



## Hoymiles Three-phase Gateway

# Quick Installation Guide

HiBox-63T-G3

# Contents

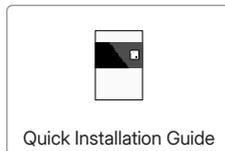
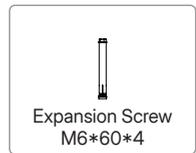
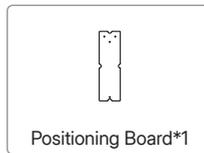
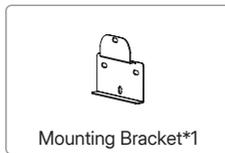
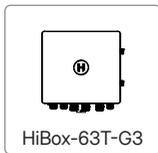
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## 1 General Declaration

- The information in this quick installation guide is subject to change due to product updates or other reasons.
- This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions here are for guidance only.
- Before installations, read through the quick installation guide and the user manual to learn about the product and the precautions.
- All installations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Check the deliverables for the correct model, complete contents, and intact appearance. Contact the manufacturer if anything is damaged or missing.
- Use insulating tools and wear personal protective equipment when operating the equipment to ensure personal safety. Wear anti-static gloves, clothes, and wrist strips when touching electronic devices to protect the inverter from damage. The manufacturer shall not be liable for any damage caused by static electricity.
- Strictly follow the installation, operation, and configuration instructions in this guide and user manual. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions.
- All cables in this article are copper cables.

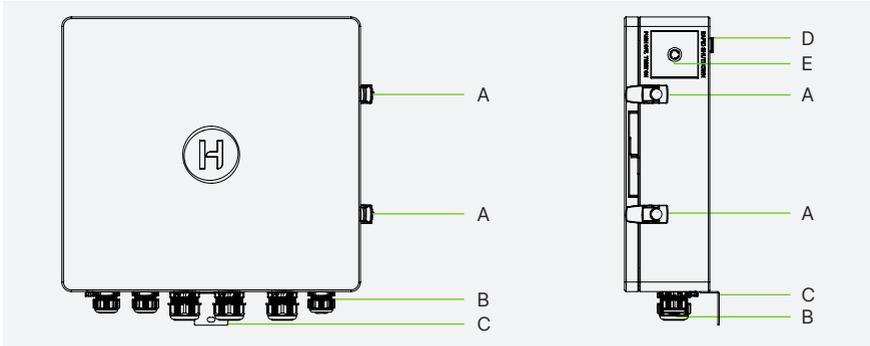
	<p>Do not dispose of the device as household waste.</p>		<p>Observe the documentation.</p>
	<p>CE mark. The original EU Declaration of Conformity may be found at <a href="https://www.hoymiles.com/">https://www.hoymiles.com/</a>.</p>		

## 2 Packing List



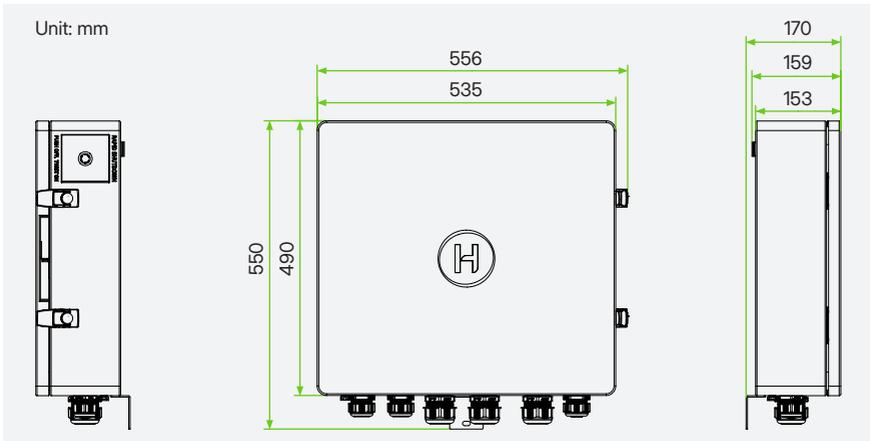
### 3 Appearance and Dimensions

#### Appearance



No.	Description	Function
A	Enclosure Door Lock	Secures the enclosure door to prevent accidental opening.
B	Cable Glands	Provides cable entry.
C	Lower Bracket	Secures the device to the wall.
D	Pre-installed Mounting Bracket	It is already fixed to the back of the device. During installation, insert the pre-installed mounting bracket into the mounting bracket to hang the device on the wall.
E	Rapid Shutdown Button	Press in an emergency to immediately shut down the system.

