

Balcony Power Plant Storage

BK215/B215



Disclaimer

Read this user manual carefully before using the product to ensure full understanding and correct operation. Retain the user manual for future reference. User improper use may result in serious injury to persons, damage to the product, or property loss. By using this product, the user expressly acknowledges and agrees to all terms and conditions outlined in the user manual. The user assumes full liability for any misuse and resulting consequences. We shall not be liable for losses arising from non-compliance with the user manual. In accordance with applicable laws and regulations, we reserve the right of final interpretation of this document and all product-related materials. This document may be amended, updated, or revised without prior notice.

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1. Specifications

Balcony Power Plant Storage BK215 – Basic Data

Model	BK215
Net weight	approx. 32.5 kg
Dimension	L479 x B289 x H261 mm
Storage capacity	2150 Wh
Wi-Fi	Yes
Bluetooth	Yes
Heating function	Yes (When the temperature of the storage is between -20 °C and 5 °C and solar input power is available, the heating function will activate automatically.)
Protection class	IP65 (The base must be installed)

Expansion Storage B215 – Basic Data

Model	B215
Net weight	approx. 31 kg
Abmessungen	L479 x B289 x H292 mm
Storage capacity	2150 Wh
Heating function	Yes (When the temperature of the storage is between -20 °C and 5 °C and solar input power is available, the heating function will activate automatically.)
Protection class	IP65 (In conjunction with the head storage unit and base)

Balcony Power Plant Storage BK215 – Output Specifications

2 x Solar output	33.6 V – 43.2 V / 50 A max, total max. 1920 W
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Balcony Power Plant Storage BK215 – Input Specifications

2 x Solar input	10 V – 80 V / 20 A, max. 800 W per input
Expandable Storage	Supports up to 3 Expansion Storage units (B215). Expansion Storage B215 units are sold separately.

Expansion Storage B215 – Input Specifications

1 x Solar input	10 V – 80 V / 20 A, max. 800 W per input
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Storage Specifications

Battery type	LiFePO4
Protection	Overvoltage protection, Overcurrent protection, Deep discharge protection, Overload protection, Low-temperature protection, High-temperature protection, Short-circuit protection, Fault/failure protection.
Lifespan	6000 Cycles ¹⁾
Balancing mode	Passive balancing to ensure uniform state of charge across all cells and optimal product utilization.

Operating conditions

Operating ambient temperature	Discharge temperature	-20 °C to 40 °C
	Charging temperature	-20 °C to 40 °C ²⁾ (Automatic activation of the heating function below 5 °C)
Storage temperature		-20 °C to 45 °C (20 °C to 30 °C is optimal)
Humidity		10 – 90% RH
Operating altitude		≤ 2000 m a.s.l.

- 1) 25 ± 2 °C, 20% – 80% State of Charge (SoC), 0.75C charge / 0.9C discharge, 70% End of Life (EoL).
- 2) To protect the storage unit at temperatures ≥35 °C, charging power is automatically reduced. (The recommended maximum state of charge is ≤90%. You can adjust the state of charge individually via the SunEnergy XT App.)

2. Safety

2.1 Safety Instructions

1. The use of the storage unit near heat sources (such as fire or heating stoves) is strictly prohibited.
2. When using the storage unit, strictly observe the operating ambient temperature specified in this user manual. If the temperature is too high, it may cause storage unit failure or fire. If the internal temperature is below -10°C and the heating function is not activated, the discharge capacity will decrease significantly.
3. If the storage unit catches fire, ensure immediate disconnection of input and output power supply. Use fire extinguishers in this sequence: water/water mist, sand, fire blanket, dry powder and carbon dioxide extinguishers.
4. If there is water in the storage unit or it is accidentally submerged, discontinue use and disconnect power immediately. Place it in a safe, ventilated area and keep away from it until completely dry. Implement shock prevention measures before touching the product. Under no circumstances should the dried storage be reused or disposed of arbitrarily. Disposal must be carried out in accordance with applicable national and local regulations without exception.
5. Clean storage unit terminals with a dry cloth if contaminated.
6. Using the storage unit in strong static electricity or magnetic field environments is prohibited.
7. Do not stack objects on the storage unit.
8. Store the storage unit in a dry, ventilated location.
9. Keep the storage unit out of reach of children and pets.
10. Do not operate in very low atmospheric pressure environments to prevent explosion or flammable liquid leakage.
11. Do not open the storage unit or damage its enclosure.
12. Do not contact terminals with wires or conductive objects.
13. Avoid impacts, drops, and strong vibrations during use/transport. After severe impact, power off immediately and disconnect all power sources.

14. Do not use unapproved components or accessories, as this will invalidate the warranty. Contact a certified dealer if a component or accessory needs to be replaced.
15. Before connecting the storage to system components, ensure the battery is turned off. Before starting the storage, check that other components are properly connected to the battery.
16. Do not insert foreign objects or body parts into input or output terminals to avoid electric shock and other risks.
17. Do not use damaged power cables, connectors, or non-standardized cables.
18. To reduce the risk of electric shock, always turn off the power supply first and then unplug the input and output connectors before following further instructions from customer service.
19. Repairs should be carried out by qualified maintenance personnel using only identical replacement parts. This ensures the safety of the storage units.
20. Do not use damaged or modified storage unit, as this may cause fire, explosion, or other injury hazards.
21. For long-term storage, please charge the battery to approximately 60% every 3 months. If the storage unit is not charged or discharged for more than 6 months, the warranty will be invalidated.

2.2 Disposal

NOTE: *This product contains batteries that contain hazardous chemicals and must not be disposed of in conventional trash cans.*

1. Please fully discharge the storage unit and dispose of it in accordance to local laws and regulations on battery recycling and disposal.
2. If the storage unit cannot be fully discharged due to a product defect, please contact our customer service.




