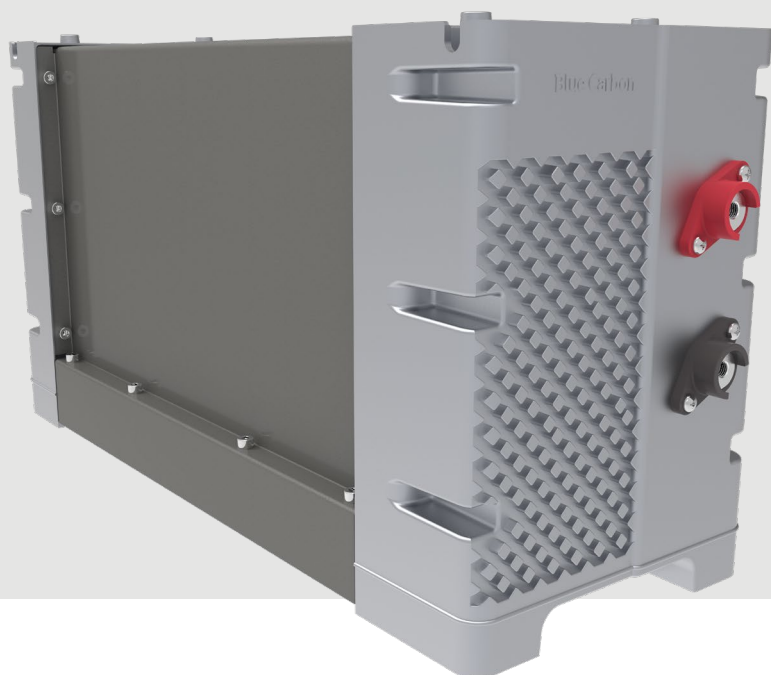




Model:

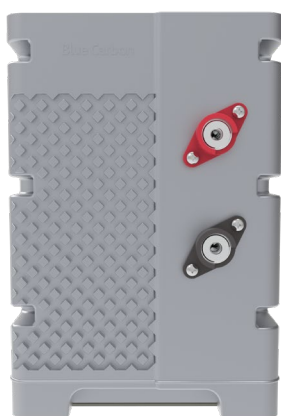
UU12- 300

LiFePO₄ Battery Pack

Name: Lithium Battery

BCT

UU12-300 LiFePO₄ Battery Pack



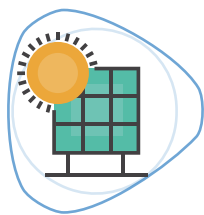
Application Scenarios

Non-main grid areas: For night lighting.

Areas with expensive urban grid electricity: Valley charge and peak discharge save 30%+.

Areas with frequent power outages: Serve as an uninterruptible power supply (UPS) to prevent data loss.

Applicable scenarios: Commercial, industrial, residential, outdoor lighting, camping and travel, farming, and night market stalls, etc.



Clean Energy

Using sunlight for clean energy charging, it can supply power to household appliances.



Storing Energy

Energy storage batteries realize electricity freedom for consumption in areas with no or insufficient electricity.



