



Model:

BCT-UU48-200/250/300

LiFePO₄ Battery Pack

Name: Lithium Battery

BCT

UU 48-200/250/300 LiFePO₄ Battery Pack



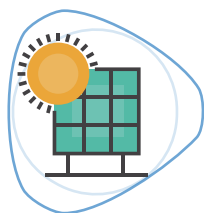
Application Scenarios

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 to achieve clean energy charging can supply power to household appliances.



Storing energy

Realize the freedom of electricity consumption in the area where there is no electricity and less electricity.



Household appliances

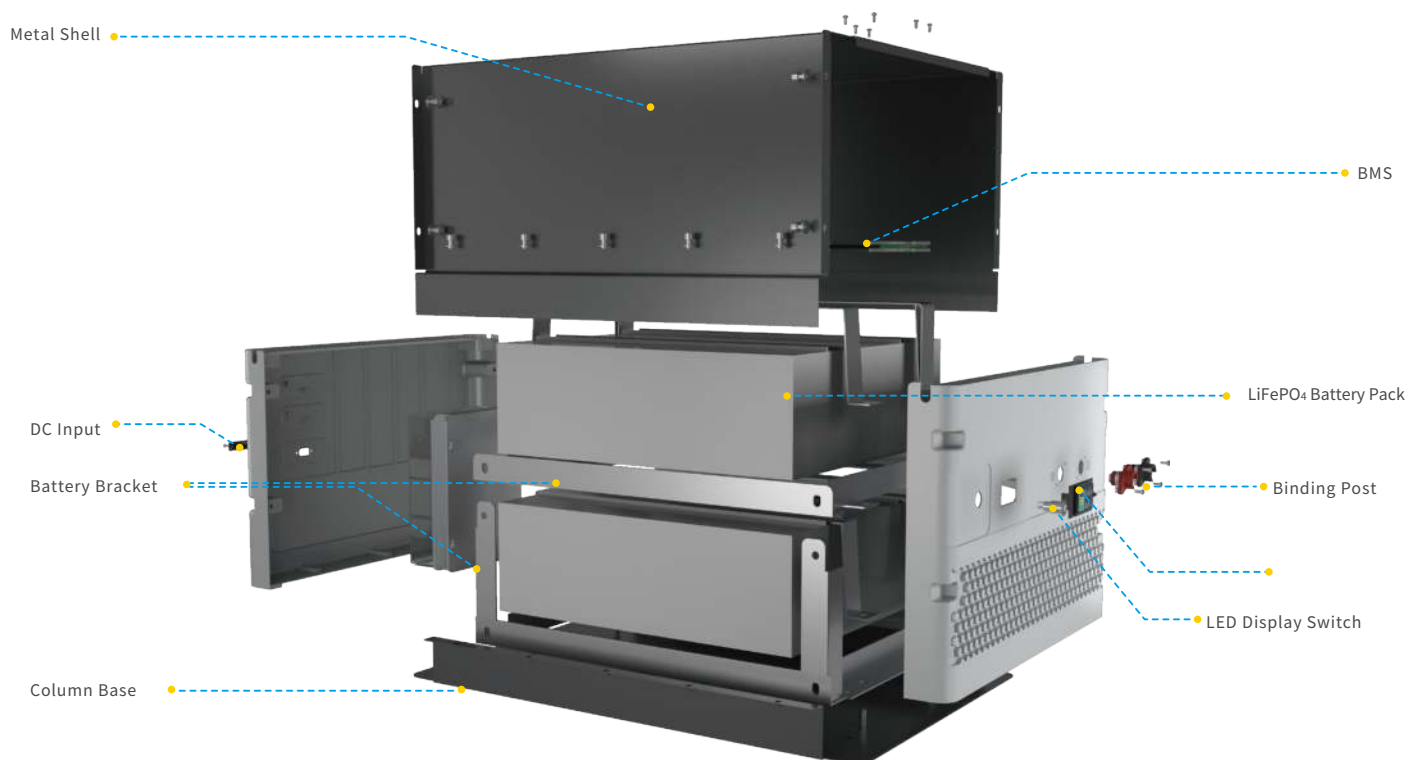
Free electricity

Storing the power from the solar panel, to be used as reserve power or emergency power supply.

At night or at the time of power outage, it can supply the power to electrical appliances by using the stored energy, to avoid the inconvenience caused by power outage, so that you can calmly deal with the situation of power outages.