KEEP THESE INSTRUCTIONS

3. List of Components

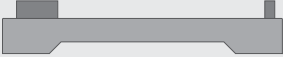
3.1 Balcony Power Plant Storage BK215 – List of Components

1




x 1

2




x 1

3




x 4

4




x 1

5



x 2

6



x 2

1 Balcony Power Plant Storage BK215

2 Base

3 Height-adjustable feet

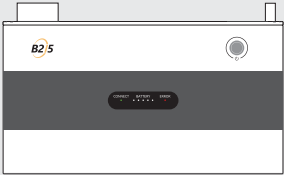
4 User manual

5 Input cable

6 Output cable


3.2 Expansion Storage B215 – List of Components

1




x 1

2



x 1

3



x 1

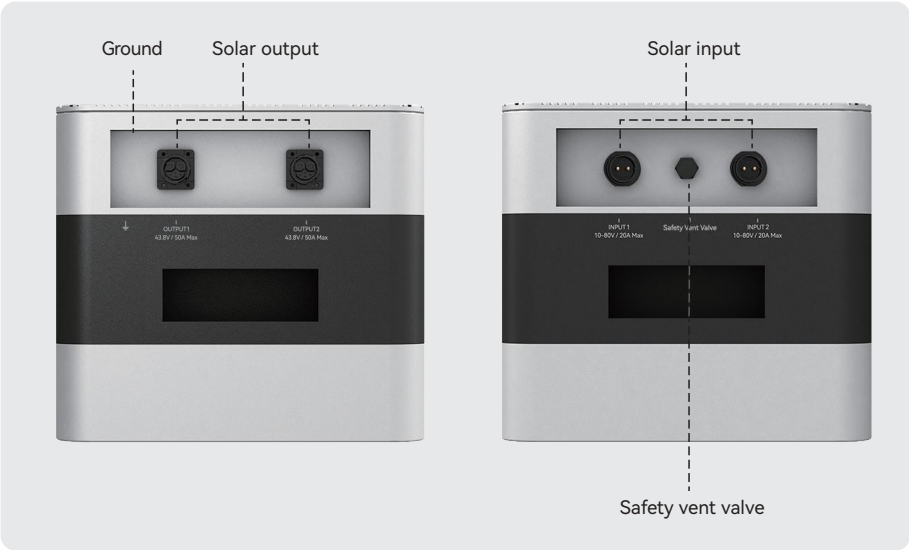
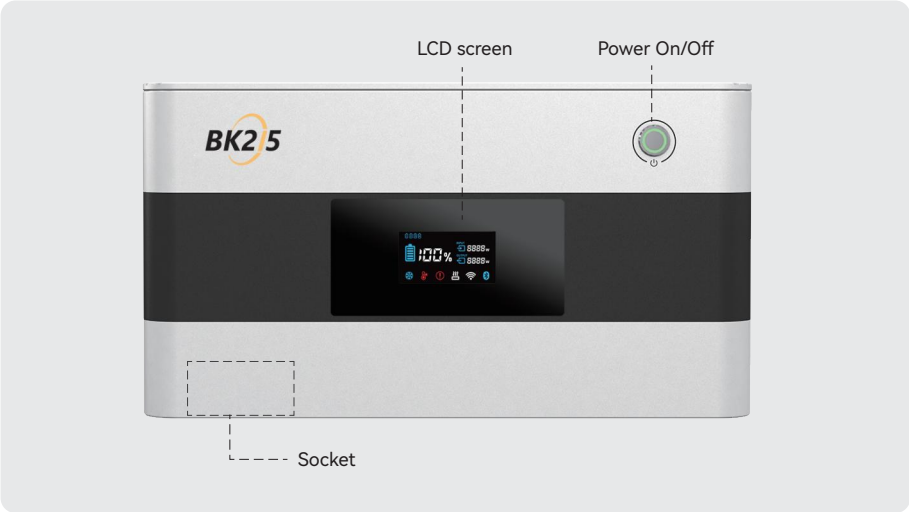
1 Expansion Storage B215

2 User manual

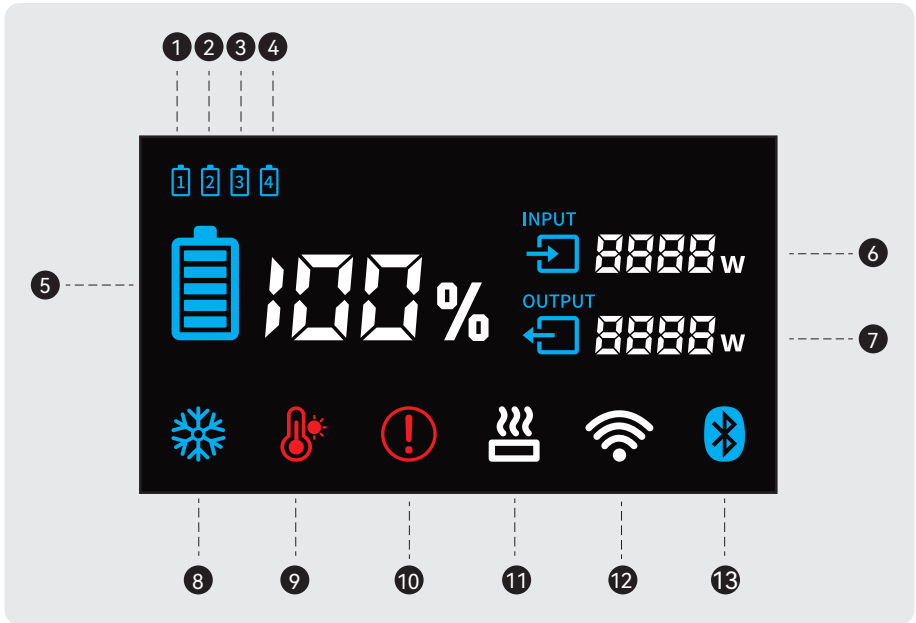
3 Input cable

4. Product details

4.1 Balcony Power Plant Storage BK215 - Product Overview



4.2 Balcony Power Plant Storage BK215 - LCD Screen Overview



- | | |
|---|---|
| ① Storage 1 (Balcony Power Plant Storage BK215) | ⑧ Low-temperature warning ¹⁾ |
| ② Storage 2 (Expansion Storage B215) | ⑨ Overheating warning ²⁾ |
| ③ Storage 3 (Expansion Storage B215) | ⑩ Error warning ³⁾ |
| ④ Storage 4 (Expansion Storage B215) | ⑪ Heating function ⁴⁾ |
| ⑤ State of charge | ⑫ WLAN indicator ⁵⁾ |
| ⑥ Input power | ⑬ Bluetooth indicator ⁶⁾ |
| ⑦ Output power | |

