



# Ai-LB 5K Pro

## Quick Installation Manual

# 1 General Information

This quick installation guide does not replace the description in the user manual. The contents of this guide may be updated or revised due to product development. The information in this guide is subject to change without notice. The latest version of this document and the manual for installation, commissioning, configuration and decommissioning are to be found in PDF format at [www.solplanet.net](http://www.solplanet.net).

## 2 Safety

### 2.1 Intended use

The Ai-LB 5K Pro is a BESS is for both residential and commercial applications and operates with Solplanet hybrid inverters.

It is a low voltage Li-ion BESS.

It can be operated in on-grid, off-grid and backup modes with all officially compatible Solplanet inverters.

The product is suitable for indoor and outdoor use.

The product must only be used as stationary equipment.

Alterations to the product are not allowed unless authorized in writing by Solplanet.

Unauthorized alterations will void the guarantee and warranty claims. Solplanet will not be held liable for any damage caused by such unauthorized alterations.

The product is not suitable for supplying power to life-sustaining medical devices.

Please ensure that no personal injury would lead due to the power outage of the battery system.

The product must only be used in countries for which it is approved for by Solplanet.

Use this product only in accordance with the information provided in this documentation and with the locally applicable standards and directives. Any other application may cause personal injury or property damage.

The type label must remain permanently attached to the product.

This document does not replace any regional, state, provincial, federal or national laws, regulations or standards that apply to the installation, electrical safety and use of the product.

## 2.2 Important safety instructions

The product has been designed and tested in accordance with international safety requirements. To prevent personal injury and property damage and to ensure long-term operation of the product, read this section carefully and observe all safety information at all times.

### DANGER

#### **Danger to life due to electric shock where surge protection is not used!**

If there is no surge protection, a voltage surge can be conducted into the building and to other connected devices in the same system through power cables, network cables or other types of cable. Touching live parts and cables may result in death or lethal injury due to electric shock.

- Ensure all devices in the same system and the inverter are integrated within an existing surge protection systems/devices.
- Refer to local installation regulations to determine the requirements for the installation of surge protection devices.

### WARNING

#### **Danger to life due to electric shock from destruction of measurement devices due to overvoltage!**

If there is Overvoltage can damage a measurement device and result in voltage being present in the enclosure of the measurement device. Touching the live enclosure of the measuring device results in death or lethal injuries due to electric shock.

- Only use measuring devices with a higher voltage range than the system battery voltage.

## CAUTION

### Risk of injury due to weight of product!

Injuries may result if the product is lifted incorrectly or dropped while being transported or mounted.

- Lift and transport the product carefully.
- Wear suitable personal protective equipment, in accordance with local regulations, when working on the product.

## NOTICE

### Damage to the battery system due to electrostatic discharge!

Internal components of the battery system can be irreparably damaged by electrostatic discharge.

- Ground yourself before touching any component.

## 2.3 Symbols on the label



Beware of a danger zone

This symbol indicates that the inverter must be additionally grounded if additional grounding or equipotential bonding is required at the installation site.



Beware of high voltage and operating current

The inverter operates at high voltage and current. Work on the inverter must only be carried out by skilled and authorized electricians.



WEEE designation

Do not dispose of the product together with the household waste but in accordance with the disposal regulations for electronic waste applicable at the installation site.



CE marking

The product complies with the requirements of the applicable EU directives.



The battery is recyclable

The battery can be recycled by a professional recycling organization, please refer to the relevant local regulations.



**ROHS marking**

The EU material and process standards for electrical and electronic products make them more conducive to human health and environmental protection.

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**UKCA marking**

The product complies with the requirements of the applicable UK Product Directive.

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**Observe the documentation**

Read and understand all documentation supplied with the product.