BCT

INSTRUCTIONS



6 KINDS OF SAFETY PROTECTION



Charge Overvoltage Protection



Discharge Undervoltage Protection



Charge Overcurrent Protection



Discharge Overcurrent Protection



Short Circuit Protection



Over Temperature Protection

Product Details

LiFePO₄ Battery Pack

Stable discharge, Long cycle life, Safe and environmental protection, High safety performance

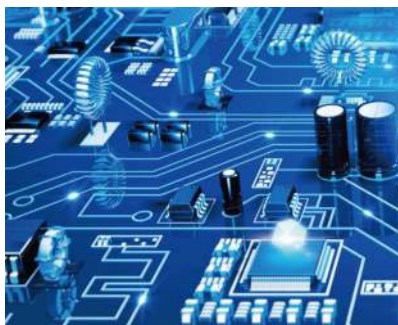


Battery bracket



BMS

Protect the battery, Prevent battery damage, Extend battery life.



Imported components



Comply with UL standard safety certification



Separate driver modules



Use insulation materials

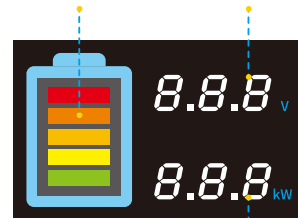
LED Display

Observe the power usage at any time.