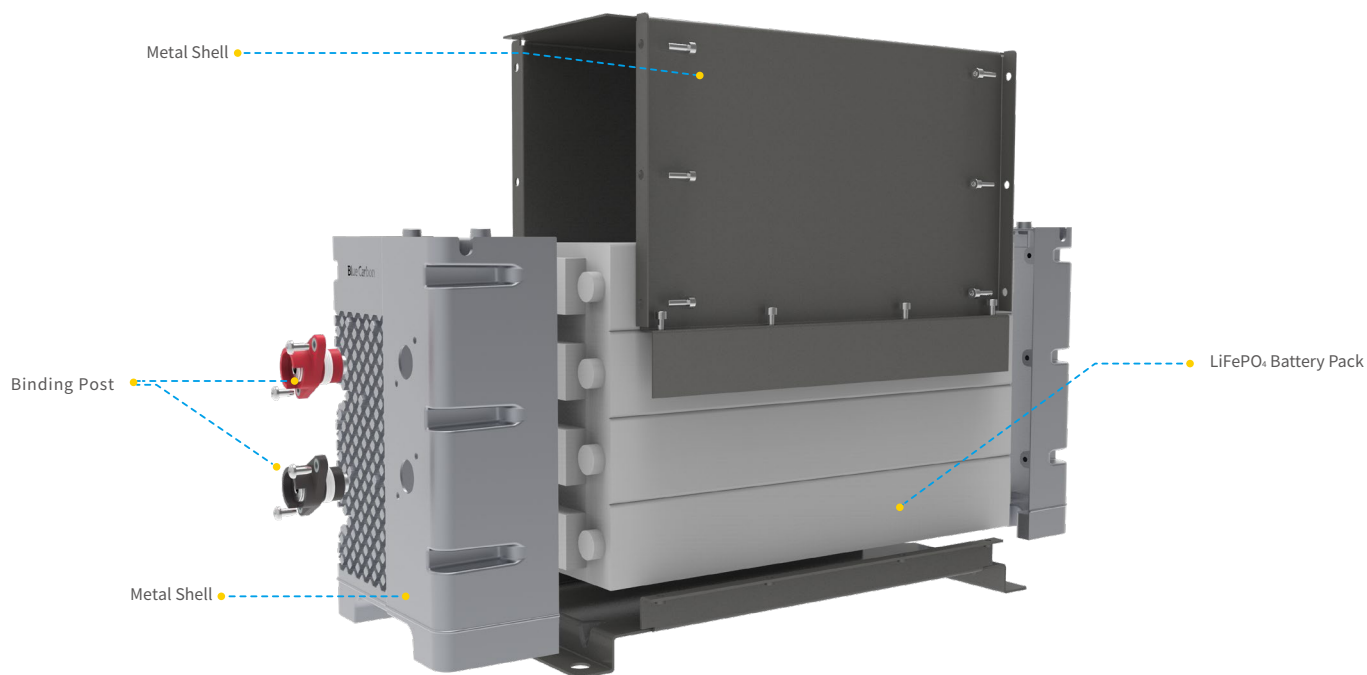
Household Appliances

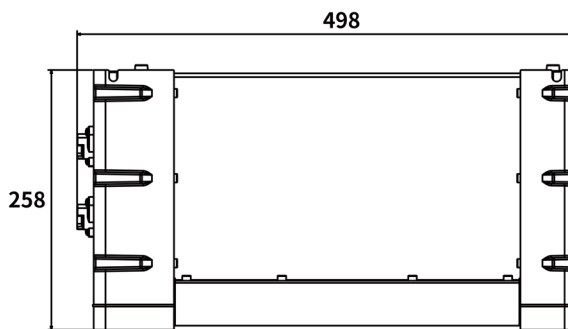