1) Low-temperature warning

(see 7.1 Troubleshooting for Balcony Power Plant Storage BK215)

2) Overheating warning

(see 7.1 Troubleshooting for Balcony Power Plant Storage BK215)

3) Error warning

(see 7.1 Troubleshooting for Balcony Power Plant Storage BK215)

4) Heating function

(see 5.7 Heating function)

5) WLAN indicator

1. Blinks slowly: Connecting to home network.
2. Blinks quickly: Connecting to server.
3. Illuminated: Successfully connected to home network.
4. Off: Home network not configured or disconnected.

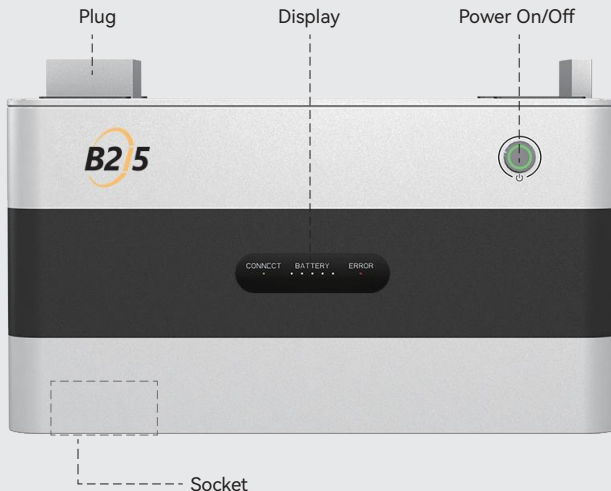
6) Bluetooth indicator

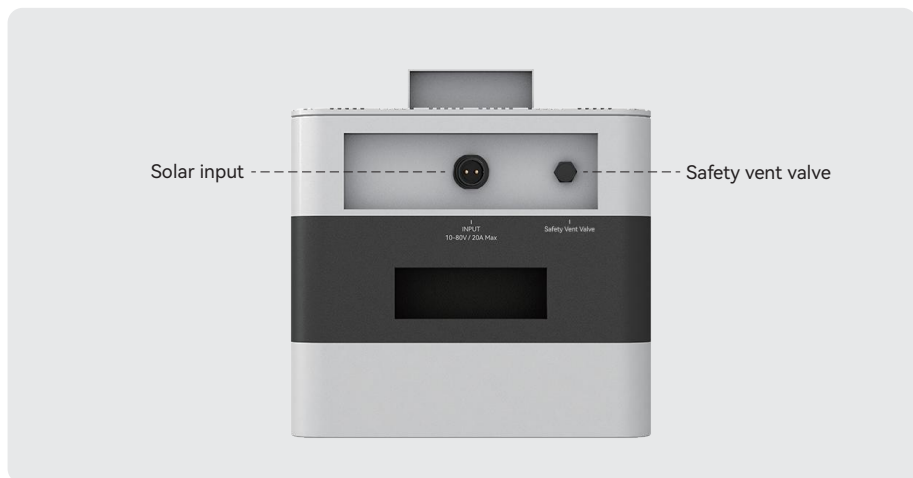
1. Blinking: The storage unit is ready for a new network configuration. A Bluetooth connection can be established with a terminal device (e.g., a smartphone with the SunEnergy XT App).
2. Off: The connection to the terminal device was successful. Information is being sent to the storage unit's WLAN module. Further configuration can be performed.

Bluetooth and WLAN indicators not illuminated

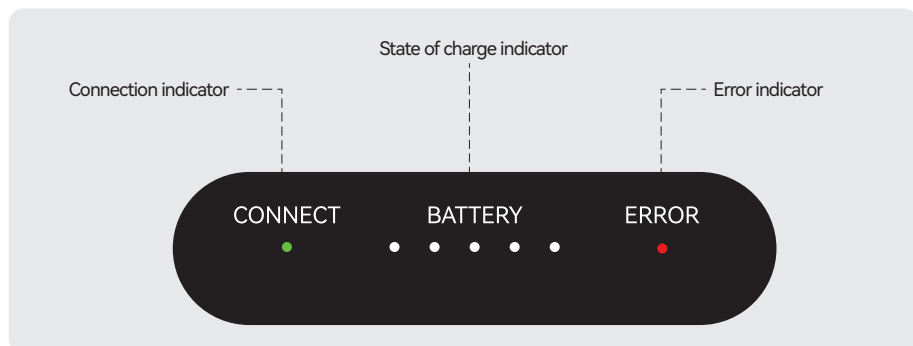
The storage unit is in low power or unknown state. Wi-Fi must be reset. To do this, please press and hold the main power button for 10 seconds until the Bluetooth indicator blinks again.

4.3 Expansion Storage B215 - Product Overview





4.4 Expansion Storage B215 - Indicator Lights



Connection indicator:

If the indicator glows green, the connection to the head storage unit is successfully established.

State of charge indicator:

Each dot represents 20% charge level; five dots collectively indicate 100%.