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### 3 EU Declaration Of Conformity

Within the scope of the EU directives

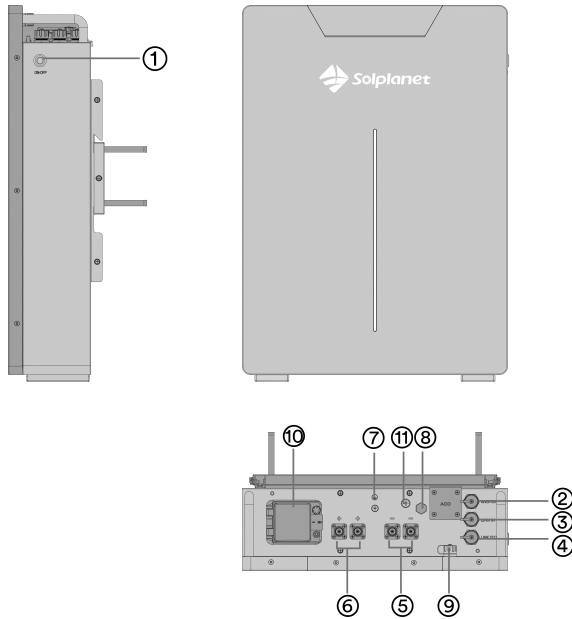
- Electromagnetic compatibility 2014/30/EU (L 96/79-106, March 29,2014) (EMC).
- Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31,2015) (RoHS)



AISWEI New Energy Technology (Yangzhong) Co., Ltd. confirms herewith that the products described in this manual are in compliance with the fundamental requirements and other relevant provisions of the above mentioned directives.

The entire EU Declaration of Conformity can be found at [www.solplanet.net](http://www.solplanet.net).

## 4 Overview






The product is equipped with the following interfaces and functions:

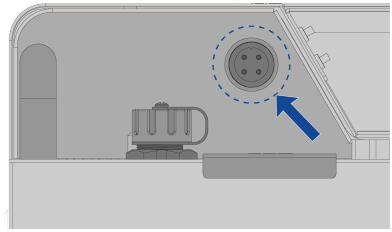
Number	Name	Details	Notes
1	Power Switch		Red LED: ALARM, Blue LED: RUN
2	INVERTER	RJ45	CAN communication to the inverter
3	LINK IN	RJ45	Internal RS485 communication between batteries
4	LINK OUT	RJ45	Internal RS485 communication between batteries
5	Port Negative x2	PSR6XABM5A	Black cable 25 mm <sup>2</sup> / 4 AWG, cable plug model: PSRP6XC25A, Manufacturer: GENERAL(Suzhou) CO., Ltd.
6	Port Positive x2	PSR6XCBM5A	Red cable 25 mm <sup>2</sup> / 4 AWG, cable plug model: PSRP6XC25A, Manufacturer: GENERAL(Suzhou) CO., Ltd.
7	GND	M6	Yellow-Green, 10 AWG
8	Venting Valve		