#### Dimensions

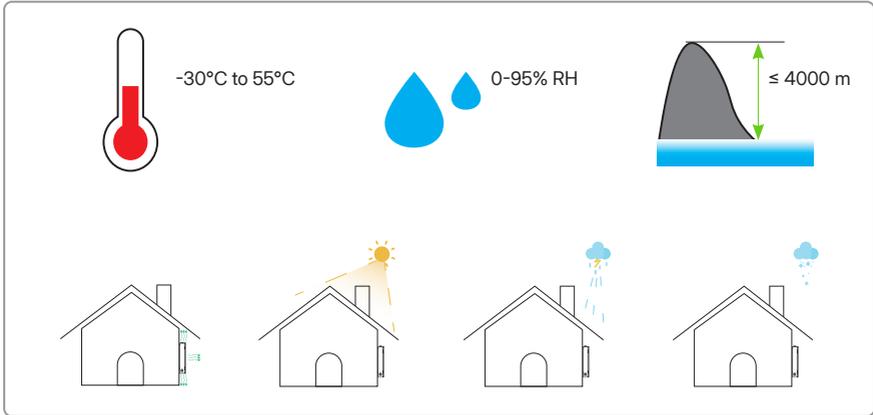


## 4 Pre-Installation

**Danger:** Danger to life due to fire or explosion!

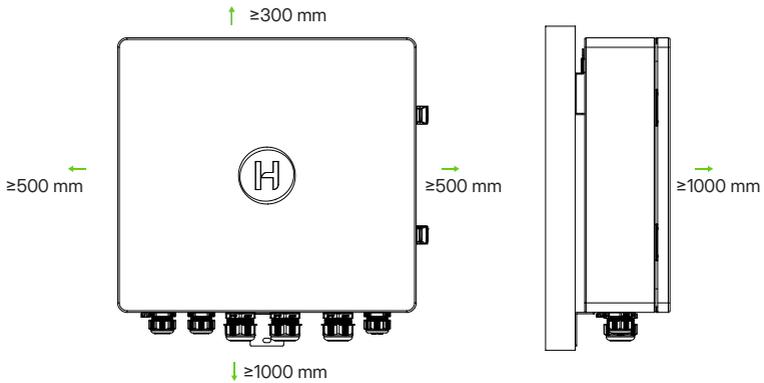
- Despite careful construction, electrical devices can cause fires. This can result in death or serious injury.
- Do not install the product in places containing highly flammable materials or gases.
- Do not install the product in places where there is a risk of explosion.

### Environmental Requirements



### Clearance Requirements

Unit: mm



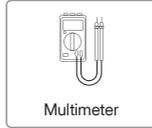
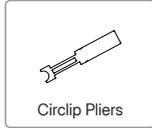
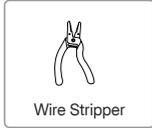
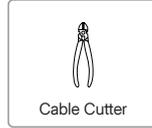
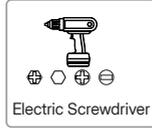
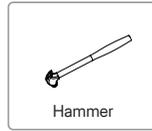
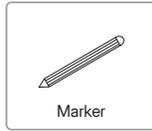
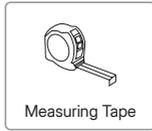
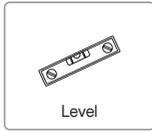
**Note:**

The installation space should be determined based on the local installation standards.

### Required Tools and Materials

The following tools are recommended in the installation process, and other auxiliary tools can also be used if necessary.

#### Tools



#### Personal Protective Equipment (PPE)



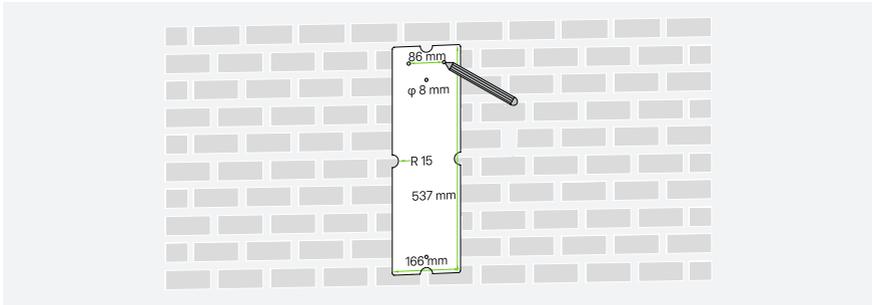
## 5 Mechanical Installation

### 5.1 Mounting the HiBox

**Warning:**

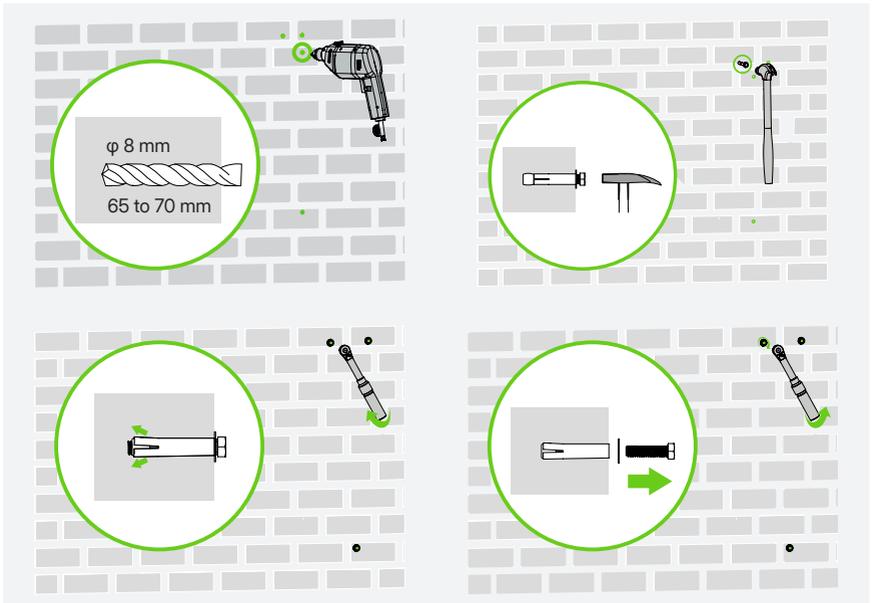
- Use appropriate personal protective equipment (PPE) and follow safe electrical work practices according to the local electrical code.
- Ensure no electrical power is connected before starting the installation.
- To avoid electric shock or other injuries, avoid drilling in areas where electrical wiring or plumbing may be present.