Error indicator:

If the indicator flashes or glows red, a fault exists. (Refer to specific faults in Chapter 7. **Troubleshooting.**)

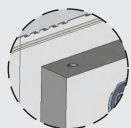
4.5 Grounding Instructions

The Balcony Power Plant Storage BK215 and its base are each equipped with designated grounding holes in the metal casing.

Use the grounding screw to securely fasten the grounding cable into the hole.

Ensure the screw is fully tightened and not loose to ensure the unit is properly grounded.

Connecting a grounding cable to either the BK215 or the base is sufficient, as shown below:



Grounding

OR



Grounding



Method I: Mains Grounding
Connect the storage unit to the
ground wire using a conductor.

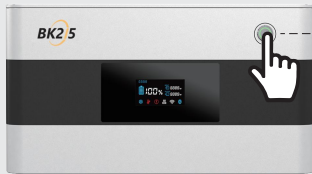
OR



Method II: Protective grounding
(Connection to earth)
Connect the storage unit to
earth using a conductor.

5. User Manual

5.1 Balcony Power Plant Storage BK215 - ON/OFF



Press and hold to power on or off

5.1.1 Power on

When the main power button is held down, the LCD screen activates. When the button glows green, the storage unit is in operational mode.

5.1.2 Power off

Press and hold the main power button for 3 seconds to power off the LCD screen and storage unit. The storage unit then enters shutdown mode.

5.1.3 System Reset

After 5 minutes of inactivity, the LCD screen enters sleep mode. Press the power button once to reactivate.

CAUTION: If input power is applied while the head storage unit is powered off, or one/multiple expansion storage units are powered off, the respective battery storage unit will automatically power on. Therefore, always disconnect the input and output cables before making adjustments, or connecting/disconnecting an expansion storage unit.

5.2 Expansion Storage B215 - ON/OFF



Press and hold to power on or off

5.2.1 Power on

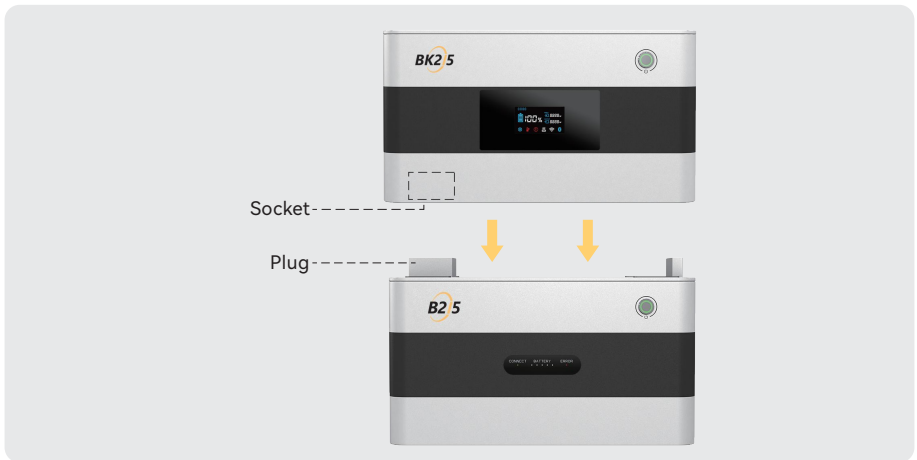
When the main power button is held down, the indicator lights activate. When the button glows green, the storage unit is in operational mode.

5.2.2 Power off

Press and hold the main power button for 3 seconds to power off the indicator and output functions. The storage unit then enters shutdown mode.

5.3 Connection to Expansion Storage B215

The storage unit is modularly connected via the socket of the Balcony Power Plant Storage BK215 (main storage unit) to the plug of the Expansion Storage B215.



The Balcony Power Plant Storage BK215 is connected in parallel with the Expansion Storage B215. Up to three expansion storage units can be connected at the same time. All storage units are charged and discharged evenly, which ensures a long service life for the product.

CAUTION: Always power off the storage units before connecting or disconnecting them.

5.4 Balcony Power Plant Storage BK215 - Input Connection

5.4.1 Maximum input power

This product can be charged using solar panels. Each of the two inputs supports a maximum input power of 800 W. Thus, the maximum total input power is 1600 W.

5.4.2 Input voltage range

Before connecting a solar panel, ensure that its open-circuit voltage (Voc)/ output voltage does not exceed 40 V. If multiple solar panels are connected in series, the combined open-circuit voltage must not exceed 80 V per input to prevent damage to the storage unit. If your solar panels have a combined open-circuit voltage of more than 80 V, the maximum input voltage of the storage unit is exceeded. In this case, please connect your solar panels in parallel (see the connection diagrams below).

5.4.3 Solar Panel Connection Diagram

The storage unit is charged using solar panels. The solar panels can be connected either individually or in series as shown in the following figures. Optimal operation depends on local sunlight and environmental influences.

Diagram 1:

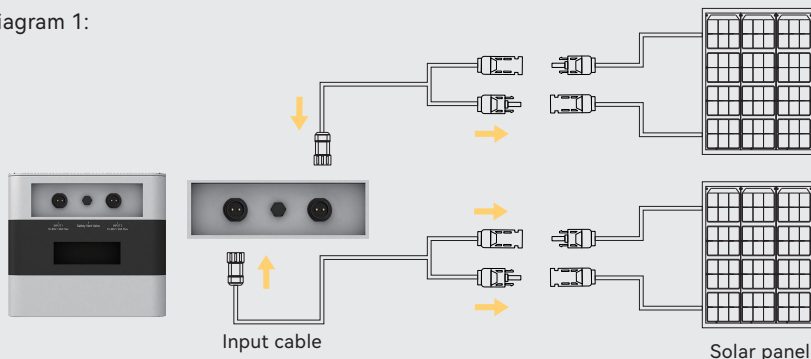
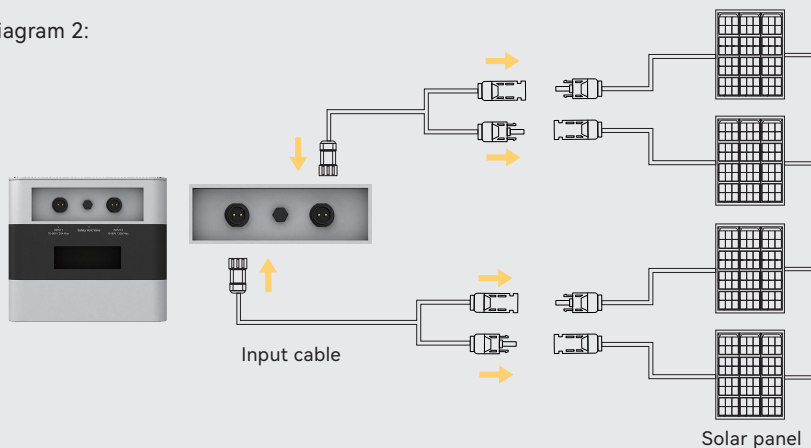