Function Introduction

Battery Remaining Capacity Real-time Battery Voltage



Real time output

Binding Post

Insulated flame retardant
Fast and efficient



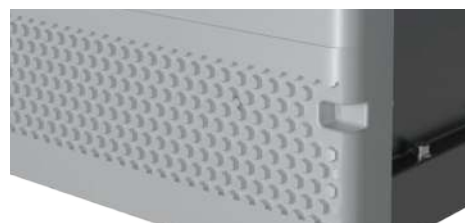
Main Switch

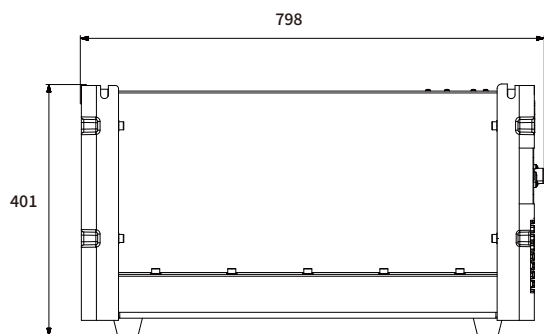
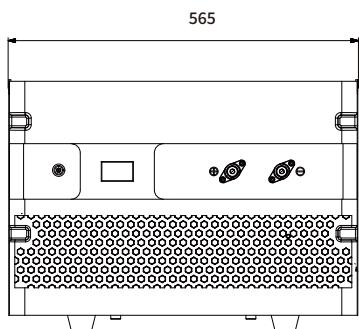
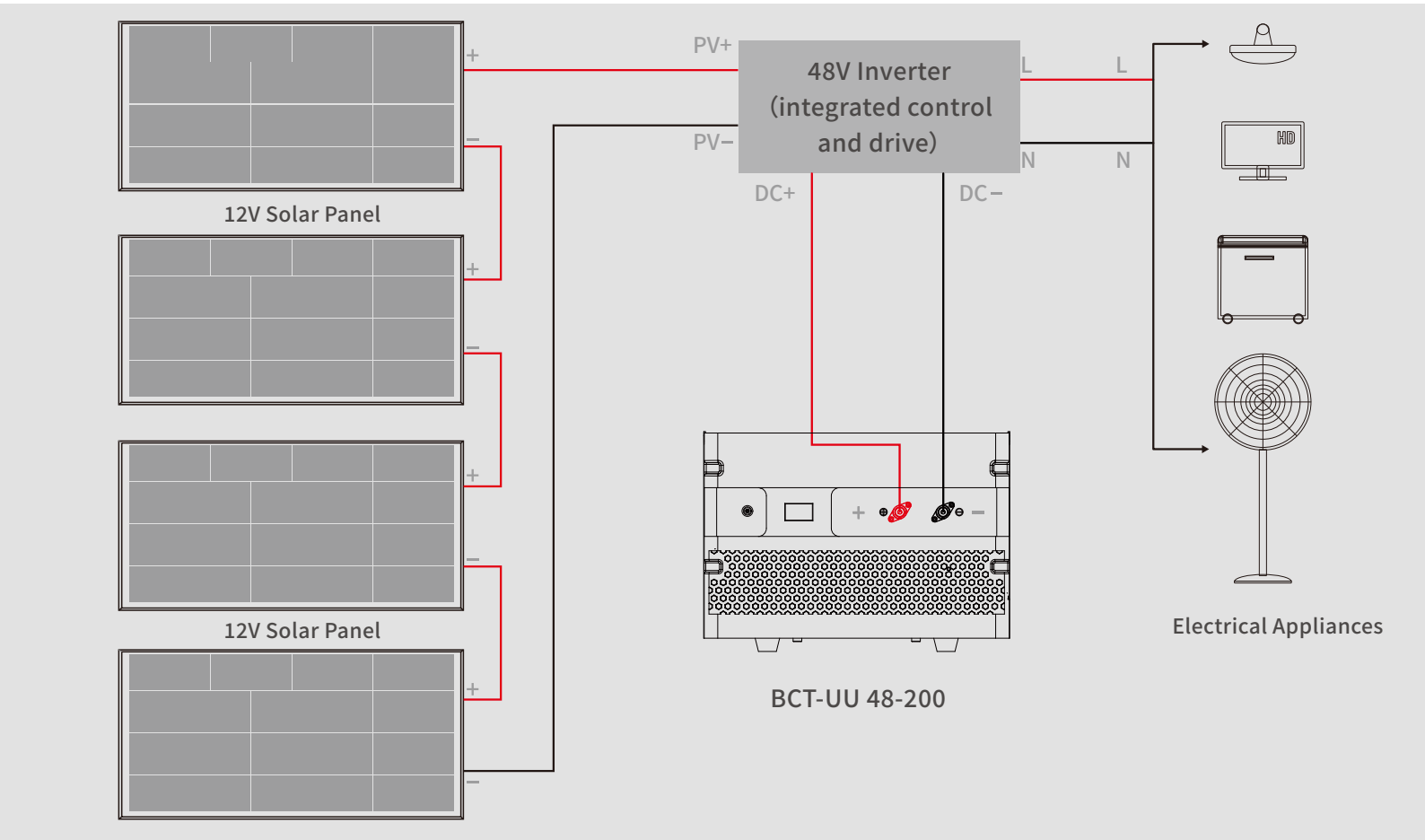
Stainless steel push button switch
Protect the upgrade



High Quality Aluminium Magnesium Alloy

Anti-corrosion, Substantial, Durable,
Artistic, Practical





Product size: (mm)

Technical Parameters

Model: BCT-UU 48-200/250/300

Basic Specifications

Nominal Capacity	200Ah/250Ah/300Ah
Nominal Voltage	48V(51.2V)
Electricity(kWh)	10.24kWh/12.8kWh/15.36kWh

Input

Full Charge Voltage	58.4V
Maximum Charging Voltage	60V
Input Voltage Range	58V-60V
Continuously Use Input Current	120A
Maximum Solar Panel Input Current	120A
Overcharge Delay Protection	1000ms

Output

Continuously Use Output Current	120A
Discharge Cut-off Voltage	44V-46V
Over-Discharge Delay Protection	1000ms
Short Circuit Protection Delay	300us
Short Circuit Protection Recovery	Disconnect load
Instant Start Current	120A

Battery

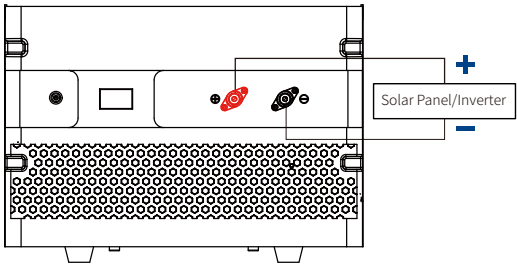
Cell Type	LiFePO ₄ Battery/LFP
Storage Temperature Range	Short-Term -20°C-40°C(Within 1 month) Long-term 10°C-35°C(Within 1 year)
Operating Temperature Range	-15°C-60°C
Recommended Temperature Range	10°C-40°C
Storage Humidity	≤75% RH
Atmospheric Pressure	Below the elevation of 5000m
Self-Discharge (25°C)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