**Step 1:** Place the Positioning Board on the wall, adjust the angle with a level, and mark drilling positions.



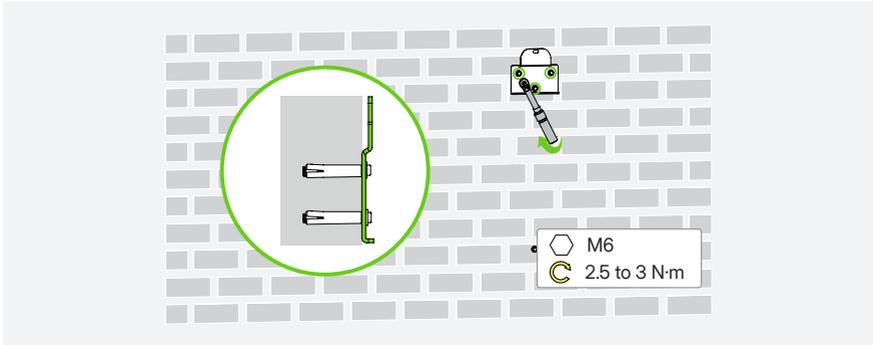
#### Step 2: Install the Expansion Sleeves

- Drill four holes, each 8 mm in diameter and 65 mm to 70 mm deep.
- Hammer the expansion bolts into the holes until the washers are flush with the surface.
- Fasten each bolt clockwise until the sleeve expands and grips the wall firmly.
- After the sleeve expands, unscrew and remove the washer and bolt.

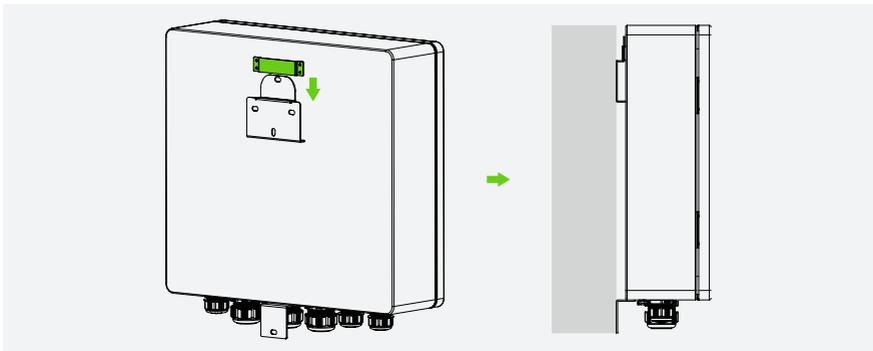


**Step 3: Attach the Mounting Bracket**

- a. Align the mounting bracket with the installed sleeves.
- b. Place the washers onto the expansion bolts, then insert them through the mounting bracket and into the sleeves.
- c. Tighten the bolts to secure the mounting bracket firmly.

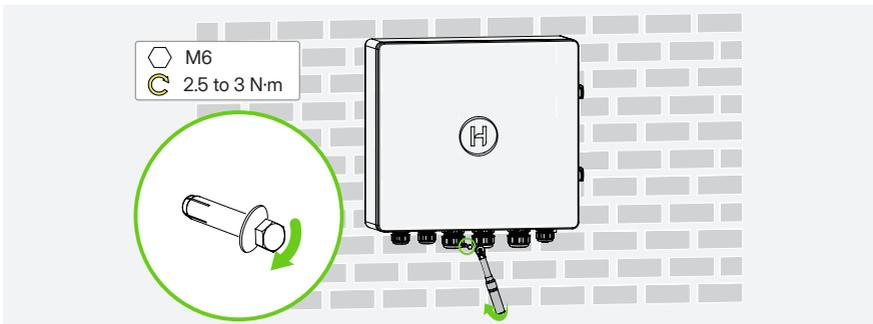


**Step 4: Hook the HiBox onto the mounting bracket.**



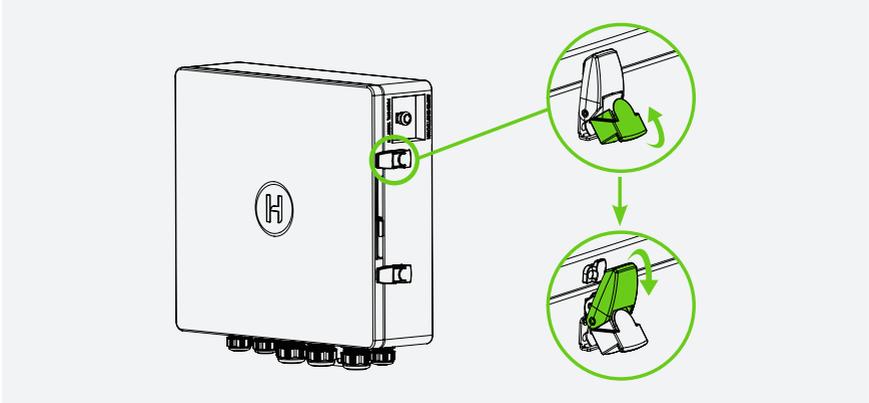
**Step 5: Secure Lower Bracket**

- a. Align the lower mounting bracket of the HiBox with the sleeve on the wall.
- b. Insert the expansion bolts into the sleeves through the lower bracket.
- c. Tighten the bolt with a torque wrench.