Diagram 2:

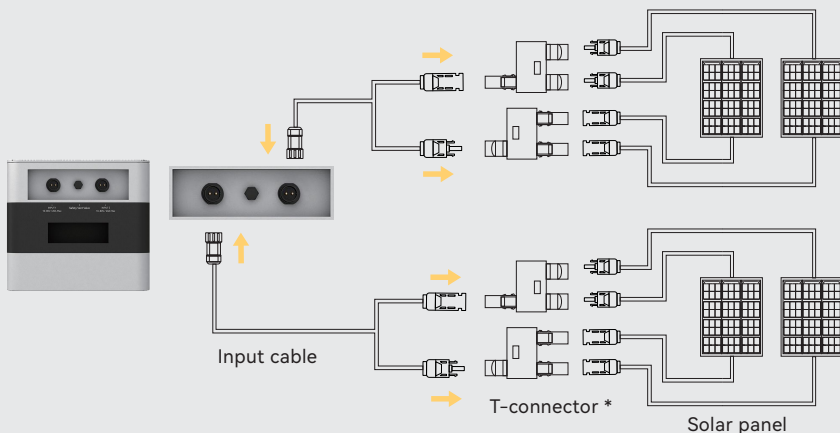


1. The solar panels must be purchased separately.
2. Connect the unit as shown in Diagram 1 or 2.
3. Before connecting a solar panel, ensure that the open-circuit voltage of a solar panel does not exceed 40 V. If multiple solar panels are connected in series, the combined open-circuit voltage must not exceed 80 V per input to prevent damage to the storage unit.
4. Ensure that the solar panels are properly connected to the storage unit.

NOTE: 1. Installation by a qualified technician is required if the open-circuit voltage of the solar modules connected in series exceeds 60 V.
2. Parallel connection as an alternative to series connection for solar panels with open-circuit voltage / output voltage ≥ 40 V.

If the open-circuit voltage of your solar panel is ≥ 40 V, connecting two such panels in series will result in a combined voltage of ≥ 80 V, which exceeds the maximum input voltage of the storage unit. In this case, connect the solar panels in parallel according to the diagram below. Before setting up your solar system, ensure all solar panels used have the same nominal voltage.

Diagram - Parallel connection:



* Sold separately

5.5 Expansion Storage B215 - Input Connection

5.5.1 Maximum Input Power

This product can be charged using solar panels and supports a maximum input power of 800 W.

5.5.2 Input Voltage Range

Before connecting a solar panel, ensure that its open-circuit voltage is between 10 V and 40 V. If multiple solar panels are connected in series, the combined open-circuit voltage must not exceed 80 V at the input to prevent damage to the storage unit.

5.5.3 Solar Panel Connection Diagram:

The storage unit is charged using solar panels. The solar panels can be connected either individually or in series as shown in the following diagrams. Optimal operation depends on local sunlight and environmental conditions.

Diagram 1:

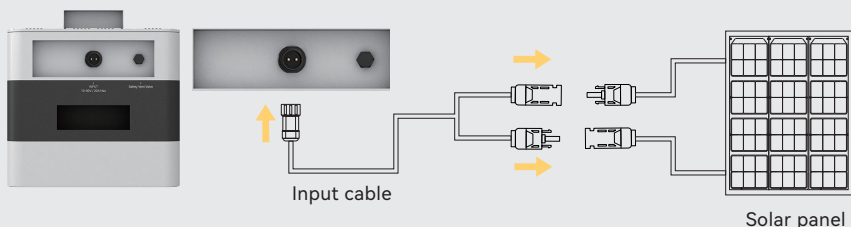
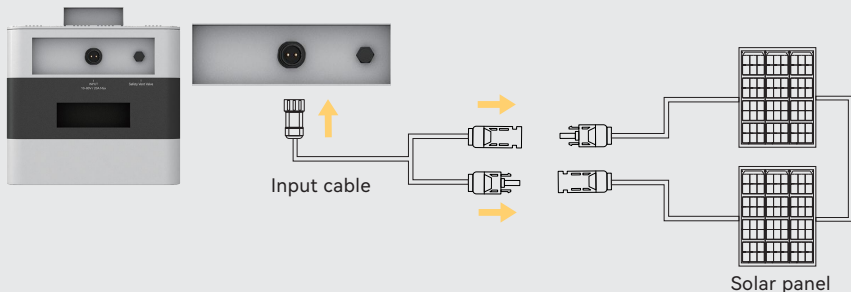


Diagram 2:



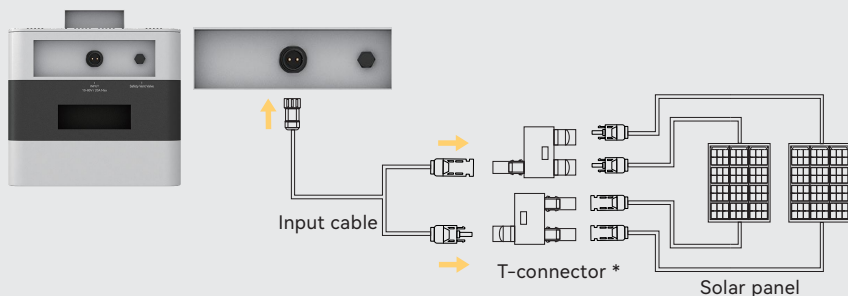
1. The solar panels must be purchased separately.
2. Connect the unit as shown in Diagram 1 or 2.
3. Before connecting a solar panel, ensure that the open-circuit voltage of a solar panel does not exceed 40 V. If multiple solar panels are connected in series, the combined open-circuit voltage must not exceed 80 V per input to prevent damage to the storage unit.
4. Ensure that the solar panels are properly connected to the storage unit.