Other

Package Size	903(±2)×671(±2)×451(±2)mm
Certification Standards	UN38.3/CE/MSDS



Instructions



Attention:

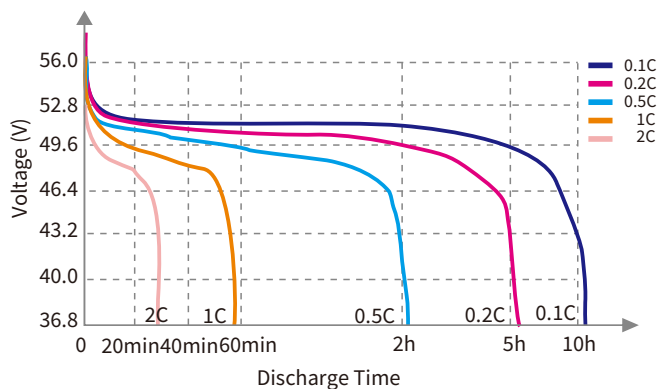
- Forbid high-voltage charging. 12V/24V/48V battery packs' open-circuit voltage must not exceed 14.6V/29.2V/58.4V respectively. Solar panels' max open-circuit voltage ≤ twice the battery pack's voltage.
- Use an MPPT controller with lithium iron phosphate battery mode.
- High-voltage MPPT controller 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.

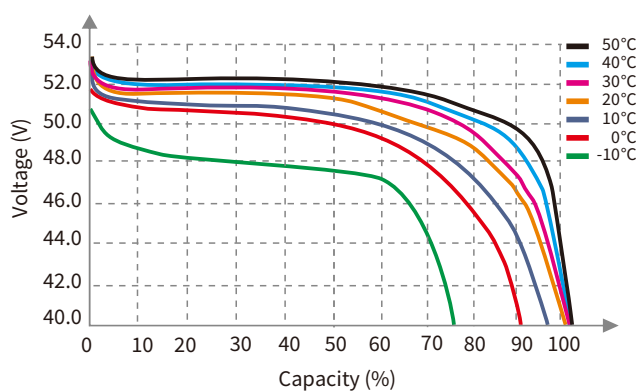
BCT

Battery Specification

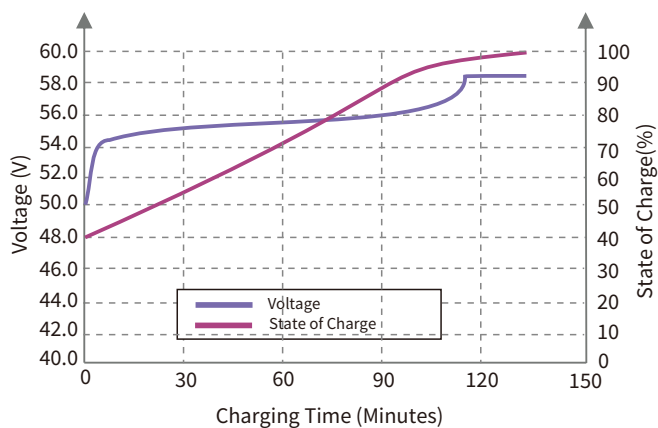
Different Rate Discharge Curve (25°C)



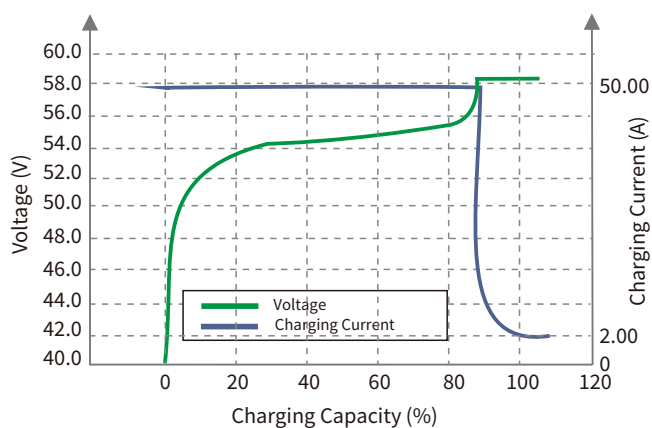
Different Temperature Discharge Curve (0.5C)



State of Charge Curve (0.5C, 25°C)



Charging Characteristics (0.5C, 25°C)



Different Temperature Self Discharge Curve