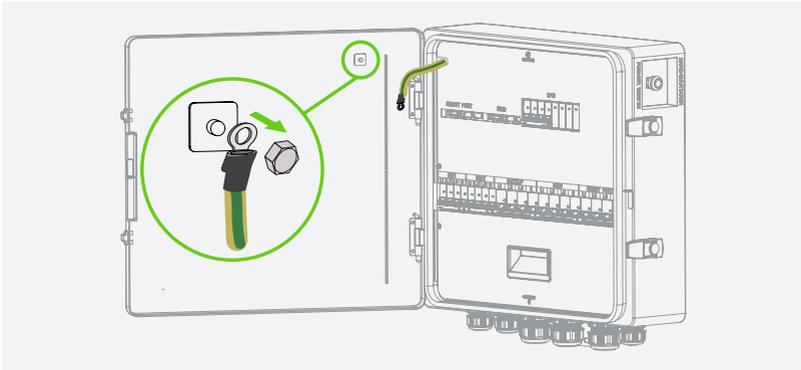
## 5.2 Removing the Wiring Protection Cover

**Step 1:** Unlock and open the enclosure door.

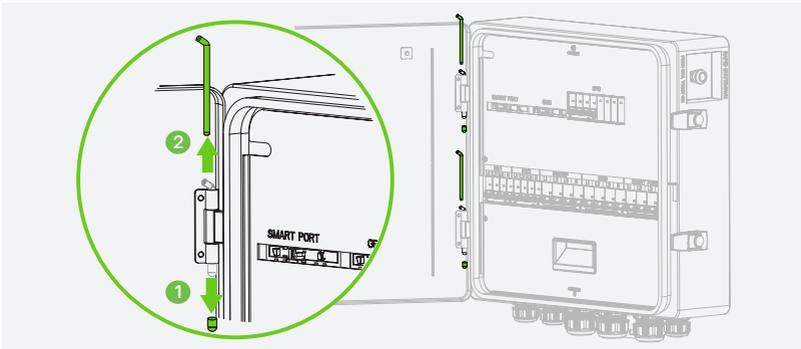


**Step 2:** (Optional) If needed, you can remove the door to make wiring easier.

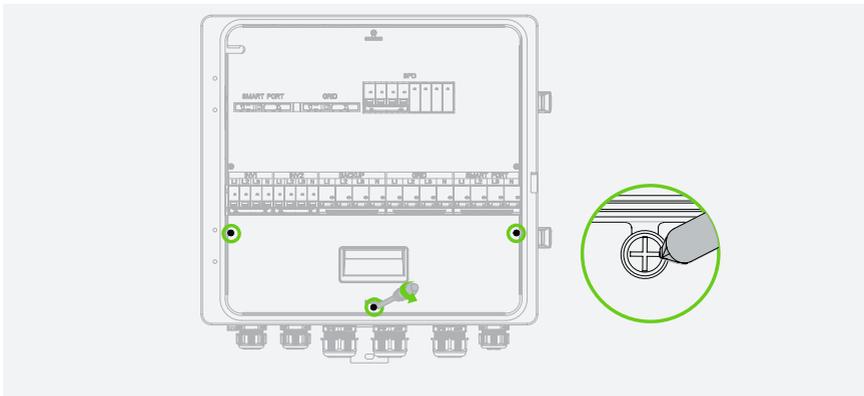
a. Disconnect the pre-installed grounding cable.



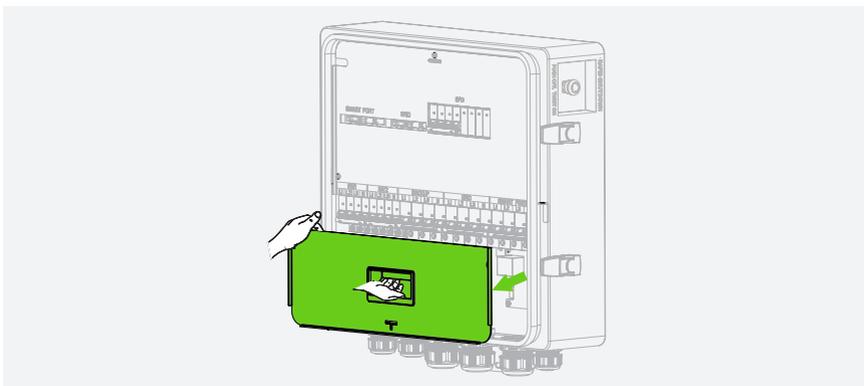
b. Unscrew the hinges to take off the door.



**Step 3:** Unscrew the three screws securing the wiring protection cover.



**Step 4:** Remove the lower cover.



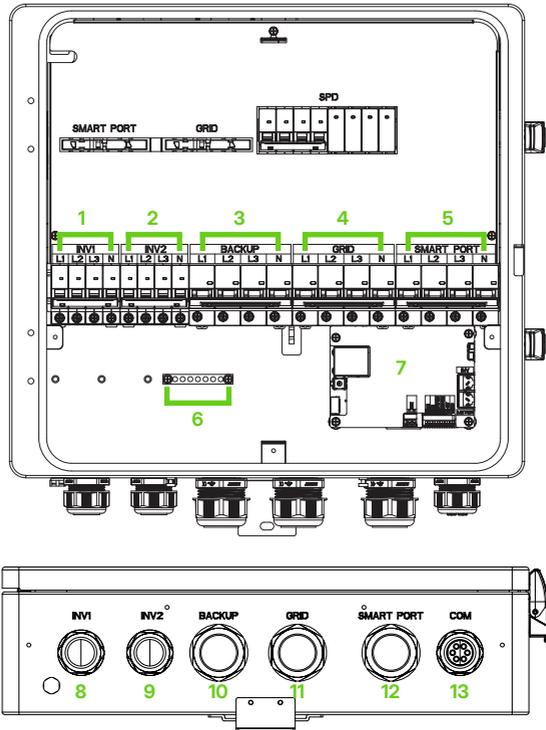
## 6 Electrical Connection

**Warning:**

- Use appropriate PPE and follow safe electrical work practices according to the local electrical code.
- Ensure the input and output circuits are isolated from the enclosure.