9	WiFi Socket	For WIFI stick
10	125A DC Breaker	
11	Reset Point	In case of severe undervoltage, wake up the battery

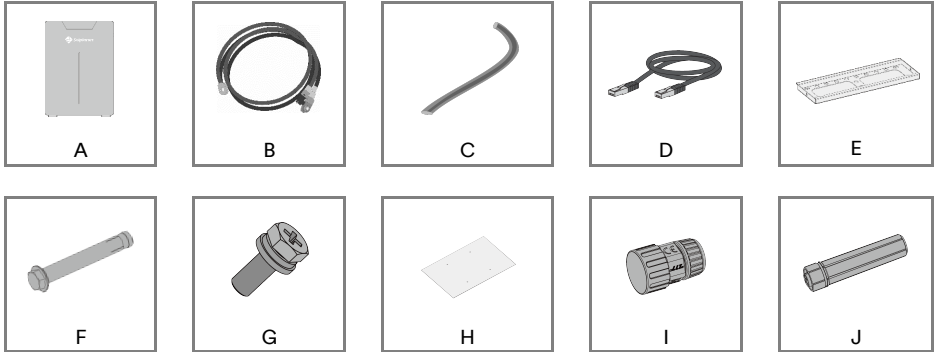
### RJ45 Port Pin Definition

View	Item	Description	1	2	3	4	5	6	7	8
	2	INVERTER	-	RS485-A	RS485-B	CAN-H	CAN-L	GND	-	-
	3	LINK IN	-	BMS-RS485-A	BMS-RS485-B	DI+	DI-	NC	BMS-CAN-H	BMS-CAN-L
	4	LINK OUT	-	BMS-RS485-A	BMS-RS485-B	DO+	DO-	NC	BMS-CAN-H	BMS-CAN-L

### WiFi Socket port description

Side View	Description
	<p>Use Wifi stick for remote software update. Please contact Solplanet after-sales service department to implement specific operations.</p>


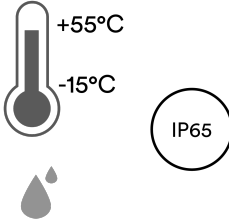
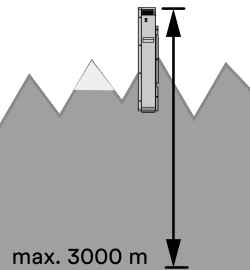
## 5 Scope of Delivery

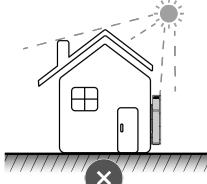


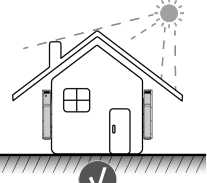

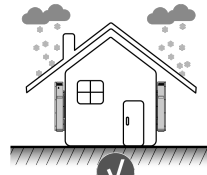


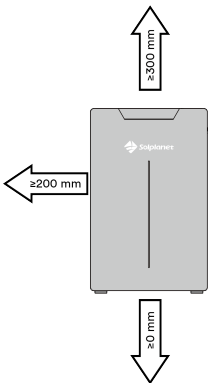
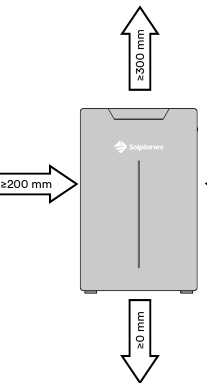
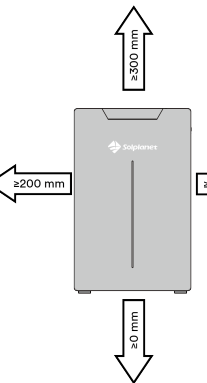
Object	Item Name	Details	Quantity	Notes
A	Battery	Ai-LB 5K Pro 460x165x652 mm 18.11x6.50x25.67 in	1	
B	Power Cable	Positive: orange plug, 25 mm <sup>2</sup> / 4 AWG, L:1.5 m (59.06 in) to SC25-8 ring terminal. Negative: black plug, 25 mm <sup>2</sup> / 4 AWG, L:1.5 m (59.06 in) to SC25-8 ring terminal	1 set	Continuous flow capacity: 100A
C	Grounding Cable	Ground cable yellow & green/L:1 m (39.37in)/ double OT M6	1	
D	Communication cable	Standard network cable black/L:1.5 m (59.06 in)/Double RJ45 Plug	1	
E	Mounting Plate		1	
F	Expansion Screw	M8*80 mm	4	
G	Screw	M5*16 mm	2	
H	Mounting Positioning Board		1	
I	RJ45 Water-proof Wiring Terminal		3	
J	Wifi Stick	EESW-A400-02, 98x23x23 mm	1	



