: -4°F to 77°F (-20°C to 25°C)

8. Specifications

General	
Model	B1232
Battery Capacity	4,019.2 Wh (12.8 V, 314 Ah)
Net Weight	Approx. 64.59 lbs (29.3 kg)
Dimensions (L × W × H)	16.38 × 11.42 × 9.09 in (416 × 290 × 231 mm)

General	
Charging Temperature	32°F to 131°F (0°C to 55°C) -4°F to 131°F (-20°C to 55°C), with a charger connected and charging current above 1 A.
Discharging Temperature	-4°F to 131°F (-20°C to 55°C)
Operating Humidity	5% to 95% RH
IP Rating	IP65
Operating Altitude	≤9,842.52 ft (3,000 m)
Operating Voltage	10 V-14.6 V
Charging Current	70 A (Recommended) 140 A Max.
Discharging Current	140 A Max.
Peak Discharging Current	310 A @ 8 s
Cycle Life	6,000 cycles while retaining 70% capacity @ 0.4C charge/discharge, 77°F (25°C)
Charging	
Single Cell Overvoltage Protection	3.65 V, recovery @ 3.40 V
Overvoltage Protection	14.6 V, recovery @ 13.6 V
Overcurrent Protection	155 A, 65 s delay 160 A, 10 s delay 165 A, 1 s delay
Cell Temperature Protection	<30°F or >142°F (<-1°C or >61°C), recovery @ >36°F or <136°F (>2°C or <58°C)
Discharging	
Single Cell Undervoltage Protection	2.5 V, recovery @ 2.8 V
Undervoltage Protection	10.2 V, recovery @ 11.2 V
Overdischarge Current Protection 1	155 A, 125 s delay
Overdischarge Current Protection 2	200 A, 62 s delay
Overdischarge Current Protection 3	255 A, 32 s delay
Overdischarge Current Protection 4	300 A, 15 s delay
Overdischarge Current Protection 5	310 A, 8 s delay
Short-circuit Protection	480 A, 200 μs delay
Cell Temperature Protection	<-6°F or >142°F (<-21°C or >61°C), recovery @ >1°F or <136°F (>-17°C or <58°C)

Radio Frequency (EU)			
	Operating Frequency	Maximum Transmit power	Modulation mode
BLE5.0	2402MHz～2480MHz	≤2dBm	GFSK

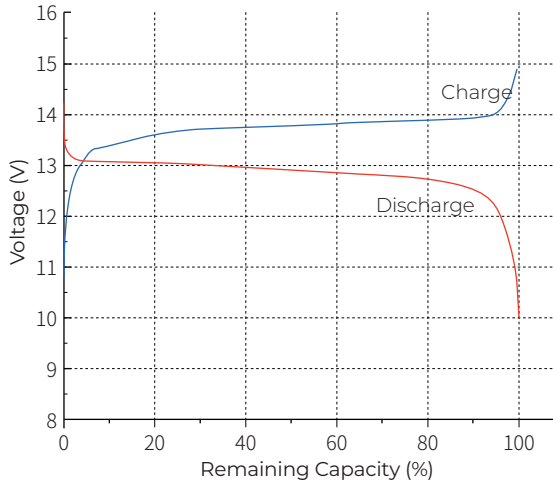
9. Troubleshooting

The B1232 uses red and green lights on the power button to show its status. See the table below for details.

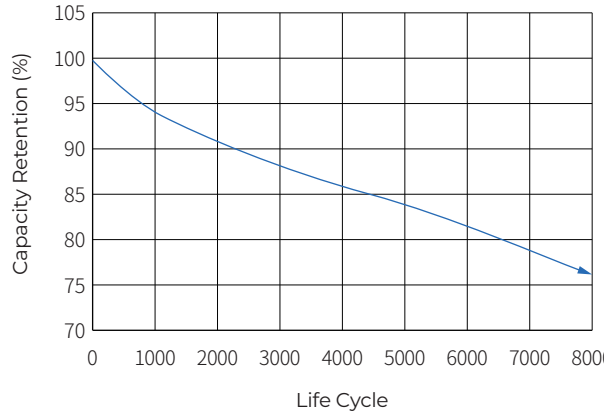
Priority	Indicator Status	Description & Solutions
1	Flashing Red	Hardware or unrecoverable failure. Please contact BLUETTI support.
2	Steady Red	Recoverable issue. Press the power button to restart the battery.
3	Flashing Green	Upgrading
4	Steady Green	Operating
5	Off	Power off

Note: If multiple statuses occur, the higher priority status will be displayed.

10. Battery Performance



Charging & dischaging curve at 0.5C, 77°F (25°C)



Cycle life at 0.5C, 77°F (25°C)

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!

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