**Note:**

For the wiring color, refer to local laws and regulations to. The colors of L1, L2, L3, N, and PE are L1-Brown, L2-Black, L3-Gray, N-Blue, and PE-Yellow&Green.



NO.	Description	NO.	Description
1 & 2	Inverter terminals	8 & 9	Wire-in ports of inverters
3	Backup load terminals	10	Wire-in port of backup loads
4	Grid terminals	11	Wire-in port of power grid
5	Smart loads, generator, or PV inverter terminals	12	Wire-in port for smart loads, generator, or PV inverter terminals
6	Grounding bar	13	Wire-in port of communication
7	Communication terminals		

## 6.1 Power Cable Connection

### 6.1.1 Inverter Power Cable

**Note:** This section uses the INV1 wiring as an example. If your system includes two inverters, wire INV2 in the same way as INV1.

Connected Terminals	Wire Gauge			
Inverter terminals (L1, L2, L3, N)	Outdoor five-core copper flexible cable			
	Applicable Model	HiOne-(8-12)T-G3	HiOne-16T-G3	HiOne-20T-G3
	Wire size	2.5 to 4 mm <sup>2</sup>	4 to 6 mm <sup>2</sup>	6 to 10 mm <sup>2</sup>
	Outer diameter	12 to 18 mm	18 to 25 mm	18 to 25 mm
Grounding bar	Core conductor cross-section: ≤ 25 mm <sup>2</sup>			

**Step 1:** Prepare the Cable Gland

- a. Unscrew and remove the gland nut.
- b. Remove the filling plug.
- c. Remove the tightening rings.

**Note:** Two tightening rings are provided for different cable sizes. Use the large ring alone for cables with an outer diameter of 18–25 mm. For cables smaller than 18 mm, install both the small ring and the large ring together.

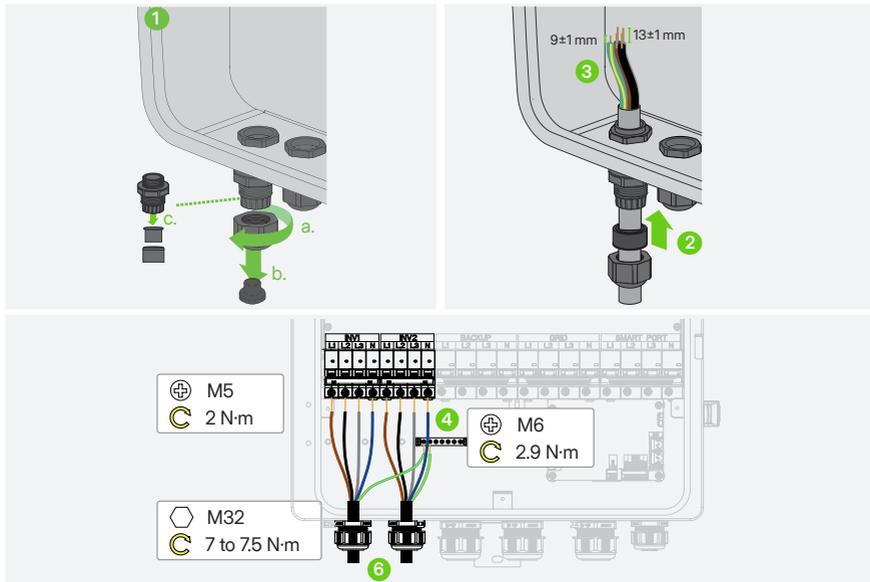
**Step 2:** Thread the cable through the nut, tightening ring, and connector body into the wiring area.

**Step 3:** Strip the insulation from the L1/L2/L3/N wires by 13 ± 1 mm, and strip the PE wire by 9 ± 1 mm.

**Step 4:** Connect each wire (L1 / L2 / L3 / N / PE) to its matching terminal and tighten the screws.

**Step 5:** Gently pull each wire to confirm it is securely fastened.

**Step 6:** Slide the tightening ring and nut back into position and tighten the nut to secure the cable.



### 6.1.2 Backup load, Grid or Smart Port Power Cable

Terminals	Wire Gauge
Backup load, Grid, Smart Port terminal (L1, L2, L3, N)	Outdoor five-core copper flexible cable Core conductor cross-section: 16 to 25 mm <sup>2</sup> Outer diameter: 24 to 32 mm
Grounding Bar	Core conductor cross-section: ≤25 mm <sup>2</sup>

- Step 1:** Prepare the Cable Gland
- Unscrew and remove the gland nut.
  - Remove the filling plug.
  - Remove the tightening rings.