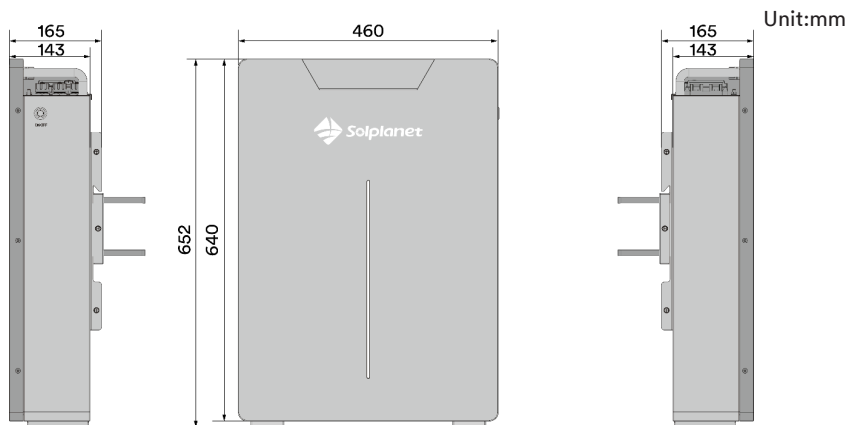
## 6 Mounting Environment

	 <p>+55°C -15°C IP65</p> <p>5~95% RH, discharging</p>	 <p>max. 3000 m</p>
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 <p>✗</p>	 <p>✗</p>	 <p>✗</p>
 <p>✓</p>	 <p>✓</p>	 <p>✓</p>

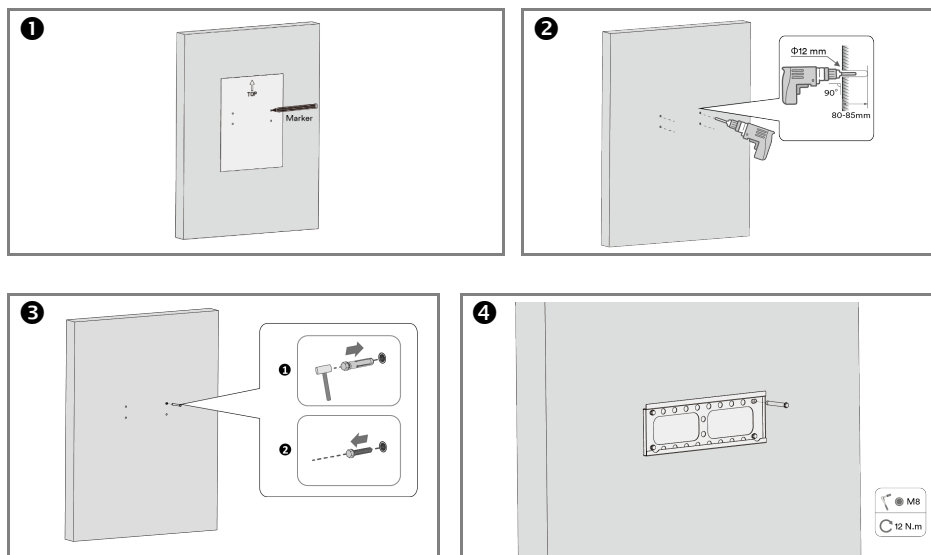
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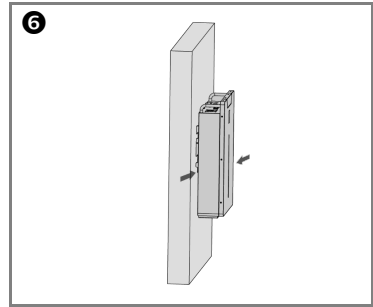
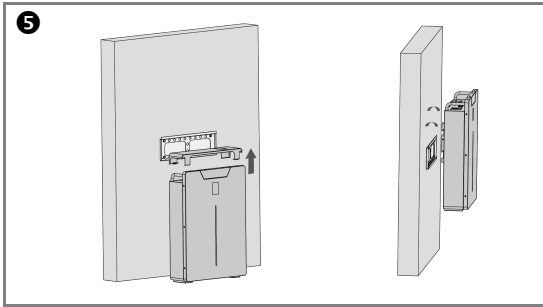
## 7 Dimensions