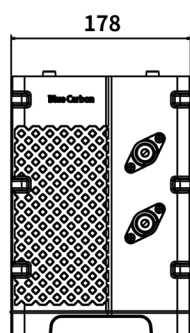
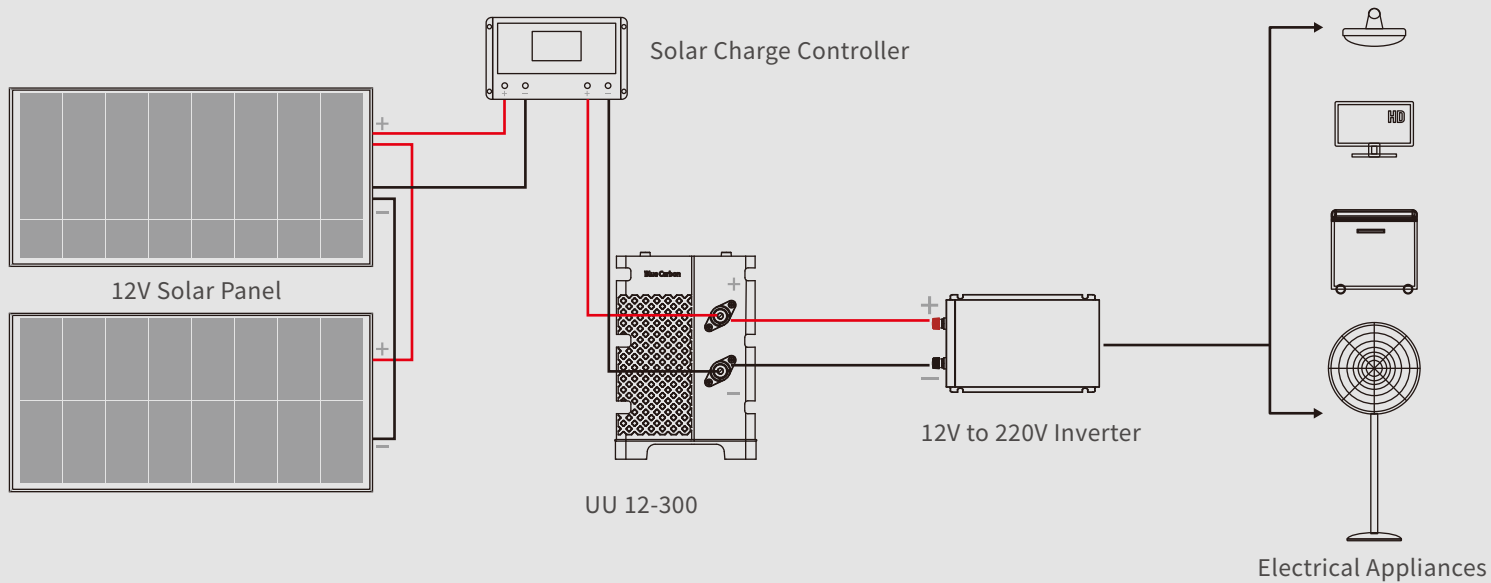
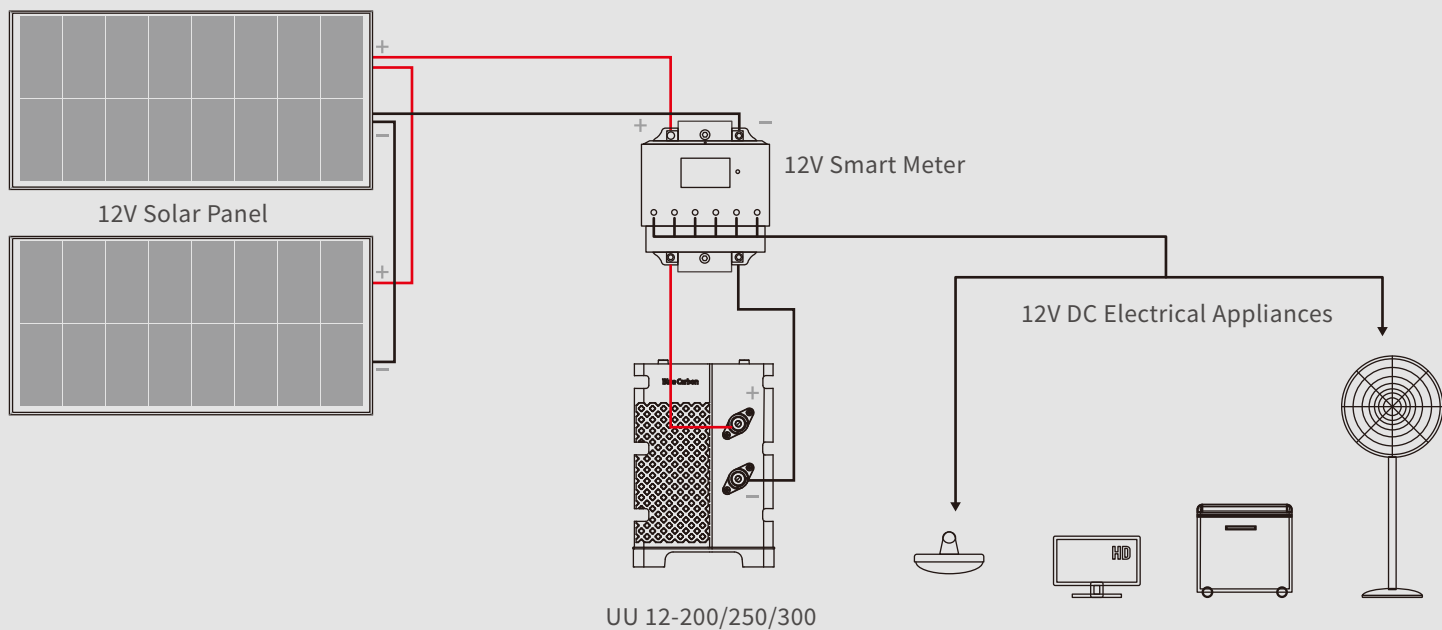
Free electricity