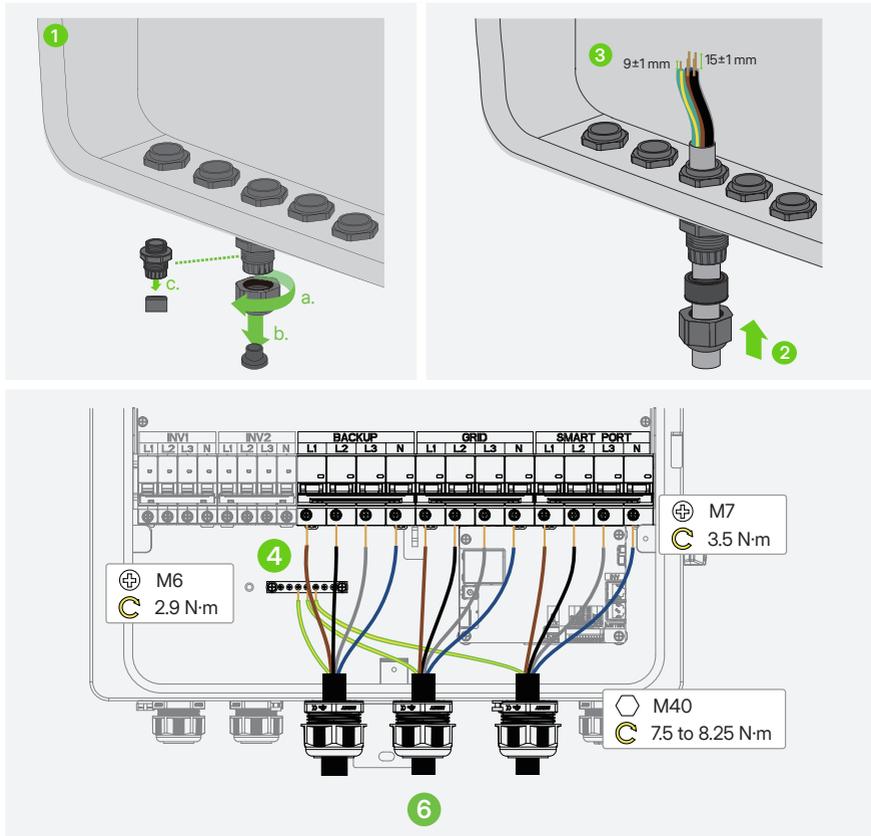
**Step 2:** Thread the cable through the nut, tightening ring, and connector body into the wiring area.

**Step 3:** Strip the insulation from the L1/L2/L3/N wires by 15 ± 1 mm, and strip the PE wire by 9 ± 1 mm.

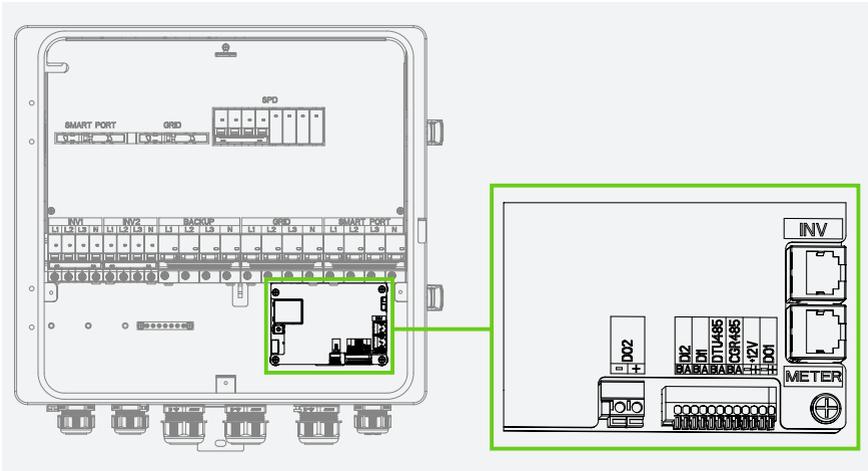
**Step 4:** Connect each wire (L1 / L2 / L3 / N / PE) to its matching terminal and tighten the screws.

**Step 5:** Gently pull each wire to confirm it is securely fastened.

**Step 6:** Slide the tightening ring and nut back into position and tighten the nut to secure the cable.



## 6.2 Communication Cable Connection



Terminal Functions		Description	Cable Requirements
INV (Required)		Connects the inverter.	<ul style="list-style-type: none"> <li>Outdoor RJ45 network cable, eight-core, shielded twin-twisted pair</li> <li>Core conductor cross-section: 0.13 to 0.2 mm<sup>2</sup></li> <li>Outer diameter: 4.5 to 6 mm</li> <li>Single cable length: ≤100 m</li> <li>Standard: EIA/TIA 568B</li> </ul>
METER (Required)		Connects the smart meter.	
DO1 (Optional)	Relay_HPA+	Dry contact for heat pump control.	
	Relay_HPA-		
+12V (Optional)	12V 0.1 A OUT	/	
	GND_SELF		
DTU485 (Optional)	DTU_485-A	Connects the DTU of the microinverter.	
	DTU_485-B		
CGR485 (Reserved)		Connects third-party devices.	
DI1, DI2 (Reserved)		/	
DO2 (Optional)		Dry contact for generator control.	<ul style="list-style-type: none"> <li>Outdoor cable, two-conductor shielded</li> <li>Core conductor cross-section: 0.2 to 1.5 mm<sup>2</sup></li> <li>Outer diameter: 4.5 to 6 mm</li> </ul>

**Note:** The inverter and meter communication ports must be connected. If your system includes a heat pump or microinverter DTU, wire them using the same steps.

**Step 1:** Prepare the COM Cable Gland

- a. Unscrew and remove the gland nut.
- b. Remove the filling plug.
- c. Remove the tightening ring and the sealing plugs needed for your cables.