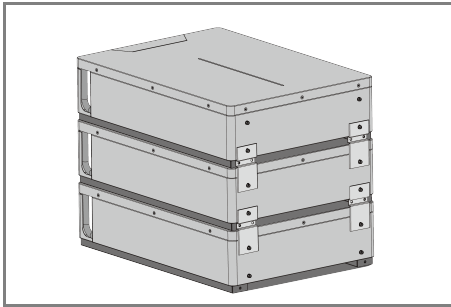
## 8 Mounting

### 8.1 Mounting

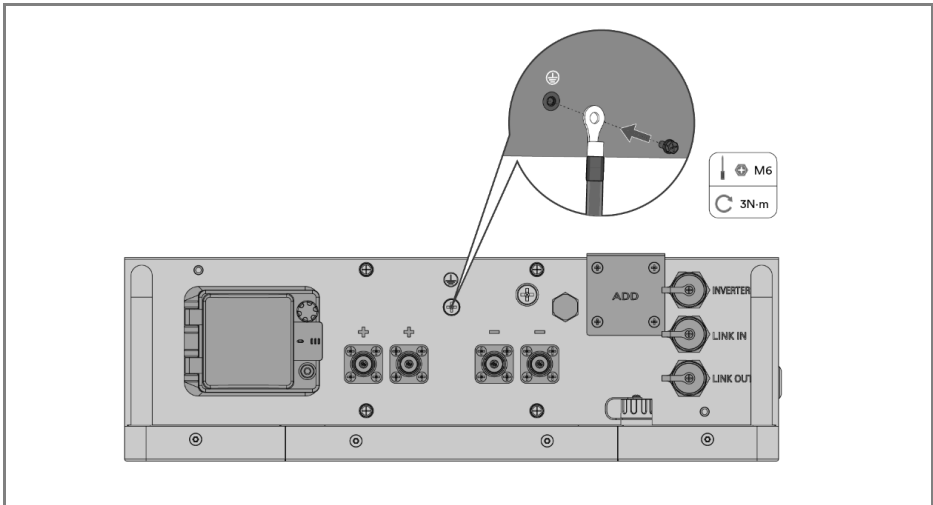




## 8.2 Stack Mounting

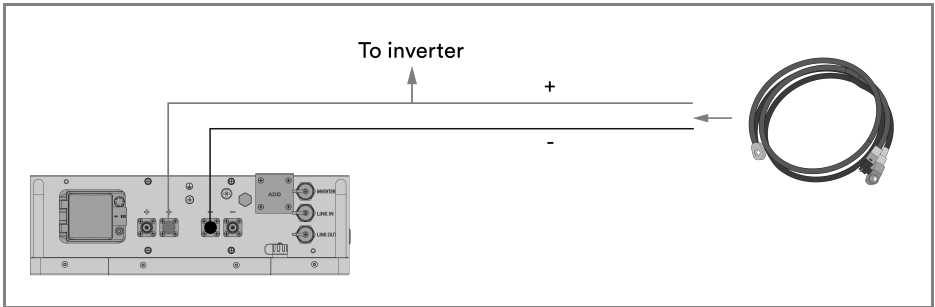