This energy storage system stores electricity generated by solar panels, serving as backup or emergency power. At night or during power outages, it can use the stored energy to power electrical appliances, ensuring continuous operation of critical loads and avoiding the inconvenience caused by blackouts.

BCT

INSTRUCTIONS





Product size: (mm)

Technical Parameters

Model: UU12- 300

Basic Specifications

Nominal Capacity	300Ah
Nominal Voltage	12V(12.8V)
Electricity(kWh)	3.84kWh

Input

Full Charge Voltage	14.6V
Maximum Charging Voltage	15V
Input Voltage Range	14V-15V
Continuously Use Input Current	100A
Maximum Solar Panel Input Current	100A
Overcharge Delay Protection	1000ms

Output

Continuously Use Output Current	100A
Discharge Cut-off Voltage	10V-12V
Over-Discharge Delay Protection	1000ms
Short Circuit Protection Delay	300us
Short Circuit Protection Recovery	Disconnect load

Battery

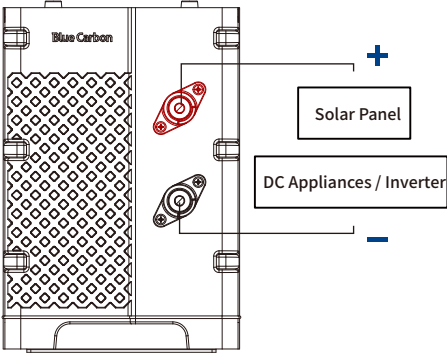
Cell Type	LiFePO ₄ Battery/LFP
Storage Temperature Range	Short-Term -20°C-40°C(Within 1 month) Long-term 10°C-35°C(Within 1 year)
Operating Temperature Range	-15°C-60°C
Recommended Temperature Range	10°C-40°C
Storage Humidity	≤75% RH
Atmospheric Pressure	Below the elevation of 5000m
Self-Discharge (25°C)	<3%/Month
Depth of Discharge	>80%
C-rate Discharge	<0.8C
Cycle Life	> 6000 times (< 0.5C)

Other

Package Size	575(±2)×260(±2)×335(±2)mm
Certification Standards	UN38.3/CE/MSDS

BCT

Instructions



Attention:

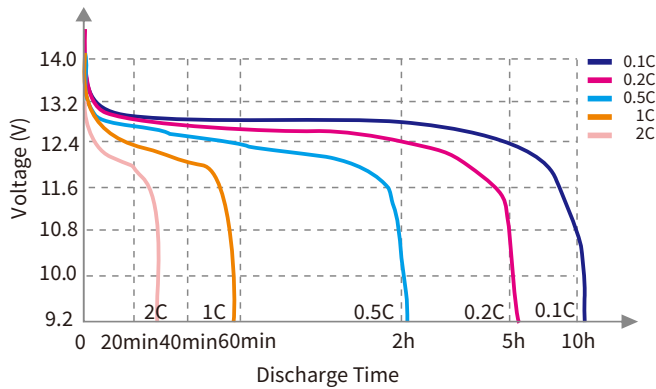
- Forbid high-voltage charging. 12V/24V/48V battery packs' open-circuit voltage must not exceed 14.6V/29.2V/58.4V respectively. Solar panels' max open-circuit voltage ≤ twice the battery pack's voltage.
- Use an MPPT controller with lithium iron phosphate battery mode.
- High-voltage MPPT controller requires high-voltage isolation at the output terminal.
- If charging terminal voltage > battery pack's open-circuit voltage, connect a charge-protected high-voltage circuit breaker between controller and battery to prevent overcharging from intermediate voltage converter failure.
- 12V packs: max 4 in series (4-series max charging voltage <58.4V; 2-series <29.2V). 24V packs: max 2 in series (max charging voltage <58.4V). 48V packs: series connection forbidden. Ensure packs are fully discharged/charged prior to series connection. Consistent voltage required for series/parallel connections.
- Forbid terminal reverse-connection, pack short-circuit, and overloading.
- Not for use in severe vibration scenarios.
- Prohibit immersing/cleaning the pack with water. Avoid prolonged outdoor exposure to rain/moisture.
- Prohibit high-temperature use/storage. Optimal long-term ambient temp: 10–40°C.
- Do not place near combustible gases/items. Use in clean, dry, well-ventilated areas.
- Prohibit knocking, throwing, inverting, or trampling the pack. Do not use if severely damaged (e.g., impact, scratches, drops, unauthorized disassembly).
- Prohibit tipping over the pack.