**Note:** The tightening ring contains six sealing plugs. Remove only as many as required.

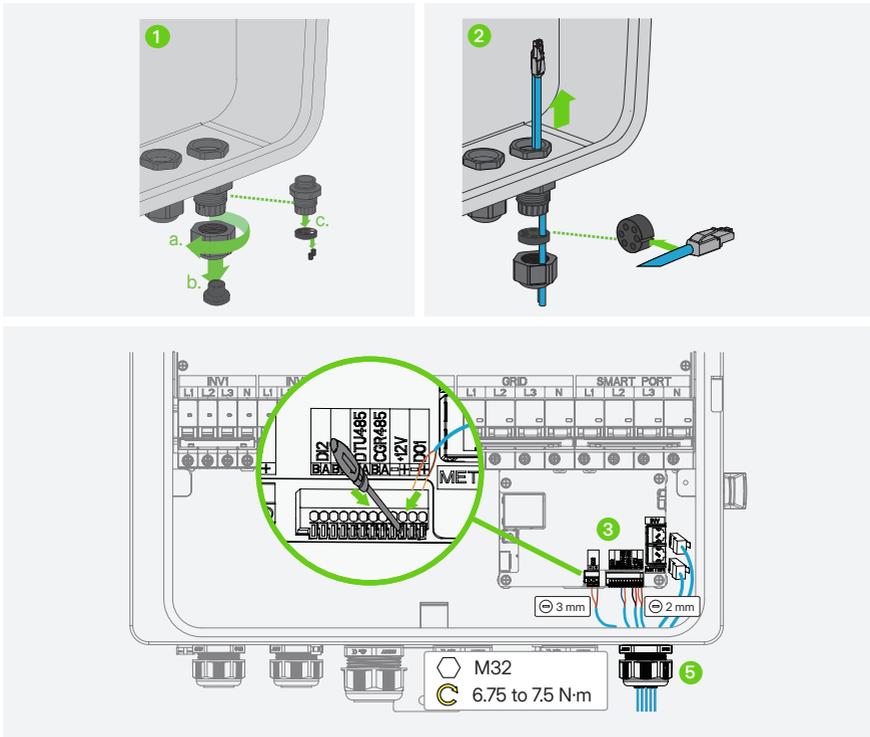
**Step 2:** Thread the cables through the nut, tightening ring, and connector body into the Hibox interior.

**Step 3:** Prepare and Connect the Wires

- **For inverter and meter:** Connect the RJ45 cable to the corresponding INV and METER terminals.
- **For DO1 / +12V / DTU / CGR / DI1 / DI2 / DO2 cables:**
  - Strip  $11 \pm 1$  mm of insulation from cables connected to DO1 / +12V / DTU / CGR / DI1 / DI2, and strip  $10 \pm 1$  mm from cables connected to DO2.
  - Insert a flathead screwdriver to open the terminal clamp, insert the wire, and release to lock it.

**Step 4:** Gently pull each wire to confirm it is securely fastened.

**Step 5:** Reinstall the tightening ring and nut, then tighten the nut to 6.75 to 7.5 N·m.

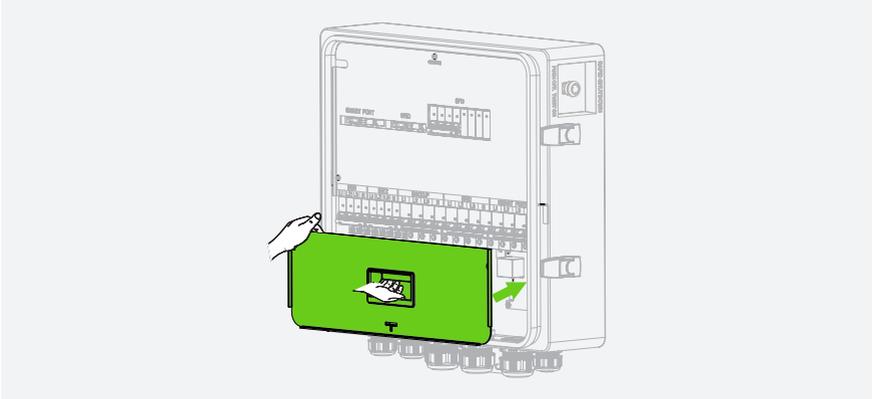


## 6.3 Complete the Installation

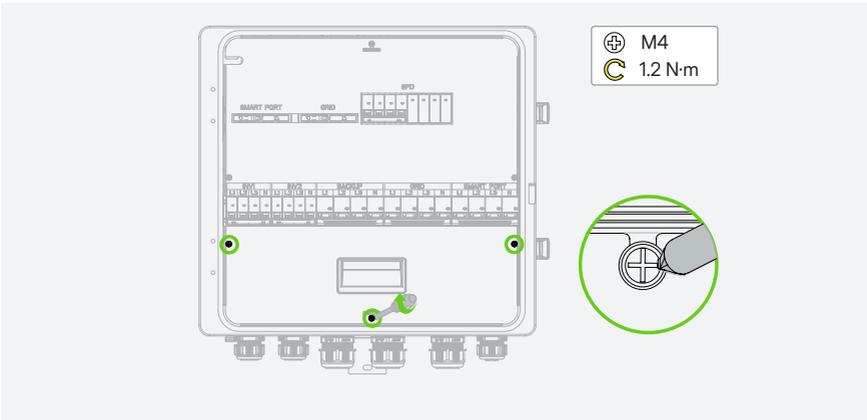
**Notice:**

Ensure that all cables are firmly connected and all cable entry points are properly sealed.

**Step 1:** Reinstall the lower cover.



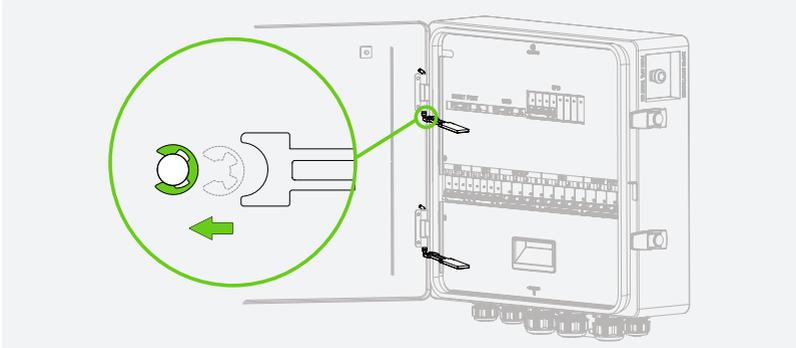
**Step 2:** Tighten the screws to secure the lower cover.