## 9 Protective Grounding

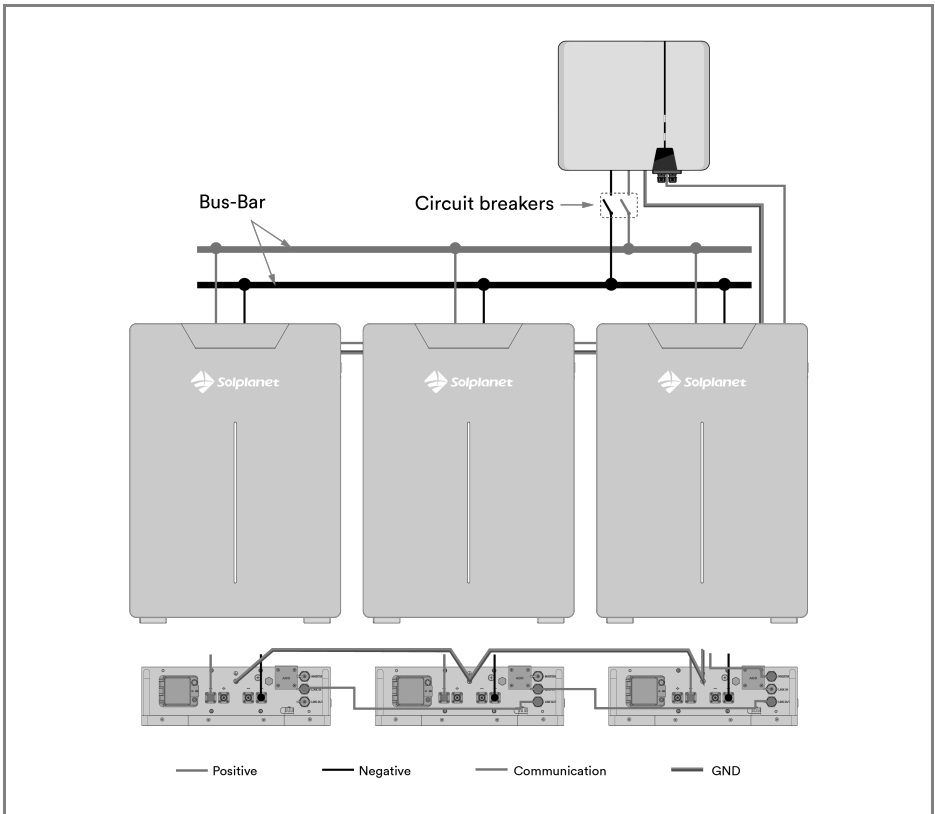


## 10 Battery Connection

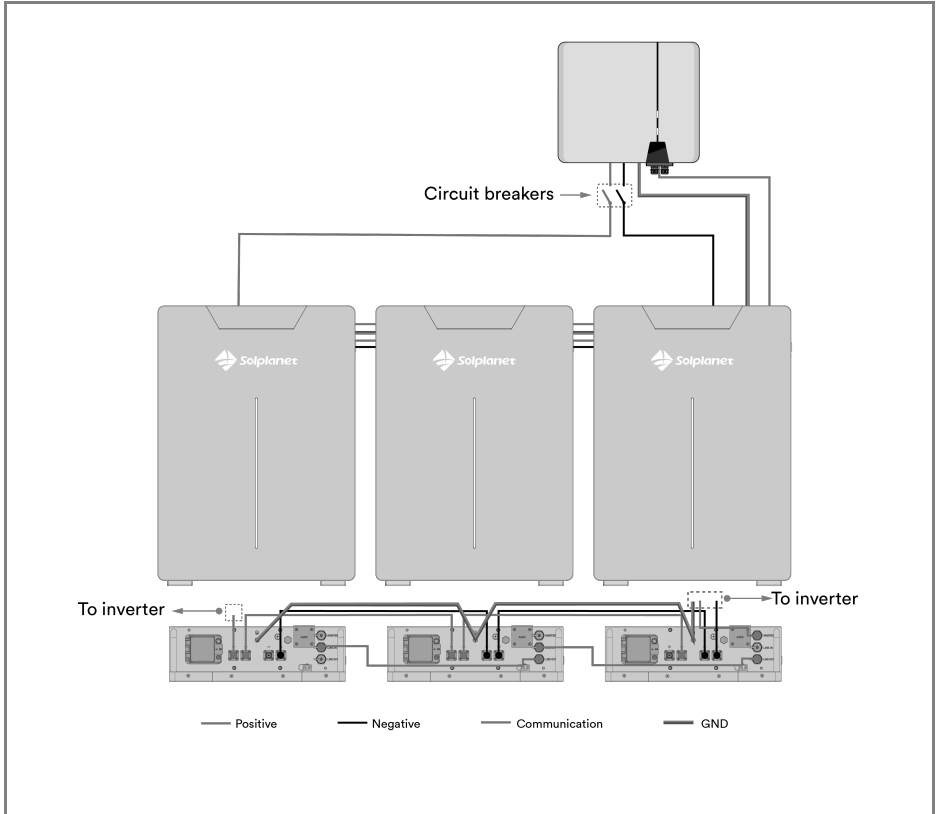
### 10.1 Single Unit Connection



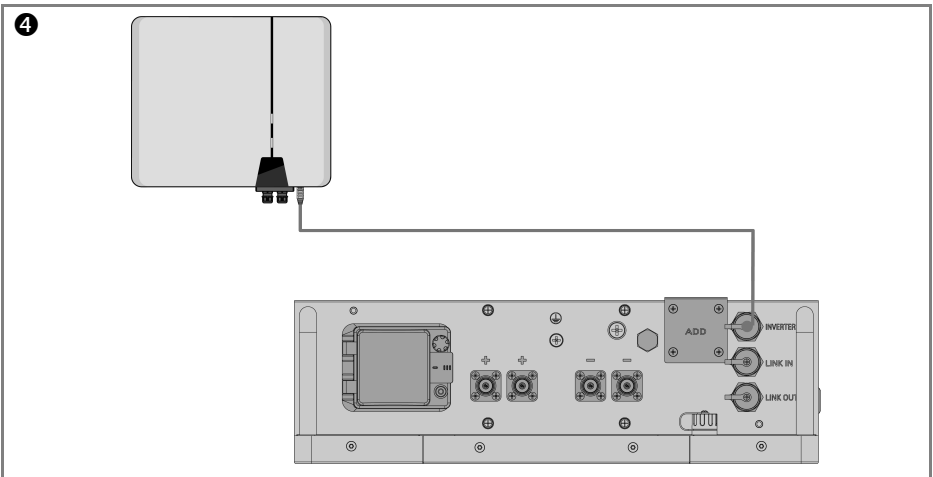