Please strictly following the above operating rules when using the battery pack.

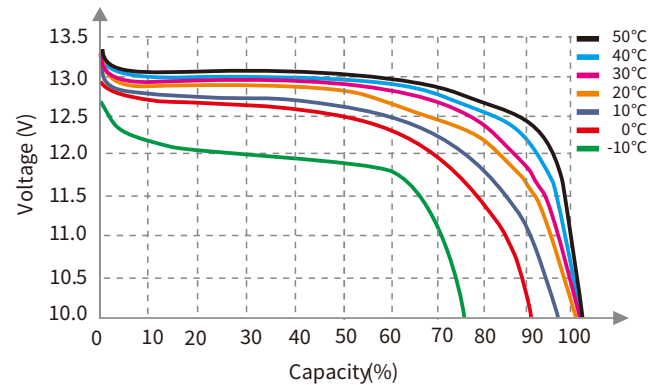
BCT

Battery Specification

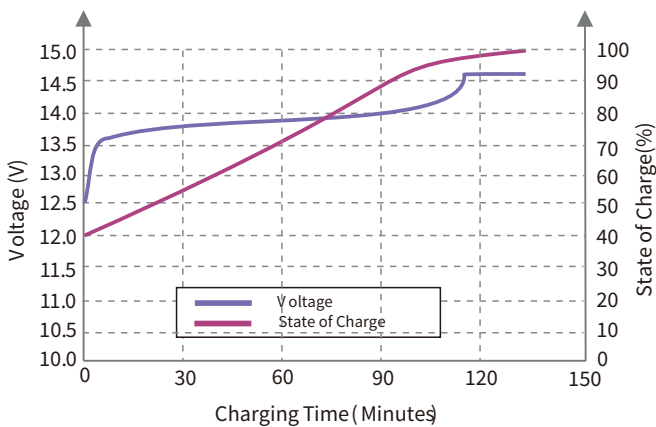
Different Rate Discharge Curve (25°C)



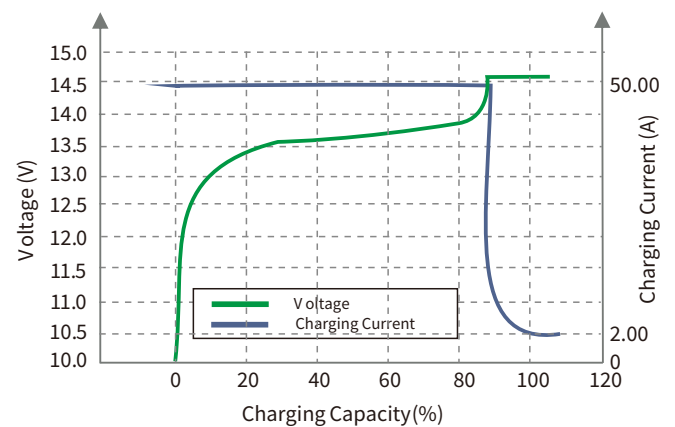
Different Temperature Discharge Curve(0.5C)



State of Charge Curve(0.5C, 25°C)



Charging Characteristics (0.5C, 25°C)



Different Temperature Self Discharge Curve