Ensure that the solar panels are properly connected to the battery.

NOTE: 1. Installation by a qualified technician is required if the open-circuit voltage of the solar modules connected in series exceeds 60 V.
2. Parallel connection as an alternative to series connection for solar panels with open-circuit voltage / output voltage ≥ 40 V.

If the open-circuit voltage of your solar panel is ≥ 40 V, connecting two such panels in series will result in a combined voltage of ≥ 80 V, which exceeds the maximum input voltage of the storage unit. In this case, connect the solar panels in parallel according to the diagram below. Before setting up your solar system, ensure all solar panels used have the same nominal voltage.

Diagram - Parallel connection:



* Sold separately

5.6 Balcony Power Plant Storage BK215 - Output Connection

Please ensure that the inverter is properly connected to the head storage before use.

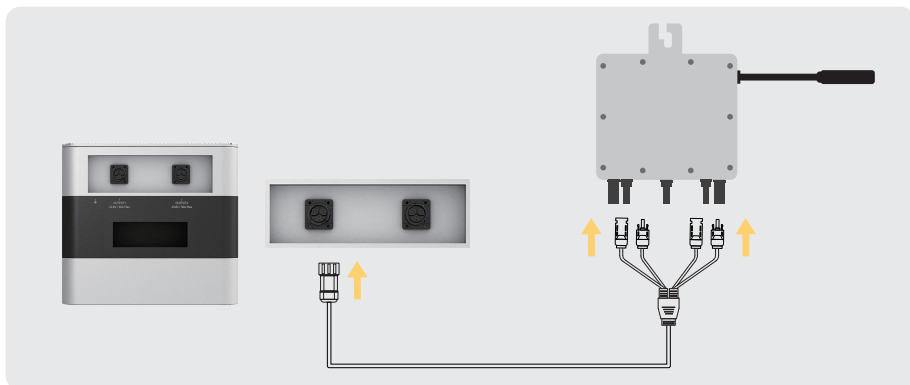
5.6.1 Maximum Output Power

The main storage unit has 2 outputs with a total maximum output power of 1920 watts.

5.6.2 Inverter Wiring Diagram

The battery can be connected to a total of 2 inverters. The inverter is connected to the output connection (Output) of the battery as shown in Diagram 1.

NOTE: Please observe the local laws and regulations for feeding into your home electricity grid.



5.7 Heating Function

To function properly at low temperatures, the battery is equipped with a heating function.

When the temperature inside the battery is below 5 °C, the heating function starts automatically.

The storage unit can resume charging when a temperature of ≥ 5 °C is reached.

The heating function stops when the storage temperature exceeds 8 °C.

The heating function is active when the internal temperature of the battery is between -20 °C and 5 °C.

5.8 Bypass Mode

The Bypass Mode enables the storage unit to automatically feed up to 100% of the harvested solar energy directly into the home grid if necessary. Excess solar energy that is not fed into the home grid is used to charge the the storage unit. The (Semi-)Bypass Mode is triggered automatically when the following conditions for input power and output power are met:

Semi-Bypass Mode

This mode is activated when the output power supplied to the home grid is more than half (50%) but less than twice (200%) of the input power.

Full Bypass Mode

This mode is activated when the output power is at most half (50%) or at least twice (200%) of the input power.

In Bypass Mode, if the input power is lower than the output power, the storage unit will discharge to compensate for the difference. If the input power is higher than the output power, the storage unit will be charged with the excess energy.

5.9 Installation Manual


Assembly sequence when using the Balcony Power Plant Storage BK215 with up to 3 Expansion Storage units B215:

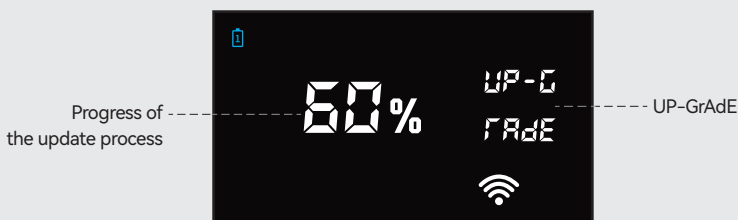
1. Check whether the Balcony Power Plant Storage BK215 is powered off. If the green indicator light on the power button is on, press the power button to power it off. The green light of the button goes out.
2. Place the Expansion Storage B215 in a suitable location (up to 3 Expansion Storage units B215 stacked on top of each other – ensure that the socket and plug interlock).
3. Place the Balcony Power Plant Storage BK215 on the Expansion Storage B215 (ensure that the socket and plug interlock).
4. Connect the microinverter to the output of the Balcony Power Plant Storage BK215 via the output cable and ensure that the plugs are firmly connected.
5. Connect the solar panels to the input of the storage units via the input cable and make sure that the plugs are firmly connected.
6. Press the power button on the Balcony Power Plant Storage BK215 to power it on.