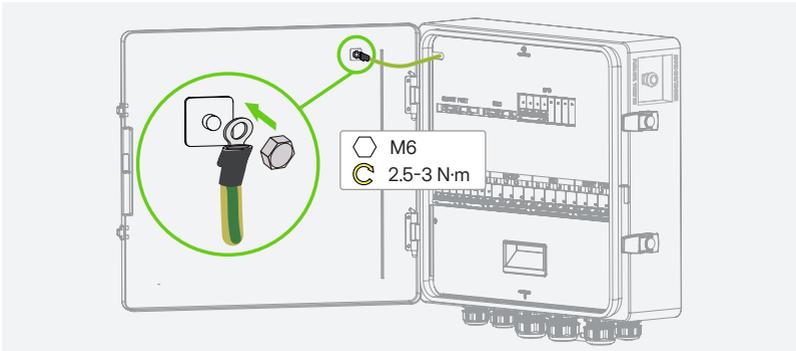
**Step 3: Re-install the Enclosure Door**

**Note:** Perform this step only if you previously removed the door and disconnected the pre-installed grounding cable.

a. Insert the two door slide bolts into the hinges and secure them with circlips.



b. Reconnect and fasten the grounding cable.



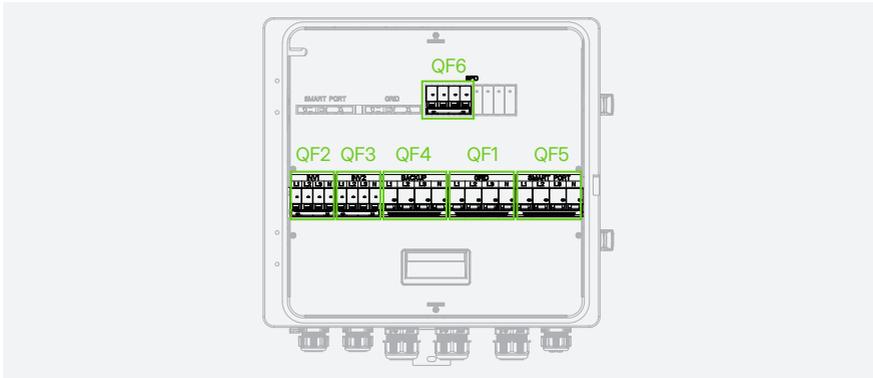
**7 System Commissioning**

**7.1 Preparation Checking List**

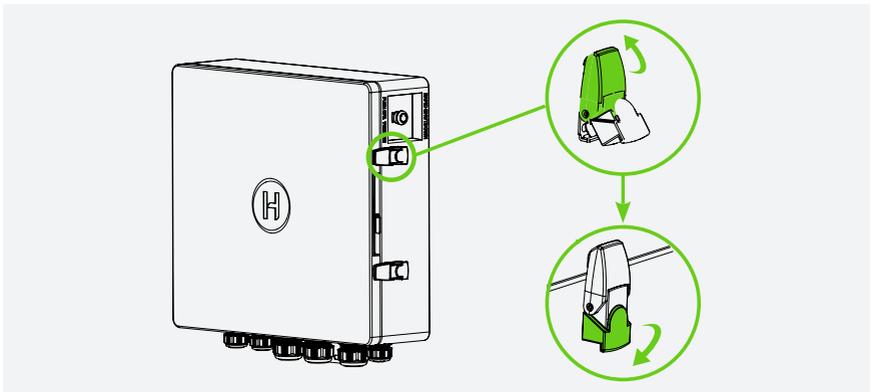
<input type="checkbox"/>	The inverter DC switch and external circuit breaker are disconnected.
<input type="checkbox"/>	All wiring has been completed correctly, following <a href="#">5 Mechanical Installation (P5)</a> and <a href="#">6 Electrical Connection (P9)</a> .
<input type="checkbox"/>	The grid voltage is within the permissible range, verified with a multimeter.
<input type="checkbox"/>	All unused terminals are properly sealed with the corresponding sealing plugs.
<input type="checkbox"/>	All cables are routed safely and protected against mechanical damage.
<input type="checkbox"/>	Warning signs and labels are intact.
<input type="checkbox"/>	Nothing is left on the top of the device.

## 7.2 System Power-on

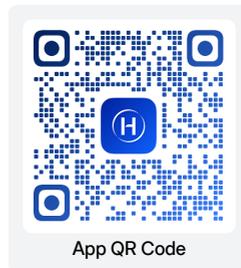
**Step 1:** Turn on the switches in the following order: QF6 > QF1 > QF2 / QF3 (If your system has two inverters, turn on both.) > QF5 (If a smart load or a generator is connected.) > QF4.



**Step 2:** Close and lock the door.



**Step 3:** Follow the procedures in the S-Miles Cloud user manual to activate system monitoring, set up grid management functions, and complete the installation.







Scan the QR code or visit our website  
[www.hoymiles.com/us/download-center.html](http://www.hoymiles.com/us/download-center.html)  
to access the manual.



Scan the QR code or visit our YouTube  
[www.youtube.com/@Hoymiles/videos](http://www.youtube.com/@Hoymiles/videos)  
to access the Installation video.



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