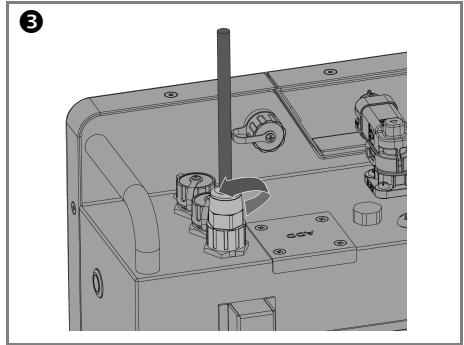
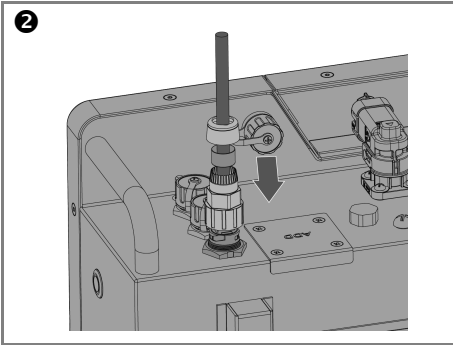
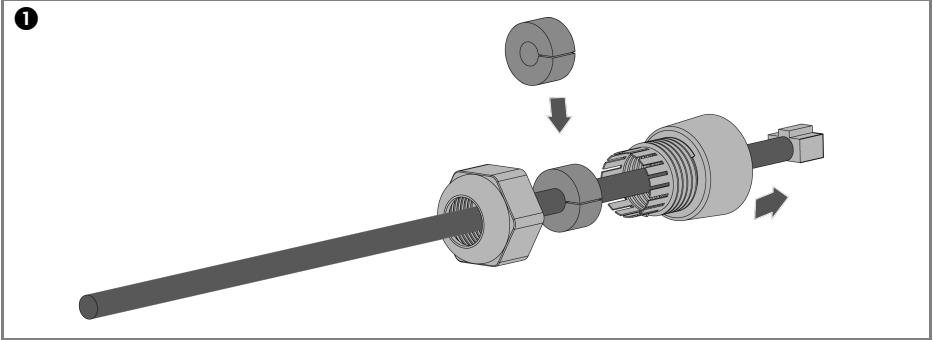
### 10.2 Multi-Unit Connection with Bus-Bars (3-unit example)