5.10 Automatic Activation Function

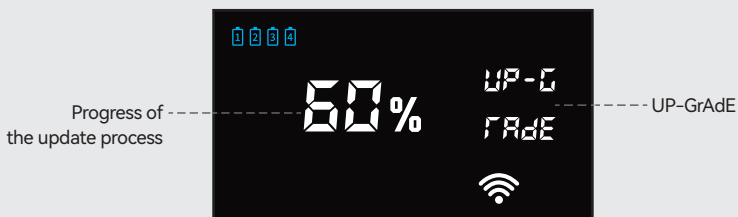
Upon exposure to sunlight or during daytime, the storage unit will automatically activate if the solar input is connected and the voltage from the solar panels is $\geq 18\text{ V}$.

5.11 System Upgrade Indication

1. If the symbol  and the letters "UP-GrAdE" are displayed continuously on the display, the BK215 is updating. The percentage shown on the display indicates the progress of the update process. When the update status shows 100%, the update is complete and the device will restart automatically.



2. If the symbol  is displayed continuously on the display, and the symbols    cycle through a blinking pattern (the number of symbols displayed corresponds to the number of B215 expansion storage units actually installed) along with the letters "UP-GrAdE", the B215 expansion storage units are updating. The percentage on the display indicates the progress of the update process. When the update status shows 100%, the update is complete and the device will restart automatically.



6. SunEnergy XT APP

The Balcony Power Plant Storage Unit BK215 is managed via the SunEnergy XT App. Among other features, the following functions can be controlled through the app:

1. Complete the network configuration of your Balcony Power Plant Storage easily via Bluetooth.
2. Monitor the status of your Balcony Power Plant Storage anytime, anywhere.
3. Adjust the power supply mode of your Balcony Power Plant Storage as needed.

Please scan the QR code below to download the SunEnergy XT App.

You can also find the app in the iOS App Store or Google Play Store by searching for "SunEnergy XT".



SunEnergy XT App
– Download for Android –



SunEnergy XT App
– Download for iOS –

For further information and support regarding the app, please visit:

<https://www.sunenergyxt.com/en/download-app>




Adding Your Storage Unit BK215

Scan the QR code to
view the installation guide.




7. Troubleshooting

7.1 Error Display on Balcony Power Plant Storage BK215

indicator	Problem	Resolution
 Blue snow symbol	The internal temperature of the battery is too low - temperature protection -	The heating function activates when the internal temperature of the storage unit ranges from -20 °C to 5 °C.
 Red thermometer	The internal temperature of the battery is too high - temperature protection -	The storage unit will resume power supply once the temperature drops below 52 °C. The error will be eliminated automatically.
 Red exclamation mark	Error warning	Please restart the storage unit. If the error cannot be resolved, please contact us.

7.2 Error Display on Expansion Storage B215

indicator	Problem	Resolution
 Red light	Error warning	Please restart the storage unit. If the error cannot be resolved, please contact us.

If an error message appears during the use of the storage unit and the error message does not disappear after restarting the unit, it should not be operated further and our customer service should be contacted.

7.3 Error Codes and Solutions

7.3.1 Balcony Power Plant Storage BK215 – Main Storage Error Codes

Error Code	Error Description	Solution
E003	AFE defect	Please contact us.
E004	Overcurrent protection during charging (hardware protection)	Press the power button to restart.
E006	Overcurrent protection during discharging (hardware protection)	Press the power button to restart.
E008	Protection against charging at low temperature (hardware protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E009	Charging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 50^{\circ}\text{C}$.
E010	Discharging protection at low temperature	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E011	Discharging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 52^{\circ}\text{C}$.
E012	Protection against short circuit during discharging	Press the power button to restart.
E014	Battery cell damage / cable connection interrupted	Please contact us.
E015	NTC cable broken	Please contact us.
E018	MOS protection at high temperatures (hardware protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E020	Protection against cell voltage differentiation	Please contact us.
E021	Button error	Press the power button to restart / Please contact us.
E022	Abnormal AFE initialization	Update the program / Please contact us.
E023	Timeout during load short circuit test	Press the power button to restart.
E025	Relay defect	Press the power button to restart / Please contact us.
E026	Heating foil failure	Please contact us.
E027	System deactivated	Please contact us.

E035	MOS protection against high temperatures during charging (software protection)	When the MOS temperature is $\leq 75^{\circ}\text{C}$, the storage will automatically recover.
E036	Protection against charging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E037	MOS protection against high temperature during discharging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E038	Protection against discharging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E039	Overcurrent protection during charging (software protection)	Press the power button to restart.
E040	Overcurrent protection during discharging (software protection)	Press the power button to restart.
E045	Charging MOS damaged	Please contact us.
E046	Discharging MOS damaged	Please contact us.
E049	Fan defect	Please contact us.
E050	MPPT error	Please contact us.

7.3.2 First Expansion Storage B215 – Error Codes

The error codes of the Expansion Storage B215 are displayed on the LCD screen of the Balcony Power Plant Storage BK215.

Error Code	Error Description	Solution
E103	AFE defect	Please contact us.
E104	Overcurrent protection during charging (hardware protection)	Press the power button to restart.
E106	Overcurrent protection during discharging (hardware protection)	Press the power button to restart.
E108	Protection against charging at low temperature (hardware protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E109	Charging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 50^{\circ}\text{C}$.
E110	Discharging protection at low temperature	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E111	Discharging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 52^{\circ}\text{C}$.