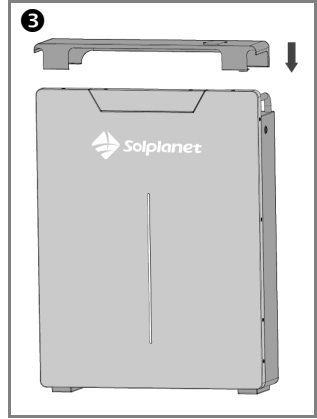
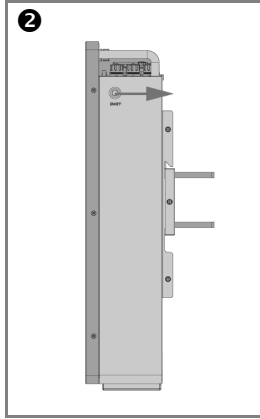
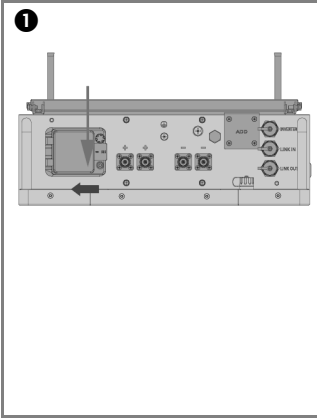
### 10.3 Multi-Unit Connection without Bus-Bars (3-unit example)



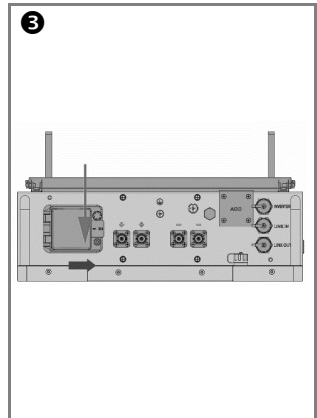
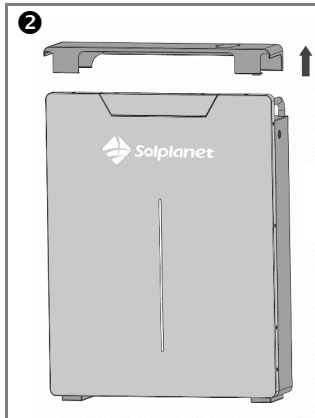
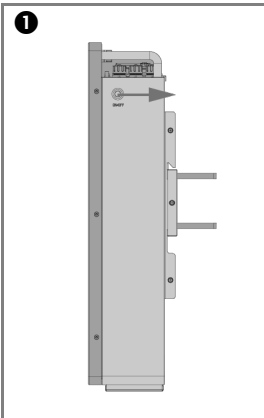
# 11 Communication Connection



## 12 Turn On Battery



## 13 Shutdown Battery



## 14 Contact

EMEA

Service email: [service.EMEA@solplanet.net](mailto:service.EMEA@solplanet.net)

APAC

Service email: [service.APAC@solplanet.net](mailto:service.APAC@solplanet.net)

LATAM

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<https://solplanet.net/contact-us/>

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