E112	Protection against short circuit during discharging	Press the power button to restart.
E114	Battery cell damage / cable connection interrupted	Please contact us.
E115	NTC cable broken	Please contact us.
E118	MOS protection at high temperatures (hardware protection)	The storage will automatically recover when the MOS temperature is $>75^{\circ}\text{C}$.
E120	Protection against cell voltage differentiation	Please contact us.
E121	Button error	Press the power button to restart / Please contact us.
E122	Abnormal AFE initialization	Update the program / Please contact us.
E123	Timeout during load short circuit test	Press the power button to restart.
E125	Relay defect	Press the power button to restart / Please contact us.
E126	Heating foil failure	Please contact us.
E127	System deactivated	Please contact us.
E135	MOS protection against high temperatures during charging (software protection)	When the MOS temperature is $\leq 75^{\circ}\text{C}$, the storage will automatically recover.
E136	Protection against charging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E137	MOS protection against high temperature during discharging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E138	Protection against discharging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E139	Overcurrent protection during charging (software protection)	Press the power button to restart.
E140	Overcurrent protection during discharging (software protection)	Press the power button to restart.
E145	Charging MOS damaged	Please contact us.
E146	Discharging MOS damaged	Please contact us.
E149	Fan defect	Please contact us.
E150	MPPT error	Please contact us.

7.3.3 Second Expansion Storage B215 – Error Codes

The error codes of the Expansion Storage B215 are displayed on the LCD screen of the Balcony Power Plant Storage BK215.

Error Code	Error Description	Solution
E203	AFE defect	Please contact us.
E204	Overcurrent protection during charging (hardware protection)	Press the power button to restart.
E206	Overcurrent protection during discharging (hardware protection)	Press the power button to restart.
E208	Protection against charging at low temperature (hardware protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E209	Charging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 50^{\circ}\text{C}$.
E210	Discharging protection at low temperature	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E211	Discharging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 52^{\circ}\text{C}$.
E212	Protection against short circuit during discharging	Press the power button to restart.
E214	Battery cell damage / cable connection interrupted	Please contact us.
E215	NTC cable broken	Please contact us.
E218	MOS protection at high temperatures (hardware protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E220	Protection against cell voltage differentiation	Please contact us.
E221	Button error	Press the power button to restart / Please contact us.
E222	Abnormal AFE initialization	Update the program / Please contact us.
E223	Timeout during load short circuit test	Press the power button to restart.
E225	Relay defect	Press the power button to restart / Please contact us.

E226	Heating foil failure	Please contact us.
E227	System deactivated	Please contact us.
E235	MOS protection against high temperatures during charging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E236	Protection against charging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E237	MOS protection against high temperature during discharging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E238	Protection against discharging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E239	Overcurrent protection during charging (software protection)	Press the power button to restart.
E240	Overcurrent protection during discharging (software protection)	Press the power button to restart.
E245	Charging MOS damaged	Please contact us.
E246	Discharging MOS damaged	Please contact us.
E249	Fan defect	Please contact us.
E250	MPPT error	Please contact us.

7.3.4 Third Expansion Storage B215 – Error Codes

The error codes of the Expansion Storage B215 are displayed on the LCD screen of the Balcony Power Plant Storage BK215.

Error Code	Error Description	Solution
E303	AFE defect	Please contact us.
E304	Overcurrent protection during charging (hardware protection)	Press the power button to restart.
E306	Overcurrent protection during discharging (hardware protection)	Press the power button to restart.
E308	Protection against charging at low temperature (hardware protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E309	Charging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 50^{\circ}\text{C}$.

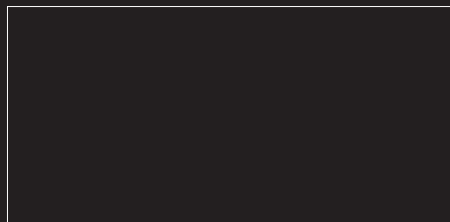
E310	Discharging protection at low temperature	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E311	Discharging protection at high temperature	The storage will automatically recover when the maximum battery cell temperature is $\leq 52^{\circ}\text{C}$.
E312	Protection against short circuit during discharging	Press the power button to restart.
E314	Battery cell damage / cable connection interrupted	Please contact us.
E315	NTC cable broken	Please contact us.
E318	MOS protection at high temperatures (hardware protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E320	Protection against cell voltage differentiation	Please contact us.
E321	Button error	Press the power button to restart / Please contact us.
E322	Abnormal AFE initialization	Update the program / Please contact us.
E323	Timeout during load short circuit test	Press the power button to restart.
E325	Relay defect	Press the power button to restart / Please contact us.
E326	Heating foil failure	Please contact us.
E327	System deactivated	Please contact us.
E335	MOS protection against high temperatures during charging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E336	Protection against charging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq 8^{\circ}\text{C}$.
E337	MOS protection against high temperature during discharging (software protection)	The storage will automatically recover when the MOS temperature is $\leq 75^{\circ}\text{C}$.
E338	Protection against discharging at low temperature (software protection)	The storage will automatically recover when the minimum battery cell temperature is $\geq -15^{\circ}\text{C}$.
E339	Overcurrent protection during charging (software protection)	Press the power button to restart.

E340	Overcurrent protection during discharging (software protection)	Press the power button to restart.
E345	Charging MOS damaged	Please contact us.
E346	Discharging MOS damaged	Please contact us.
E349	Fan defect	Please contact us.
E350	MPPT error	Please contact us.

8. Maintenance and Care

1. To extend the service life of the storage unit, it is recommended to use or store the unit in an environment with a temperature between 20 °C and 30 °C, away from direct sunlight, water, heat, and other metal objects.
2. For long-term storage, recharge and partially discharge the unit once every 3 months (discharge to a state of charge (SOC) of 10% and then recharge to 60% SOC).
3. For safety reasons, do not store the unit for extended periods in environments with temperatures above 45 °C or below -20 °C.
4. If the state of charge of the unit is less than 10% after use, recharge it to 60% SOC before storage. If the unit remains unused for a long time in a deeply discharged state, this will cause irreversible damage to the battery cells and shorten the service life of the storage unit.
5. If the unit is stored unused for more than 3 months and is deeply discharged, it will enter deep sleep mode. Recharge the storage unit as soon as possible. Failure to recharge it promptly may result in damage to the unit.

You can find the certificates, EU declaration of conformity and other documents at
<https://www.sunenergyxt.com/en/download-product-data-sheets>



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